

# TouchWin Pro software

User manual

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Data No. HSC02 20231123EN 1.4

### Basic description

- Thank you for purchasing the Xinje TS series HMI.
- This manual mainly introduces the use of TouchWin Pro editing software of TS series HMI.
- Before using the product, please read this manual carefully and use it on the premise of fully understanding its contents.
- Please deliver this manual to the end user.

#### Notice to users

- Only operators with certain electrical knowledge can conduct wiring and other operations on the human-computer interface. If there is any ambiguity, please consult the relevant technical department of the company.
- The examples listed in the manual and other technical materials are only for users' understanding and reference, and certain actions are not guaranteed.
- When using HMI with other products, please confirm whether it conforms to relevant specifications and principles.
- When using the HMI, please confirm whether it meets the requirements and safety by yourself. For the possible machine failure or loss caused by product failure, please set backup and security functions by yourself.
- Please avoid using HMI in the environment of high radiation and strong magnetic field to avoid interference.

# Declaration of responsibility

- Although the contents in the manual have been carefully checked, errors are inevitable, and we cannot guarantee that all the data are completely consistent.
- We will often check the contents of the manual and make corrections in the subsequent versions. We welcome your valuable suggestions.
- The contents introduced in the manual are subject to change without notice.

# Related manual

Refer to the following manuals for TS hardware and connection with other communication devices.

- TS series HMI user manual [hardware]
- TS series HMI user manual [connection]

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# 1. TouchWin Pro software

#### 1-1. TouchWin Pro installation

#### 1. PC hardware configuration

CPU above INTEL Pentium II, More than 64MB memory. Hard disk with more than 2.5GB and at least 1GB of disk space. 32-bit true color display with resolution above 800 x 600.

#### 2. Operation system

Windows 10/windows11.

- 3. Installation steps
- Find "setup. exe" in the installation file package and right click to run as an administrator. A dialog box as shown below appears. Select the language to install: (Note: Please close the anti-virus software during installation!)

	Select Setup Language
TS	Select the language to use during the installation.
	English
	OK Cancel

(2) Click OK, select "I accept the agreement", click next.

	reement ad the following important information before continuing.	1
	ed the following License Agreement. You must accept the terms of this agreement before g with the installation.	
)	机界面编辑工具软件最终用户许可协议	^
装、多	版知:请您仔细阅读以下使用许可的协议的条款和条件,您一旦安 [利或以其它方式使用该软件,即表示您同意接受本《协议》中条款 [的约束。如果您不同意这些条款和条件,请不要安装、复制或使用 F。	
软件产	"品许可协议	
本"软 护。	件产品"受著作权法及国际条约条款和其它知识产权法及条约的保	~
€1 <u>200</u>	opt the agreement	
Oldon	ot accept the agreement	

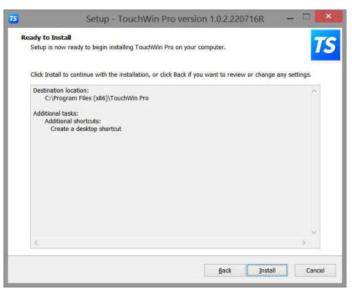
(3) Select the software installation folder. It is recommended to install the software on a non system disk and in the English path. (%/!/@ and other special characters cannot exist in the installation path name)

	Setup - TouchWin Pro	o version 1.0.2.2207	16R -	
	tination Location hould TouchWin Pro be installed?			T
1	etup will install TouchWin Pro into the folk	nuina faldar		
	we, click Next. If you would like to select a		e.	
C:\Progr	am Files (x86)\TouchWiit Pro		B	rowse
At least 7	128.7 MB of free disk space is required.			

(4) Choose whether to add shortcuts.

75	Setup - To	uchWin Pro versio	on 1.0.2.220716	R — 🗆 🗙
	dditional Tasks additional tasks should be pe	formed?		TS
Select	the additional tasks you woul	d like Setup to perform wi	hile installing TouchW	In Pro, then click Next.
Additi	onal shortcuts:			
20	reate a desktop shortcut			
			gack 📃	Next Cancel

(5) Click Install to finish the installation.





To install two or more different versions of editing software on the computer, you must select different

installation paths, otherwise overwriting the installation will cause the software to run abnormally or even fail to run. After installation is completed, if you modify the software installation directory, the directory name cannot contain%//@ Wait for special characters.

#### 1-2. TouchWin Pro software uninstallation

1. Find out "unins000.exe" in the software installation folder, double click it to

uninstall the software.



- 2. Click Yes to unistall.
- 3. After the software uninstallation is completed, it will automatically exit the uninstallation program, and finally delete the installation directory folder by manual.

名称	修改日期	类型	大小
HMI	2021/8/28 8:55	文件夹	
Log	2021/8/27 15:13	文件夹	
📴 Temp	2021/8/27 17:19	文件夹	

# 2. Make a simple program

TouchWin Pro editing software is simple and fast, and provides an ideal editing platform for beginners or users with a certain foundation. This chapter introduces the use of HMI editing software through a simple project production.

Please confirm the model of HMI and the type of communication equipment before making the program, which is the prerequisite for the normal operation of the screen program and equipment

#### 2-1. New program



2. Select correct HMI model, for example TS3-700-E. Click next page.

<ul> <li>✓ TS3 Series</li> <li>Ⅲ TS3-400-M(4*, 480 × 272)</li> <li>Ⅲ TS3-400-E(4*, 480 × 272)</li> <li>Ⅲ TS3-700-M(7*, 800 × 480)</li> </ul>	Screen size : 7* Resolution : 800 x 480 Colour : 16.77 million Brightness : 200 USB_A : 1 Serial port : COM1(RS232/RS485) COM2(RS232/RS485/RS422)
<ul> <li>T53-700-E(7*, 800 x 480)</li> <li>T53-700-M3(7*, 800 x 480)</li> <li>T53-1000-M(10*, 1024 x 600)</li> <li>T53-1000-E(10*, 1024 x 600)</li> <li>T53-1000-M3(10*, 1024 x 600)</li> <li>T53-1200-M(12*, 1024 x 768)</li> </ul>	Ethernet : 1 SD : None Key: None Audio : None WiFi : None 4g : None
<ul> <li>TS3-1200-E(12*, 1024 x 768)</li> <li>TS3-1500-E(15*, 1920 x 1080)</li> <li>TS3-1500-M(15*, 1920 x 1080)</li> <li>TS3-700-X14(7*, 800 x 480)</li> <li>PC Series</li> </ul>	
	Display Normal direction

3. Set the COM port, the COM port has no equipment by default. You need to select the PLC brand through the pull-down menu. After selecting the correct PLC type in the list, click the "New Equipment" button, and set the equipment name and its communication parameters in the pop-up window

COM1	信播					~
COM2 Net0	信捷 西门子 Modbus_通用 三菱 <mark>台达</mark> 基恩士					
		-	Comm	unication setti	NOS .	121 ×
COM1	(告注)	Essential in	- 10 Parts 10 Parts			_
COM2	信捷 XC系列	Equipm	COLUMN THE OWNER			
Net0	信捷 XD/XL/XG系列(Modbus RT					
		Serial com	nunication informatio	on		
		Interfac	RS232			~
		Baud	19200 ~	Data bit	8	~
		Check	Parity check v	Stop bit	1	~
		A	1			
		Timeout an	d packaging parame	ters		
		Timeout an Communi	d packaging parame <sup>cat</sup> 1000		3	
	New equipment	Communi	cat 1000	Retry count		
	New equipment Serial Equipment name Equipm	Timeout an Communi Delay tir Maximur	cat 1000	Retry count Interval time	3 0 120	

4. Set the Ethernet port (Net0), select the PLC brand through the pull-down menu, select the correct PLC type in the list, click the "New equipment" button, and set the communication parameters such as device name and IP address in the pop-up window.

5		
COM1	西门子	<b>v</b>
COM2	信達	
Net0	西门子 Modbus_通用	
	三菱 三菱	
	台达	
	基恩士	
	产电	
	<b>丰炜</b>	
	欧姆龙	
	永宏	
	松下	
	AB	
	光洋	

3					C	ommi	unication setti	ngs	me	13
COM1 COM2	信頼	KD/XL/XG系列(Mo	vibus TCP 1	Essential inform		贏列(	Modbus TCP (		-	
Net0		ND ND ND ND ND 1 ( MIC	10003 101 7	Equipm (#3	2 XD/XL/XG	系列(	Modbus TCP )			
				Network port	communicat	ion inf	formation			
				space	2 . 168	. 6				
				End 502	2		Station	1		
				Timeout and p		aramet				
				Communicat Delay time	A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O	_	Retry count Interval time			
		New equipment			(****	Aaximum				
	Nev			120			120	٥		
	Serial	Equipment name	Equipment	Communic PSW		registe	er			
	0	本地设备	本地设备			mmun	ication status i	formatio		
				Communic	ation shield	addre	55			
				P58	100					
				Do n	ot use comm	nunicat	tion mask add	ess		
				Advanced					Confirm	13

Click the "Set native IP" button, and set the HMI native IP address parameters in the pop-up window (you can choose to automatically obtain the IP address or customize the IP address)

COM1 COM2	信捷					
Net0	信捷 XD/XL/X	(G 张列 ( N	fodbus TCP )			
	(直速 X5系列 (	CodeSys	r			
			本机IP			
		O Get ad				
			定义即地址	-		
	New equi		192.168.6.2		Set native	Ib
			255.255.255.0	Increase	Communication	Statio
	No. E	Default	192.168.6.1	Port type	Communication	Statio
	1 015	DNSE	0.0.0.0	Not -	192.168.6.6 502	1
			Ok Cancel			

- 5. Click ok to finish the building.
  - (1) TouchWin Pro software cannot support TG series HMI.
  - (2) -E series HMI can support Ethernet devices.

#### 2-2. Screen edit

Realize the reverse operation of digital value Y0, and display the output status of Y0 through the indicator on

the HMI.

1. Make the button

Click the menu Parts/key/key or key icon in control window. Click on the editing screen to set its properties in the pop-up properties dialog box.

Basic properties

Write address: set to Y0.

Action: set to reverse.

			Key			
Basic proper	tie Appearance	Function bi	ndi Security	settin	Position	
Control	ID BTO					
Describe	•					
Write add	dress					
Equipm	信捷 XD/XL/XG	系列(Mode	ous RTU )	~	Set up	
Address	Y	~	0	1		
			Indirect desi	gnation		
Action						
⊖ Se	ton OS	et off	Reverse		stantaneous on	

Text: enter reverse Y0.

reverse Y0       ✓ Use pictures         Status       0         Name       button_05_a         Categor svg       0         Dimensi 80 × 42       More         ✓ Fill       Fill color         Fill pattern       Solid color
Change appearance More
State 0 v 🗹 Display Apply fonts to each
Text     O Multilin

You can click "Change appearance" to enter the resource material library of the system and select an appropriate appearance, or click "More" to select a custom picture as the appearance of the component.

2. Indicator light

Click the menu Parts/key/indicator light or click the indicator icon in control window. Click on the editing screen to set its properties in the pop-up properties dialog box.

Basic properties

Read address: set to Y0.

Logic: set to positive logic.

		India	cator I	ight		
asic proper	tie Appearance	Security se	ettin	Position		
Control Describ	10031					
Read add	iress					
Equipm	信捷 XD/XL/XG	系列 (Mod	bus R	TU)	~	Set up
Address	Y	*	0		1	
			Indire	ect design	nation	
logic						
• Po	ositive logic		0	Negative	logic	
🗌 twink	e					
. 0	n status flashes		0	Off statu	s <mark>f</mark> lashes	
	Flick	er frequen	v IT	0.1 8	~	

#### ■ Appearance

Set the appearance display of its ON status and OFF status respectively.

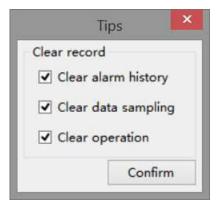


#### 2-3. Offline simulator

In order to facilitate the user to debug and edit the screen, the actual operation of HMI and PLC can be simulated on the computer (no need to connect PLC).

1.Click the menu File/offline simulator or offline simulator icon

2. The following prompt window will pop up in the interface, and it is recommended to select all of them, otherwise the simulation will be abnormal.



3.Click the "Reverse Operation" button to directly observe the output state of Y0 through the indicator light

ON	Reverse Y0	OFF Reverse Y0
	ON status	OFF status

#### 2-4. Online simulation

Simulate the actual operation of HMI and PLC on the computer to realize the monitoring function of the lower computer equipment (PLC must be connected to the computer, and the effective operation time of online simulation is within 2 hours).

1. Click the menu File/online simulation or online simulation icon in control window.

	Comm port c	onfiguration	×
Device Port No.	Local port No.	Config res	ult
COM2		>>>>	
	Deter	mine Cancel	Application

2. At this time, you need to configure the port. Configure the device port with the local port. First click to select the device port number, then click to select the local port number, and then click the middle button. The right side will display the configuration results.

	Comm port c	onfiguration	×		Comm port of	onfiguration	×
Device Port No.	Local port No.	Config result		Device Port No.	Local port No.	Config result (COM1, COM4) 4	
	Deter	mine Cancel Appli	ication		Deter	rmine Cancel Applica	tion

Device port	Select the HMI port number, that is, the COM port selected when adding a device for a new
number	project, which can be viewed by clicking "File/System Settings - Equipment"
Local port	Select the port number of the PLC connected to the computer, which can be viewed through the
number	computer device manager

Configuration	Display port configuration results
result	
2 The fall	wing prompt window will non up in the interface, and it is recommended to select all of them

The following prompt window will pop up in the interface, and it is recommended to select all of them, 3. otherwise the simulation will be abnormal.

3	Tips	×
Clear recor	d	
✓ Clear a	larm history	
Clear d	l <mark>ata sampling</mark>	
✔ Clear o	peration	
	Confirm	è

4. After the above operations are completed, click "OK" to enter the online simulation screen, which can realize the function of the computer monitoring the PLC. In the figure, Y0 output is achieved through reverse operation, as shown in the indicator light





If the prompt window of "communication timeout" appears on the online simulation interface, first check whether the port is correctly selected and configured, and then check whether the serial port in the computer is occupied by other software.



#### 2-5. Program download

#### 2-5-1. Download overview

There are three download methods for TS series HMI: USB, LAN and Remote. LAN and Remote require (- E) series models.

The project downloaded by default does not support upload. If you need to support project upload, please select "Allow project upload" on the download page. Then, you can set the "upload password".

	+	
Click the menu File/download or the download icon	Download	to show the following window.

	Download (PC - > HM	I) 🔽
Communication settings		
Connection LAN	Ÿ	
Device IP discovery	~	
O Device ID lookup	~	
Scan	IP Communic	
Upload Download	n commune	
Downloa	2	
Allow project upload	Upload pa •••	•••
Synchronize PC time	□ Hide menu system	Enable installment
Clear alarm record	Clear operation	Clear data acquisition
✓ Overwrite recipe data	<ul> <li>Download fonts to</li> </ul>	Clear PFW/SPFW data
Download Upload	T	Close

Communication settings	Set the download connection mode and corresponding parameter settings
Connection	Refers to the way to connect the HMI. You can select USB, LAN and remote
Download password	To set the download password of the project, it must be consistent with the password
	set in the HMI, otherwise it will not be downloaded. The default download password
	is 123456. For the modification of the password in the HMI, refer to chapter 7-2
	Password
Allow project upload	Set whether the current project can be uploaded
Upload password	When Allow Project Upload is selected, you can choose to set the upload password
User defined boot screen	After checking, click "Browse", and select the file as the HMI boot loading screen

	(the current version only supports images with 800 * 480 pixels and BMP format)
Synchronize PC time	The time information of the computer is synchronously downloaded to the HMI to
	synchronize the HMI clock with the computer
Hide menu system	There is a system menu at the lower right corner of the HMI by default, here you can
	set whether the menu is displayed
Enable installment	This download will enable the installment function
Clear alarm record	This download will delete the alarm information stored in HMI
Clear operation	This download will delete the operation record information stored in HMI
Clear data acquisition	This download will delete the data collection information stored in HMI
Overwrite recipe data	This download will overwrite the original recipe data in HMI with the recipe data set
	in the current project
Download fonts to	Download the fonts of the computer to the HMI to synchronize the HMI fonts with
	the computer
Clear PFW data	This download will delete PFW data stored in HMI
Download	Execute the download operation, and download the project to the HMI
Upload	Read the project in HMI to the computer, and check "Allow project upload" is
	selected when downloading the project in HMI, otherwise it will prompt that the
	project does not support upload
Close	Close the window

#### 2-5-2. USB download

When USB connection mode is selected, it can be used after successful connection, and no other parameter setting is required.

(Note: TS5 series HV2 and above versions are not supported);

**USB refresh:** Identify the currently available USB. If no USB is identified, the "communication" cannot be clicked.

**Communication:** It is used to test whether the HMI is successfully connected to the computer. After clicking, the connection status will be displayed on the right side of the button, including "connection succeeded, connection failed, connection timeout.

#### 2-5-3. LAN download

When the LAN connection mode is selected, IP and ID settings will be displayed below. You need to enter the correct IP or ID address to download the program.

(Note: - E model supported, you need to first change the network adapter IP of the computer to a manually specified IP, and it should be in the same network segment as the HMI's IP);

Communication settings	
Connection LAN	~
• Device IP discovery	~
○ Device ID lookup	¥
Scan	IP Communic

**Device IP discovery:** Input the IP address of the connected HMI, or select the last input address through the drop-down box

**Device ID loopup:** Input the ID address of the connected HMI, or select the last input address through the drop-down box. The touch screen ID can be viewed on the label on the back of the HMI.

**Scan IP**: When the IP address is uncertain or multiple HMIs are connected, click this button to scan the device IP connected to the computer, select the IP address to download from the scanned IP addresses, and click it to pop up the window below.

DevName	(P	DevID	Model
Hmi	172.31.0.55	417-036-024-7885-1350	T\$3-700-E
Heni	172.31.0.1	314-127-180-D7AF-7974	T\$5L-1500-E
Hami	172.31.1.223	023-255-053-562C-5941	TSSL-700-E
Hmi	172.31.0.136	409-009-238-FBBA-7365	T\$5L-700-E

**Communication:** It is used to test whether the touch screen is successfully connected to the computer. After clicking, the connection success, connection failure or connection timeout will be displayed on the right side of the button.

#### 2-5-4. Remote download

When remote connection is selected, the HMI needs to be connected to the network, and the correct ID number and password need to be input, as shown in the following figure (not supported in the current version).

(Note: TS5 or above models are required and maintain network connection. Remote system updates are sensitive operations and should be operated with caution. When network connection is abnormal, it may cause downloading failure or even system update failure. HMI needs to be updated on the local area network to recover.);

onnection Ren	note	~
Device ID	10191008F9187089	~
Password		

**Device ID**: Input the ID address of the connected HMI, or select the last input address through the drop-down box. The HMI ID can be viewed on the label on the back of the product.

Password: User defined remote connection password.

#### 2-5-5. U disk download

When selecting a USB drive to download, it is necessary to prepare a USB drive and generate a USB drive file through the upper computer. Then, select and import the download from the lower computer;

USB file generation: Export and store the project as .dat file, with a customizable file name but .dat suffix. Copy the generated file to the root directory of the USB drive and connect it to the HMI. The file can be directly downloaded to the TS series HMI.

The operation steps are as follows:

- Open the "File" menu, select "Generate USB Flash disk File", and a dialog box for selecting the save path will appear, as shown in the following figure. Click "...", select the path to save in the pop-up window, enter the name of the USB drive project file to be saved, and note that the file save type must be dat.
- 2. After selecting the path, select the HMI hardware version number to download, and then click the "Export" button.

Synchronize PC	✓ Hide menu system	Enable installment
✓ Clear alarm record	Clear operation	🗹 Clear data
🗹 Overwrite recipe	Download fonts to	Clear PFW/SPFW
Export file		
		HV1 V Export

Note: HV1 is an old version, HV2 is a new version. The old version of the HMI can only select HV1, and the new version of the HMI can only select HV2. Otherwise, it will prompt that the firmware is incorrect. Please refer to 7-3 for the current hardware version of the HMI.

3. If the export is successful, a prompt will appear as shown in the following figure, and a file must be generated in the save path. The file type must be .dat (do not modify the file suffix). Copy the file to the root directory of the USB drive for later use.



- 4. Insert the USB drive into the USB port of the HMI, and a "USB Drive Update" pop-up window will pop up in the upper left corner of the HMI. Click "Update Hmi Project" to pop up a file selection window, as shown in the following figure.
- 5. Select the project to be imported from the list, click the "OK" button in the bottom right corner, and the system will automatically execute the import of the project file. The progress bar of the imported project will be displayed on the screen. After the import is completed, remove the USB flash drive.

uaes 🗙	选择更新文件
	Show: *.dat
更新Hmi工程	/ System Volume Information/ database/
	导出工程.dat
	Preview Show hidden files
	Filename: //mnt/udisk/导出工程.dat
	OK 🖉 Cancel

The "Allow Project Upload" setting on the software download interface after updating the project using a USB drive does not take effect, meaning that the updated project through the USB drive is not allowed to be uploaded.

#### 2-6. Upload project

The HMI supports the upload function of engineering data, which is convenient for data resource management.

Click the menu File/download or download icon , click the "Upload" button at the bottom of the pop-up window. The precondition for uploading is that "Allow Project Upload" is selected when downloading the project to the HMI. If the upload password is set, you need to enter the correct password to upload the project successfully.



Password input range: 1-8 digits and characters.

	Download (PC - > HMI	n) 🦲 📃
Communication settings		
Connection LAN	~	
Device IP discovery	~	
O Device ID lookup	~	
Scan	IP Communic	
Upload Download		
Downloa	8	
<ul> <li>Allow project upload</li> </ul>	✓ Upload pa 1111	11
Synchronize PC time	Hide menu system	
Clear alarm record	Clear operation	<ul> <li>Enable installment</li> <li>Clear data acquisition</li> </ul>
<ul> <li>Clear alarm record</li> <li>Overwrite recipe data</li> </ul>	Clear operation	

When the download is successful, the steps to upload the project are as follows:

1. Complete steps  $1 \sim 3$  as shown in the figure below

Communication s	ettings			-
Connection	USB	~		n ent
				• ×
	USB刷新	Communi		
Upload and down	nload			
Download passy	vord	۲		
Allow project	t upload 🗹 U	pload p 11111		12
		B	rowse For Folder	
User defined	boot screen	请选择文件夹		~
□ Synchronize F ☑ Clear alarm re		Jandroid		
Overwrite rec	ipe data 🕑		step 3: select the folder to save the upload file	
		Javonites		~

2. Click OK to pop up the password input dialog box. Enter the upload password set during download, and click OK. (If the upload password is not selected, this step is not available)

輸入密码		
密码:	*****	确认

3. After clicking OK, the progress bar of file upload will be displayed, and the words "upload succeeded" will be displayed.

	USB跟	新	12	信测试	连接成	<b>1</b> 01	
上传下载							
☑ 下载密码	123456			۲			
2 允许工程	上传		上传密码	123456			
				L			
No.							
□ 用户自定:	义开机画面						
i							
□ 同步PC时	间至HMI		隐藏系统	菜单		启用分期付款	
☑ 清除报警	记录		法除操作	记录		清除数据采集记录	
☑ 覆盖配方	数据	$\leq$	下载字体	至HMI	$\leq$	清除PFW数据	
文件正在上傳	; 清销候						_
文件上传成功							
	-					<u></u>	
下载	上传					关闭	8

If Allow Project Upload is not selected, a window prompt of "No Upload" will appear when clicking upload.



#### 2-7. SCADA project

The SCADA project needs to be used in conjunction with the secret dog Autowin Pro.

- 1. Open the editing software, click the "New" icon on the toolbar or "New" under the "File" menu.
- 2. Select the TS-PC series and select the corresponding resolution based on the display.

Ŧ

Monitor	Product description
<ul> <li>TS-PC series</li> <li>PC-800x600(800 x 600)</li> </ul>	<ul> <li>Resolving power : 1024 x 768</li> <li>Serial port : COM1(R\$232/R\$485)</li> </ul>
PC-1024x768(1024 x 768)	Network interface:1
PC-1152x864(1152 x 864)	
PC-1280x600(1280 x 600)	
PC-1280x720(1280 x 720)	
PC-1280x768(1280 x 768)	
PC-1280x800(1280 x 800)	
PC-1280x960(1280 x 960)	
PC-1280x1024(1280 x 1024)	
PC-1360x768(1360 x 768)	
PC-1366x768(1366 x 768)	
PC-1400x1050(1400 x 1050)	
PC-1440x900(1440 x 900)	
PC-1600x900(1600 x 900)	
PC-1680x1050(1680 x 1050)	
PC-1920x1080(1920 x 1080)	Display Normal     function

3. Set the COM port. By default, there is no device for the COM port. You need to select the PLC brand through the drop-down menu, select the correct PLC type in the list, and click the "New Equipment" button. In the pop-up window, set the device name and its communication parameters.

COM1	Xinje	Essential in	formation			
Net0		Device	Xinje XD RTU			
Neto	Xinje XC RTU	Equipm	Xinje XD RTU			
	Xinje XD RTU	+	nunication info		21	
		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	RS232	rmatic	'n	
			19200	~	Data bit	_
			Parity check	~	Stop bit	1
		Station	1			
	/	Timeout an	d packaging p	arame	ters	
		Communi	cat 1000		Retry count	3
	New equipment	Delay tin	ne 0	- 1	Interval time	0
		Maximun	120	\$	Maximum	120
	No. Device name Equ 0 Local Device Loca	11				-
		Advanced	Ĩ			

4. Set the Ethernet port, select the PLC brand through the drop-down menu, select the correct PLC type in the list, and click the "New Equipment" button. In the pop-up window, set communication parameters such as

device name and IP address.

COM1	Xinje	Communication	20010/2010					
Net0	Xinje XD TCP	Essential infor	(A.4488					
	Xinje XS CodeSys		Minje XS Codesys					
	Xinje CAD	Equipm Xin	je XS CodeSys					
		Network port	communication in	formation				
		space 192 .	2 . 168 . 6					
		End 484	40	Station	1			
		Timeout and p	ackaging parame	ters				
		Communicat	1500	Retry count Interval time Maximum	3			
	No. Device name O Local Device	Delay time	me 0		0			
		Maximum	120		120	H		
		Communic	ation status regist	ter				
		6 (100 C (10) C (100 C (10) C (100 C (10) C (10) (100 C (10) (100 C (100 C (10)						
		Do n	ot export commu	nication status in	nformatio			
		Communic	ation shield addre					
		PSB						
			ot use communica	tion mask addr	Acc			
			47, 4965, 5970 (70,091 (99					
		Advanced				C		

Click "set native IP", set the IP address parameter in the pop-up window (set to be in the same network segment as the local network card).

Net0         Xinje XD TCP           Xinje XS CodeSys         Xinje CAD           Local IP              •             •	COM1	Xinje
Xinje CAD         Local IP         Automatically obtain IP         Image: Use custom IP address         IP addr	Net0	Xinje XD TCP
Local IP         T           Automatically obtain IP         •           • Use custom IP address         192 , 168 , 6 , 2           Nev         Subnet           255 , 255 , 255 , 0           No,         Default           Gateway         192 , 168 , 6 , 1           0         Default           1         Server		Xinje XS CodeSys
IP address         192 . 168 . 6 . 2           Nev         Subnet         255 . 255 . 255 . 0           No.         Default         192 . 168 . 6 . 1           0         Default         192 . 168 . 6 . 1           1         server         0 . 0 . 0 . 0		
IP address         192 , 168 . 6 . 2         Set native IP           Nev         Subnet         255 . 255 . 255 . 0         Set native IP           No.         Default         192 . 168 . 6 . 1         rt type         Communication         State           0         DNS         0 . 0 . 0 . 0         0         PCUA         192.168.66 ± 4840         1		
New mask         Subnet 255 . 255 . 255 . 0         Set native IP           No.         Default Gateway         192 . 168 . 6 . 1         rt type         Communication         Static 0           1         DNS         0 . 0 . 0 . 0         PCUA         192.168.66 ± 4540         1		Use custom IP address
Submet mask         255 . 255 . 255 . 0           No.         Default           0         Gateway           1         server           0         0           1         server		
Gateway 192 . 168 . 6 . 1 0 DNS 0 . 0 . 0 . 0 1 Server 0 . 0 . 0 . 0		Subnet are are a
DNS 0 . 0 . 0 . 0 PCUA 192:168.65: 4540 1		192 . 168 . 6 . 1
		DNS 0 0 0

- 5. Click OK to finish the setting.
- 6. Generate configuration, click "Generate Configuration" under the "File" menu, and a window will pop up.

option		
Clear alarm record	Clear operation	Clear data acquisition
Overwrite recipe data	Clear PFW/SPFW data	
file name		

7. Fill in the configuration file name, select the corresponding path, click export, and complete the configuration generation.

8. Open the corresponding folder and run it by double clicking on the corresponding file.

Hmi.Simulator.dll	8/21/2023 6:11 PM	Application exten
Hmi.WPP.dll	8/21/2023 10:36 AM	Application exten
image-dafbf64416dd99addf3e9450cf2231	5/28/2015 2:11 PM	JPG File
IMG-20150526-WA0000_resized.jpg	5/26/2015 12:17 PM	JPG File
inverter1.png	6/2/2015 9:08 AM	PNG File
nxet3.PNG	5/29/2015 1:49 PM	PNG File
panbaidu download explanation.png	5/28/2015 8:38 AM	PNG File
75 today.exe	12/23/2023 3:51 PM	Application
Logo VID-20150526-WA0004.mp4	5/26/2015 4:21 PM	MP4 Video File (V
🛓 VIDEO0044.mp4	5/27/2015 8:37 AM	MP4 Video File (V

9. Open the corresponding folder, double-click the corresponding file to run it, and a dialog box will pop up as shown in the following figure.

通讯口配置			?	×
设备端口号	本机端口号	配置结果	果	
COM1	COM4	>>>>		
		定 取消	<u>sty</u>	1

10. At this point, it is necessary to configure the port and connect the device port with the local port. First, click to select the device port number, then click to select the local port number, and then click the middle button. The configuration result will be displayed on the right side.

	? ×	通讯口配置		? ×
本机满口号	配置结果	设备端口号	本机端口号	配置结果
COM4				(COM1,COM4)
2	>>>>			
	3			
	****			****
			确定	取消 並用
	2 2	本机族口号 配置结果 COM4 2 >>>> 3	本机端口号 配置结果 COM4 2 >>>> 3 <<<<	本机族口号 配置结果 COM4 2 3 KKKK

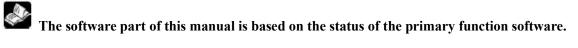
Device port	Select the HMI port number, which is the COM port selected when creating a new project or
number	adding a device. This can be viewed by clicking on "File/System Settings - Device".
Local port	Select the port number for connecting the PLC to the computer, which can be viewed through
number	the computer device manager.
Configuration	Display port configuration results.
Results	

10. After completing the above operations, click "OK" to enter the online simulation screen, which can realize the monitoring function of the computer on the lower computer PLC.

If you need to start up and run automatically, you can add the application to the startup automatic run list.

# 3. Software screen and window

This chapter gives an overall description of the TouchWin Pro editing tool.



#### 3-1. Software structure

Open TouchWin Pro, build a new project.

Project are	a Menu bar	Tools bar	Screen tools bar	Screen editing area	Function area			
		out window						
object a	rea	Jut willdow	L	status bai				
Project area	It involves basic operations such as creating, deleting, copying and cutting pictures and windows, and editing and using function blocks and libraries							
Menu bar	There are 7 n	There are 7 menus, including File, Edit, Part, Mapping, Tool, View, Help						
Tools bar	Some comm simulating, et		uding creating,	saving, copying, cu	tting, searching, downloading,			
Screen tools bar	Some tools	for operating	the contents o	f the screen during	the screen editing, including			
	-		width, equal he	ight, combination, etc	C			
Screen editing	Project screet	n editing area						
area								
Function area	1 1	switching of	function window	w can be freely set,	including address preview and			
	outline							

Control object	Control list window for screen editing, including basic components, equipment, drawing, data	
area	processing and special components	
Output window	When the project reports an error, the error message will be displayed here, and the	
	compilation information and results will also be displayed here when the project is simulated	
	or downloaded	
Status bar	Display HMI model, PLC port connection device, download port connection device, etc	

# 3-2. Project area

It is mainly used to add, cut, copy, paste and delete images, windows, function blocks and libraries.

#### 3-2-1. Add

1. Add the screen

Select "User Screen" in the project area, right-click and select "Add to", and the following property dialog box will pop up:

	8-1	ering tree Engineering User A [00001]页	dd to	×	
		Page propert	ies		×
Page info Page					
17.	Page2				
Page	2				
Page backgro		~			
Picture si	ze				
Width	800	* *			
Height	480				
Overlay v	vindow				
Top floor	无			*	
Bottom	无			~	
Screen p	ermission	0			
Required user per		权限1		~	
Switch	to the p	ermission range whe	en the screen	n / window	w is clos
		权限2		~	

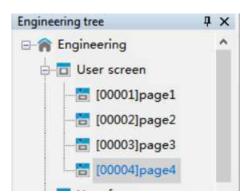
Page name	Customize the name of this screen	
Page no.	Set the number of the screen, which is incremented by default. After clicking "OK", the screen	
	number cannot be changed	
Page	Set the background color of the project screen	
background		
Picture size	size Set the width and height of the screen. If it is a user screen, the picture size is the resolution by	

	default and cannot be changed. The user window can freely adjust the width and height
Overlay	Set the overlapping display window of the picture. Overlapping windows can be set at the top
window	and bottom layers. After setting, the set picture will be displayed on the top or bottom layer of
	the picture, but the superimposed picture can only be displayed and cannot be operated. For
	example, if the bottom overlay screen 1 is set in the properties of screen 2, the content of screen
	1 will be displayed in screen 2 like the background. The overlay screen will be displayed in gray
	during project editing to distinguish between the two screens, and will be displayed normally
	when simulated or downloaded into the HMI. See the following case description for specific use
	methods
Screen	Set operation permission for the current screen
permission	
Switch	After checking, when the screen/window is closed, the permission becomes another permission
permission	set (As shown in the figure above, when it is closed, the current screen permission is switched
range	from permission 1 to permission 2)

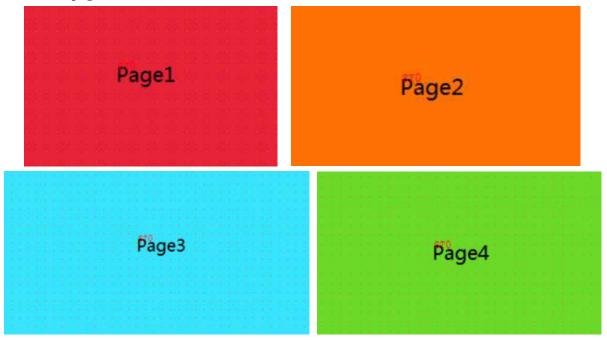
When the screen properties needs to be modified, select "Project Area/Object Screen Number", double-click the mouse left button directly, or click the mouse right button to select "properties".

# For the use of overlapping windows, the following is an example.

(1) Add 4 screens



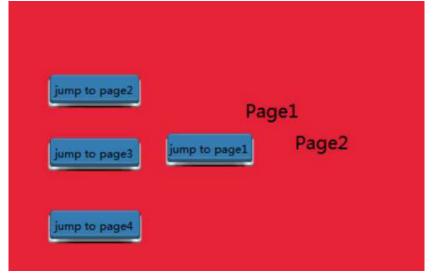
The four pages are shown as below:



(2) Set Page 2 as the top layer of Page 1. Operating Steps: Right click on Page 1, click Attribute, and select Page 2 at the top level under the overlapping window. At this time, the entire screen tone of Page 1 will darken, making it easy to distinguish between superimposed images. All components of Page 2 will be displayed on Page 1 and the tone will darken, and will be displayed normally when simulated or downloaded into the touch screen.

Page info	Page properties		
Page	Page1		
Page	1		
Page backgro	· ·		
Picture s	ze		
Width	800 🔅		
Height	480		
Overlay v	window		
Top floor	[00002]Page2	~	Page1
Bottom	无	v	
Screen p	ermission		Page2
Required	l user per 无	*	전 수 집에서 것 것 것 같아. 같아. 말 것 것 같아.
Switch	to the permission range when the s	creen / window is clos	

(3) You cannot open/switch from the current page to a window or page with the current page as the top/bottom layer. Take offline simulation as an example. Set the starting screen as Page 1. Page 1 that jumps from Page 3, 4 will display the superimposed screen, as shown in the figure below.



If you click the function key of "Jump to page 2" on page 1, the current screen will still be displayed (that is, the superimposed page 1).

If you click the function key "Jump to page 3/4" on page 1, the screen of page 3/4 will be displayed.

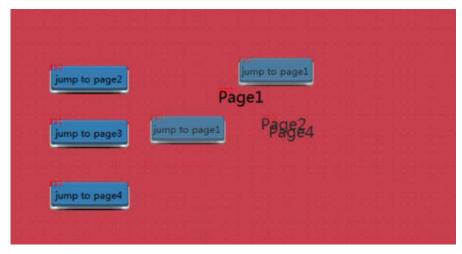
If you click the function key of "Jump to page 1" on page 3/4, the superimposed page 1 will be displayed.

If you click the function key of "Jump to page 1" on page 2, page 1 before superimpose will be displayed.

The same is true for the bottom layer.

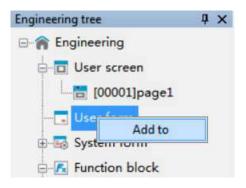
If the top layer and bottom layer are set at the same time, the superposition order of screen elements

is current page ->top layer ->bottom layer, and the elements of the current page will be displayed at the top. (As shown in the following figure, the current page is Page 1, Page 2 is the top layer, and Page 4 is the bottom layer)



#### 2. Add window

Select "User Form" in the project area, right-click and select "Add to", and the following property dialog box will pop up:



	Page	properties
Page info	ormation	
Page	Forms5001	
Page	5001	Used as keyboard display
Page backgro		
Picture si	ze	
Width	800	
Height	480 .	
Overlay v	window	
op floor	无	v
Bottom	无	~
Pop up w In the Show i Monop	middle of the screen in	
Consideration of the second	ermission	
	user per 无 n to the permission ra	ange when the screen / window is

The properties interface of the new form is basically the same as that of the new screen. The following only describes the differences:

Page number	Set the number of the current form, which is incremented by default. After clicking OK, the		
	form number cannot be changed. Different from the screen, the number of the form starts from		
	5001		
Picture size	Set the width and height of the form. The width and height can be adjusted freely		
In the middle	Place the form in the center of the entire screen		
of the screen			
Show in	The customizable form is located in the whole screen		
Monopoly	When monopoly is checked, as long as this window is called, no other components in the screen		
	can be clicked except the components in this window. When this window is closed, other		
	components can be clicked normally, which is usually used in conjunction with the "close		
	button"		
Close button	After checking, the user does not need to do the close button alone, and there will be" ×" close		
	button		

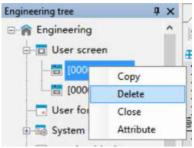
#### 3-2-2. Copy paste

- 1. Select the screen to be operated, right-click and select copy.
- 2. Select the user screen in the project area, right-click and select "Paste" to complete the operation.

Engineering tree	ąΧ	[0				
Engineering			Engineering tree	Ţ.	×	ſ
User screen		⊕_	- A Engineering		^	F
- [] [00001]Pa	Сору		User screen			4
	Delete		[00001	Add to		
E System form	Close			Paste		
E Function bloc	Attribute	6	- 🛅 [00002]Pag	ez	-	T

# 3-2-3. Delete

Select the screen to delete, right-click and select Delete to delete the screen.



The operations of adding, copying, pasting and deleting "user window and function block" are the same as above.

## 3-3. Menu

The menu bar includes 7 groups of menus: File, Edit, Parts, Drawing, Tool, View and Help.

#### 3-3-1. File

The file includes various operations on the project, such as new, open, close, save as, download, simulation, encryption save project.



#### 1. New

Create a new program, set the display and communication equipment, press Ctrl+N, and refer to section 2-1 for details.

#### 2. Open

Click File/open or open icon in the tool bar, or press Ctrl+O, it will show below dialog box, select a project and click Open or double-click the project directly.

3. Close

Click File/close or close icon in the tool bar to close the project. But it will not exit the software. If the project is not saved, the following prompt window will pop up.

18

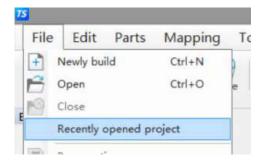
	Friendly tips
	The project has been modified. Do you want to save it
	Yes No Cancel
Yes	Save the project. Then exit project editing
No	Do not save. Then exit project editing

#### 4. Recently opened project

Return to screen editing status

Cancel

If the user has opened or edited some projects recently, the software will automatically remember the path and name of these projects, so that the user can find these projects more quickly without having to refind the project path. Move the mouse to File/Recently Opened Project, and the recently opened project will be displayed on the left. Click to open the corresponding project.



#### 5. Save

Click File/save or save icon . Open the save dialog box, select the save path, enter the project name, and click Save.

# In the process of editing the project screen, the user should save at any time to avoid data loss.

6. Save as

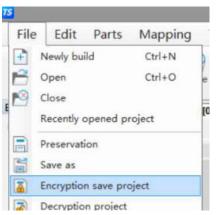
This operation is different from Save. Save uses a new file to replace the old one based on the original project. Save As saves the current project as a new project. After the Save dialog box pops up, select the storage path, enter the file name, and click Save.

7. Encryption save project

When the programmer needs to protect his own program and must give the program to the customer to download, the programmer can choose to encrypt and save it. After the file saved in this way is opened with editing software, the content of the screen cannot be seen, and no parameters can be modified. Only downloading and simulation can be done.

Operation steps:

(1) Open the project to be encrypted and click File - Encryption Save Project.



(2)After clicking, the pop-up window for entering password will appear, please set the encryption password (the password cannot be less than 6 digits)

请输入密闭	码			x
密码:	•••••			(长度不超过32字数)
		确定	取消	

(3) After entering the password, set the save path of the encryption project. The file default is the xep format, which cannot be changed

(4) Open the path where the encryption project is located, and you can see an encrypted file ending in xep

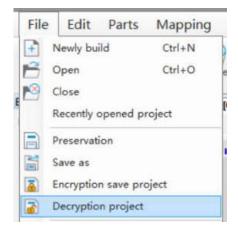


(5) The encrypted file can only be opened for decryption, download, online simulation, offline simulation, compilation and other operations, and the project content cannot be modified in any way.

#### 8. Decryption project

It is used to decrypt the encrypted project. The decrypted project can be edited and downloaded normally. Operation steps:

(1) Open the encrypted project. Refer to "7. Encryption save the project" above for the operation steps. Click File - Decryption Project.



(2) Enter the password set during encryption and click OK.

请输入密	码			x
密码:	•••••			(长度不超过32字数)
		确定	取消	

(3) Select the save path of the decryption project and click Save to generate a project that can be edited and downloaded normally.

(4) There will be a pop-up prompt after saving successfully.



(5) Open the save path of the decryption project. After the project is opened, it can be edited or downloaded normally.

9. Compile



Click File/compile or **Compile**. The system will check whether all control properties in each screen and window have errors. Compilation is a prerequisite operation for simulation and download. When you click Online Simulation, Offline Simulation or Download, the system will automatically execute the compilation operation. When compiling, a pop-up window as shown in the left figure will pop up in the center of the software, and the compilation information and results will be displayed in the output window

-	Output window	
×	Output ErrorlList	
Compiling	Compile window25014 Compile window25900 Number of compiled res Compilation succeeded. OErrory Owarning ON	

10	0.00.	• • •
10	Offline	simulation
	0 mme	ommanation

In order to facilitate the user to debug and edit the screen, simulate the actual operation of HMI and PLC on the computer (no need to connect PLC). Click File/offline simulation or to perform offline simulation.

#### 11. Online simulation

Simulate the actual operation of HMI and PLC on the computer to realize the monitoring function of the lower computer equipment (PLC must be connected to the computer). Click File/online simulation or perform online simulation.

#### 12. Download

Realize downloading the editing screen data to the HMI, click File/download or press Ctrl+D to perform downloading function.

# For detailed operations of offline simulation, online simulation and download, please refer to chapter 2-3, 2-4 and 2-5.

13. Generate USB flash disk file

Export and store the project as dat file. The file name can be customized, but the suffix must be Dat, copy the generated file to the root directory of the USB flash disk, connect the HMI with the USB flash disk, and download the file directly to the TS series HMI.

Operation steps:

(1) Click File/Generate USB flash disk file, it will show path selection dialog box. Click , select the path to be saved in the pop-up window, and enter the name of the USB flash drive project file to be saved. Please note that the file must be saved as .dat.

西南周月月上帝田王王国		2
<b>≗</b>	← → · ↑ ■, 848 · · · · ○ E SAR +88	p
1	80 · · 8: ·	0
, les.	→ wpsRm → psmm → psmm 本(6) 本(5) 本(5) 本(5) 本(7	
HEU4827年 × 単出し曲55項 単出支件動産		
9±	201 201 ■ 105 mm da	
1	● 8年 文中考2(3)     □	
22	(879450): det214 (* det) > Net216:R (8795) 834	

(2) After selecting the path, click the "Export" button.

Export file path	C:\Users\TXB\Desktop\1111.dat				***
		HV1	~	Export	

Note: HV1 is an old version and HV2 is a new version. Only HV1 can be selected for the old version of the touch screen, and only HV2 can be selected for the new version of the touch screen. Otherwise, the firmware will be prompted as incorrect. Please refer to 7-3 for the hardware version of the touch screen currently used Device information.

(3) If the export is successful, you will be prompted as shown in the following figure, and a file will be generated in the saved path. The file type must be .dat (do not modify the file suffix). Copy the file to the root directory of USB flash drive for later use.

	×
Export s	ucceeded
ľ	OK

(4) Insert the U disk into the U disk port of the HMI, and the "U disk update" pop-up window will pop up in the upper left corner of the HMI. Click "Update HMI Project", and the file selection window will pop up, as shown in the following figure on the right. Select the project to be imported in the list, and click "OK" button at the lower right corner. The system will automatically import the project file, and the progress bar of the import project will be displayed on the screen. After the import is completed, remove the U disk.

リ産運新	选择更新文件	
	Show: +.dat  Favorites	⊽ 🖻
更新Hmi工程	/ System Volume Information/ database/	
	导出工程.dat	
	1	
	Preview Show hidden files	
	Filename; //mnt/udisk/导出工程.dat	
	OK /#	Cancel

(5) Import is successful.



The "Allow project upload" set in the software download interface does not take effect after the project is updated with a USB flash drive, that is, the project updated with a USB flash drive is not allowed to upload.

14. Generate SCADA

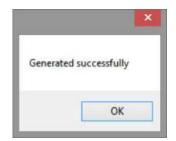
The SCADA generation let the computer replaces the HMI and communicates directly with PLC and other external communication devices. The difference between its function and the online simulation function is: when the online simulation function is implemented, the user needs to install TouchWin Pro editing software. The user does not need to install TouchWin Pro editing software when the SCADA is running.

Operation steps:

- (1) Click File/generate SCADA
- (2) Set the saving path and file name

	Export Scada	
option <ul> <li>Clear alarm record</li> <li>Overwrite recipe data</li> </ul>	<ul> <li>✓ Clear operation record</li> <li>✓ Clear PFW/SPFW data</li> </ul>	<ul> <li>Clear data acquisition</li> <li>Enable installment</li> </ul>
file name scada test		
保存路径 C:\Users\TX	3\Desktop	

(3) Generate SCADA is successful.



(4) Generate four files in the saved path, click the SCADA name .exe file, and configure the communication port to run normally.

L	Run
(1)	Hmi.Simulator.dll
3	Hmi.WPP.dll
	SCADA.exe

🚽 通讯口配置		- 🗆 X	
(28)AC+	本和編日号 COM11	和:國站商業: (COM1,COM4)	
厂 保存配置			



#### 15. Export screen

The function of screen export is to save screens in the form of pictures or PDFs for document writing or picture preview. The name is picture name+ID. Click the "File" menu and select "Export Screen", and the following window will pop up:

		Expo	ort screen			×
Export Type	e Pictu	re				
Storage location						
Format Selectio	PNG	~				
n Width	800	1	Height	480		
Export		11158		10		
	ystem form					
					Ехро	ort

Export type	Select the format of screen export. The default export is picture format, or PDF format can be
	selected as required. After selection, the screens in the project will be exported in the form of
	pictures or PDF
Screen	Select the screen to be exported. You can select a screen or window to export, or select all to
selection	export
Format	Select the export format. If the export type is a picture, the optional formats here are png, jpg
	and bmp. If the export type is PDF, there is no optional format here
Storage	Set the export path, click "Select Folder", and set the target path in the pop-up window. The
	selected image or PDF will be saved in the path set by the user
Size	When selecting an image for export type, you need to set the width and length of the generated
	image. The default is the display size of the selected HMI model for the current project. You can
	customize the width and length of the exported image according to your needs

After setting the parameters, click Export. The system will automatically perform the export task. If the export is successful, the export successfully window will pop up.

#### 16. PFW data

This operation is to modify the system parameters of the project. After the program is downloaded again, the PFW data is initialized. Generally, when the recipe function needs to set the initial value, it can be modified after being downloaded to the HMI.

■ Set PFW address range

	Р	FW data	66	2
PFW	Start	0	End	2999999
PFW[0] - F	FW[2999999]			
Add to	Delete	M	odific	Modify

Start PFW	Set PFW register data starting address
End PFW	Set PFW register data end address
	The terminal PFW address is not greater than the number of system settings - monitor - parameter – number of PFW
Add to	After setting the start and end addresses, click Add to list the data segments in the data setting list
Delete	Delete the added data segment. After selecting it, the row becomes blue. Click Delete to delete it
Modific	When the start/end address needs to be modified, select the data segment, modify the address range, and click Modific. When the set data segments conflict, the following prompt will appear.
Modify	Modify the register value within the set address range
Set PFW	Select the PFW data segment, click Modify, or double-click the PFW data segment to open the data
value	setting window as shown in the following figure

	PFW data - 1										
		+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
	7/FW(00000600)	0	0	0	0	0	0	0	0	0	0
	PFW[00000610]	0	0	0	0	0	0	0	0	0	0
	PFW[00000620]	0	0	0	0	0	0	0	0	0	0
	PFW[00000630]	0	0	0	0	0	0	0	0	0	0
	PFW[00000640] PFW[00000650]	0	0	0	0	0	0	0	0	0	0
	PFW(00000660)	0	0	0	0	0	0	0	0	0	0
	PFW[000000670]	0	0	0	0	0	0	0	0	0	0
	PFW(00000680)	0	0	0	0	0	0	0	0	0	0
	PFW[00000690]	0	0	0	0	0	0	0	0	0	0
	PFW[00000700]	0	0	0	0	0	0	0	Ø	0	0
	PFW[00000710]	0	0	0	0	0	0	0	0	0	0
	PFW[00000720]	0	0	0	0	0	0	0	0	0	0
	PFW[000000730]	0	0	0	0	0	0		0	0	0
	PFW[00000740]	0	0	0	0	0	a	0	0	0	0
Decimal: data dis	Display format	eadecieru	Set 0	0 Set FF	_			0	0	0 Determine	
Decimal: data dis Hex: data display	Display format Decimal syst He play in decin	ateora 🗌 nal fc	Set 0	0 Set FF	_		0	0	0		0
	Deploy format • Decimal syste He play in decin in hex form	nal fc at	se o prmat	0 Set FF	_		0	0	0		0
Hex: data display	Display format • Decinal syst. He play in decin in hex form in the setting	mal fc at g segr	set ormation	serff to 0			0	0	0		0
Hex: data display Set 0: set all data	Deplay format Deplay in decin in hex form in the setting ata in the set	mal fo at g segr ting s	set ormation	serff to 0			0	0	0		0

# 17. System settings

This operation is to modify the system parameters of the project.

#### Parameter

Click "Parameters" to directly set the startup screen, screen saver, mouse cursor and sound parameters.

		a second and a second as a	ttings	
aramete Monitor Interacti	User righ Clo	ck Equipme Er	ngineer	
[Screen]				
Startup screen 6			~	
[Screen saver]				
Waiting time 1	Ŷ	Minute		
O Display			~	
Turn off the backlight	ŧ			
[Mouse cursor]				
Hide mouse cursor	Mouse cursor size	20X20(熈)	~	
[Sound]				
Turn off the buzzer				

Screen	Input the startup screen number, that is, when the HMI is powered on after downloading the
	program, the screen that runs first is usually the main screen of the program or the screen with
	the highest frequency of use
Screen saver	This function is an automatic measure when the HMI is not triggered for a long time. After a
	period of no trigger operation, the touch screen can turn off the backlight or jump to the
	specified screen according to the settings
Waiting time	Select time or no screen saver according to user requirements

Display	When the time conditions are met, jump to the target screen
Turn off the	Turn off the backlight when the time conditions are met
backlight	Note: Only one operation can be selected between turning off the backlight and display screen
Hide mouse	When checked, the mouse cursor will not be displayed when the touch area is clicked
cursor	
Mouse cursor	Set the size and color when the mouse cursor is displayed. The color can only be black or white
size	
Sound	It is used to set whether the screen will emit sound when the HMI is working normally. The
	default is that there is sound output. If "Close buzzer" is checked here, no sound will be emitted
	when the HMI is working, whether the screen is clicked or the alarm is triggered

# Monitor

Modifiy the HMI model and display direction.

		System settings		
ramete Monitor Interactiv	Jser righ Clock	Equipme Engineer		
(Model)				
Mo T55-700-E		Horizontal - normal	O Horizontal - rota	te 180 degrees
del	C	Vertical - rotate 90	O Vertical - rotate !	90 degrees
[Description]				
Display model : TS5-700-E				^
Screen size : 7寸				
Resolution : 800 x 480				
Colour : 1677万				
Brightness ; 200				
USB_A:1				
COM1:RS232/RS485				
COM2:RS232/RS485/RS4	22			- 1
Ethernet : 1				
SD卡:无				~
[Zoom mode]				
Constant     Caller Constant	proportion			
○ Small ○ Large	proportion			
Component width and he	ight unchanged			
Parameter				
		Ť.	etermine Cancel	Application

Model	Display the current HMI model and display direction. If you want to modify the display model,
	you can click OK to take effect after selecting a new display model and setting the display
	direction correctly. The display direction defaults to normal horizontal display. In order to adapt
	to various occasions, we provide the options of 180° rotation, 90° clockwise rotation and 90°
	counterclockwise rotation. The rotation options are appropriate according to the actual use
	situation. (The default is horizontal display. If it is switched to other display directions, it will
	automatically jump to the calibration screen after downloading, requiring the user to calibrate
	again)
Description	Display the current screen size, resolution, color, brightness, USB port, COM port and other
	information
Zoom mode	When changing the display model, the proportional relationship between the width and height
	of components in the screen and the display size

Constant	Component width and height remain the same
Equal	The width and height of components are scaled according to the width and height of the display
proportion	
Small	The component width and height values are scaled according to the small value of the display
	width and height ratio
Large	The width and height of components are scaled according to the large value of the width and
proportion	height ratio of the display
Parameter	Set the number of system registers
	Number of PSW:       10000       Input range 1-10000         Number of PFW:       3000000       Input range 1-3000000         Number of PSBs:       10000       Input range 1-10000         Confirm       Cancel

#### ■ Interactive

It mainly realizes the attribute relation between the screen and the register. Click Interact, and the settings shown in the following figure appear:

			Sy	ystem settings 🛛 🔀
Paramete 1	Monitor Interactiv	ser ri	iqh Clock Ec	quipmeEngineer
Cont	rol picture exchang	e		
Equip	本地设备		~	Set
Addre	PSW	~ (	0 0	
Data type	Word VInsigned		t designation	
	ort current screen n	umbe	er	
Equip	本地设备		×.	Set
Addre	PSW	× (	0 0	
Data type	Word 💛 Unsigned		t designation	

Control picture	Jump to the screen according to the value of the current register. If the register value is 10, it
exchange	means jump to the screen No. 10. Use the PLC register to control the screen switching. It is
	recommended to use the rising edge or falling edge signal for the triggering conditions.
Report current	The screen number of the current operation screen is displayed. If the current operation
screen number	interface is screen 7, the register will display 7
Equipment	Current equipment port for communication
Set	Click to enter address setting, and select to use system register or user-defined label in the
	pop-up window
Address	Set the object type and address of the current register
Data type	Set the data type of the register selected in the previous item. Byte represents 8 bits, Word
	represents 16 bits, DWord represents 32 bits, and DDWord represents 64 bits. In the second
	box, you can select decimal, hexadecimal, unsigned number, floating point number, etc
Indirect	The current register address changes with the indirectly specified register value, that is, Dx
designation	[Dy]=D [x+Dy value] (x, y=0, 1, 2, 3)

#### ■ User rights

The user authority function plays the role of engineering and data protection to improve program security. Authority settings are usually used for hiding and encrypting parts or pictures. Relevant operations can only be performed when the password is correctly entered.

			System set	tings		
Paramete M	Ionitor Interactivit	Jser righ) Clock	Equipme En	gineeri		
slumber 0 ed	User name	Default pass	word	User rights	Flag bit	
			100.02			
	Dele	te	Add to	mo	dity	
				Determine	Cancel Appl	ication

There are 30 permissions from "Permission 1 to Permission 30" set here, each of which is an equal level. Click the "Add to" button to add a user when using it. When adding a user, check the range of permissions that the user can operate, as shown in the following figure. After entering the password of the user "User1", you can operate the password protection functions of Permission 1, Permission 2 and Permission 3. At the same time, the corresponding flag is ON.



# Password input range: 1-8 digits and characters.

User .			-
name	Jser1	Password 123456	
elect all	Scope of authority	Describe	1
*	权限1	权限1	
~	权限2	权限2	
2			1
	权限4		
	权限5		
	权限6		
	权限7		
	权限8		
	权限9		
	权限10		
	权限11		
	权限12		
	权限13		
	权限14		
	权限15		
	权限16		
	权限17		
	权限18		
	权限19		
	权限20		
	权限21		
	权限22		
	权限23		
	权限24		
	权限25		
	权限26		
0	权限27		
	权限28		
	权限29		
	权限30		4
		Determine Cancel	Application

If multiple users need different permissions, you can add users according to the above operations and select corresponding permissions. By default, the project has an administrator permission of Admin. The administrator permission level is the highest, and all permission protection functions can be operated.

Here are two ways to log in:

(1) Call the user login interface through the function key See the following figure for operation steps:

	ł	unction key		
nction Appearan	ce Security set 1	ocation		
Control ID FE	0			
Description				
		-		
Action Press	Status	-		
Start				
unctions			Optional functi	ions
原用面目	[25001]		设置	线圈
-		Add	设置	
			四则	
		Delete	数据	
			调用	
		Move up	关闭	窗口
	Call wit	ndow		csv
	ecurity settings			CSV
Switch	[25001]User login	~	8	配方 配方
O Pop up				调用
				FJED
Pop up the	assword window	automatically.	(If the target	
			10.000	
	Determine	Cancel	Application	

Click the function key to call up the user login window (see the figure below), select the user name to log in, enter the password correctly, and the lower left corner will display the login successfully, if the password is entered incorrectly, the login failure will be displayed.

Take user1 as an example.

Select the user name of User1 from the drop-down list, enter the correct login password 123456, and click the "Login" button to display that the login is successful (see the left figure). At the same time, the password will be cleared. After the login is successful, you will have permissions 1, 2, and 3 at the same time. To log out, also select User1's user name in the drop-down list, enter the correct login password 123456, and click the "logout" button to display that the logout was successful (see the right figure). At the same time, the password will be cleared, or you can quickly log out by turning the flag position OFF. After the logout is successful, the user will have no rights (1, 2, 3).

1 用户登录	×	1 用户登录	×
USEF 用户名 User1	O	user 用户名 User1	0
passwon間每		password	
login successful 音录成功 音录	迸出	logout successful 注情成功 登录	III
登录成功 登录 login	logout	log	

(2) Select "When the user has no permission, a prompt window will pop up" Taking the indicator button as an example, the settings are shown in the figure below

Enable  Enable  User rights  The permission will be cancelled after the operation is completed  When the user has no permission range, a prompt window will pop up	peration confirmation delay Confirmation before Key delay splay control Enable ser rights The permission will be cancelled after the operation is completed		Indicator butt	ion	
Confirmation before Key delay Display control Enable Control Enable User rights The permission will be cancelled after the operation is completed Wen the user has no permission range, a prompt window will pop up	Confirmation before Key delay splay control Enable ser rights The permission will be cancelled after the operation is completed When the user has no permission range, a prompt window will pop up Hide the component when the user has no permission range	asic prope Appearance Fu	nction bi Security set Po	sition	
	Key delay      isplay control     Enable      isplay control     Enable      isplay control     isplay control     isplay control     isplay      isplay control     isplay      isplay control     isplay      isplay	Operation confirmation	n delay		
Display control  Enable  Enable  User rights  The permission will be cancelled after the operation is completed  When the user has no permission range, a prompt window will pop up	isplay control Enable nable control Enable ser rights The permission will be cancelled after the operation is completed When the user has no permission range, a prompt window will pop up Hide the component when the user has no permission range	Confirmation befo	ore		
Enable  Enable  User rights  The permission will be cancelled after the operation is completed  When the user has no permission range, a prompt window will pop up	Enable  The permission will be cancelled after the operation is completed  When the user has no permission range, a prompt window will pop up  Hide the component when the user has no permission range	🗌 Key delay			
Enable control Enable User rights The permission will be cancelled after the operation is completed When the user has no permission range, a prompt window will pop up	nable control Enable ser rights The permission will be cancelled after the operation is completed When the user has no permission range, a prompt window will pop up Hide the component when the user has no permission range	Display control			
Enable User rights     The permission will be cancelled after the operation is completed     When the user has no permission range, a prompt window will pop up	Enable ser rights The permission will be cancelled after the operation is completed When the user has no permission range, a prompt window will pop up Hide the component when the user has no permission range	🗌 Enable			
Enable User rights     The permission will be cancelled after the operation is completed     When the user has no permission range, a prompt window will pop up	Enable ser rights The permission will be cancelled after the operation is completed When the user has no permission range, a prompt window will pop up Hide the component when the user has no permission range				
Enable User rights     The permission will be cancelled after the operation is completed     When the user has no permission range, a prompt window will pop up	Enable ser rights The permission will be cancelled after the operation is completed When the user has no permission range, a prompt window will pop up Hide the component when the user has no permission range				
Enable User rights     The permission will be cancelled after the operation is completed     When the user has no permission range, a prompt window will pop up	Enable ser rights The permission will be cancelled after the operation is completed When the user has no permission range, a prompt window will pop up Hide the component when the user has no permission range				
Enable User rights     The permission will be cancelled after the operation is completed     When the user has no permission range, a prompt window will pop up	Enable ser rights The permission will be cancelled after the operation is completed When the user has no permission range, a prompt window will pop up Hide the component when the user has no permission range				
User rights The permission will be cancelled after the operation is completed When the user has no permission range, a prompt window will pop up	ser rights The permission will be cancelled after the operation is completed When the user has no permission range, a prompt window will pop up Hide the component when the user has no permission range	Enable control			
☐ The permission will be cancelled after the operation is completed ☑ When the user has no permission range, a prompt window will pop up	<ul> <li>The permission will be cancelled after the operation is completed</li> <li>When the user has no permission range, a prompt window will pop up</li> <li>Hide the component when the user has no permission range</li> </ul>	Enable			
☐ The permission will be cancelled after the operation is completed ☑ When the user has no permission range, a prompt window will pop up	<ul> <li>The permission will be cancelled after the operation is completed</li> <li>When the user has no permission range, a prompt window will pop up</li> <li>Hide the component when the user has no permission range</li> </ul>				
☐ The permission will be cancelled after the operation is completed ☑ When the user has no permission range, a prompt window will pop up	<ul> <li>The permission will be cancelled after the operation is completed</li> <li>When the user has no permission range, a prompt window will pop up</li> <li>Hide the component when the user has no permission range</li> </ul>				
☐ The permission will be cancelled after the operation is completed ☑ When the user has no permission range, a prompt window will pop up	<ul> <li>The permission will be cancelled after the operation is completed</li> <li>When the user has no permission range, a prompt window will pop up</li> <li>Hide the component when the user has no permission range</li> </ul>				
When the user has no permission range, a prompt window will pop up	When the user has no permission range, a prompt window will pop up Hide the component when the user has no permission range	User rights			
	Hide the component when the user has no permission range	The permission wi	ill be cancelled after the o	peration is completed	
		When the user has	s no permission range, a p	prompt window will pop up	
Hide the component when the user has no permission range	Required user	Hide the compon	ent when the user has no j	permission range	
Required user		Required user	60012		
		1003000000000	less to the second s		
Determine	Determine				

Download to the screen, click the indicator button, and the following window will pop up

权限提示	×
😣 操作级别高,	您没有此权限
用户登录	确定
user login	ok

Click "User Login" to enter the user login interface. Refer to User1 login introduction above for the operation steps. Click "OK" to close this pop-up window

#### Clock

The HMI is equipped with the clock function as standard, which is mainly used to set the clock source and transmit the touch screen clock to externally connected PLC and other devices.

	System settings
Paramete Monitor Interactiv User righ Clock	Equipme Engineer
Disable clock setting	
Clock source	
HMI internal	
O Peripheral	
Write HMI clock to external device	
Write mode 连续 v	
Clock display format.	
Decimal system	
Number of synchroniz	
Equipment	Register
	Determine Cancel Application

Disable clock	If selected, the HMI internal clock cannot be modified, which is used for installment payment and other time encryption projects to
setting	prevent the clock modification from affecting the function
Clock source	To set the clock source of the HMI, you can choose to use the HMI internal clock or import from an external device. The default is
	the HMI internal clock. When you select an external device, the following settings will appear
	Clock source
	HMI internal     Clock display format     Decimal system      Hexadecimal
	Peripheral
	Addr PSW0
	ess
Clock display	When setting to read from an external device. You can select decimal or hexadecimal format.
format	For example: when HMI communicates with Xinje PLC, if you choose to read the clock from the external device, and Xinje PLC
	clock format is hexadecimal, so the clock display format here should also be hexadecimal.
Address	Set the first address of clock reading, that is, read the time from the set address, and set it as the time of HMI. The address requires
	that year, month, day, hour, minute and second each occupy a single word (16 bit) register, excluding week. For example, if the
	address is set to D0, the values of 6 registers D0~D6 will be read from D0, which will be used as year, month, day, hour, minute and
	second in turn
Write mode	After checking "Write HMI clock to external register", you can set the HMI clock export mode. You can select continuous, trigger or
	cycle. The default is continuous, that is, every second change can be written to the external address in real time. When you select
	trigger or cycle, you need to set the transmission conditions, as shown in the following figure. Note that when the writing mode is
	cycle, the minimum cycle cannot be less than 100 milliseconds.

	Write clock to periph	eral
	Write mode Read PSB0	✓ Mode Rising edgε ✓
	Write clock to periph Write mode Cycle Cycle	eral ✓ 0.1 secor ✓ ✓ Register PSW0
Number of	Customize the number of HMI	clocks written to external devices. If the touch screen is connected to multiple devices at the same
synchronization	time, the number of multiple de	vices can also be set here. The number of rows corresponding to the number set here will appear in
	the table below, and the first a	ddress corresponding to each device needs to be set in the table below. The same as the external
	reading above, when writing to	the external device, there are 6 registers, including year, month, day, hour, minute and second,
	excluding week. Example: If t	he address is set as D0, D0~D5 will display year, month, day, hour, minute and second in turn,
	occupying 6 register addresses.	
	Number of 2 synchroniz	
	Equipment	Register
	设备0	设置
	设备1	设置

# Equipment

It mainly sets the communication parameters between HMI and PLC and other external equipment

	COM1	信捷				~
	COM2	信捷 XC系列				
	Net0	信睫 XD/XL/X	3系列(	Modbus RTU	1)	
Serial	Iquipaent name	New equipm	Port	Port type	Communication	Station
0	は10没备 信捷 XD/XL/XG系列	本地设备 信捷 XD/XL/XG	1	R5232	19200.8,偶校验,1	0

New equipment	Add different device types. Select C	COM1/COM2/Net0 on the left and click "New equipment"						
	to add a new device							
Equipment	The name of a user-defined device. When multiple devices are added to the same serial port,							
name	the name cannot be duplicate							
Equipment type	The protocol name							
Port ID	The COM port where the device is lo	ocated is automatically generated by the system, no need to						
	set							
Port type	The interface type selected when cre	eating a new device is generally RS232, RS485, RS422 or						
1 010 0/20	Net							
Communication	When it is on the serial port, the bau	id rate, data bit, parity mode, stop bit and other parameters						
protocol	are displayed here.	······································						
protocor	When it is on the Ethernet port, the IP address and port number of the device are displayed							
	here. Double click to modify the para							
	Communication settings							
	Essential information	Communication settings						
	Equip (日本 X0/XU/XG 经新 ( Modbus RTU ) 2 Equip (由于 X0/XU/XG 规利 ( Modbus RTU )	Equip (ALE XO/XI/XO系列(Modbus TCP) Equip (信課 XD/XI/XG系列(Modbus TCP)						
	Serial communication information	Network port communication information						
	Interfa RS232 v Baud 19200 v Data bit 8 v	$192 + 16\xi + 6 - 6$						
	Baud 19200 v Data bit 8 v Check Parity check v Stop bit 1 v	End 502 Station 1 Timeout and packaging parameters						
	Statio	Communi 1500 Retry 3						
	Timeout and packaging parameters	Delay 0 Interval 0						
	Communi 1000 Retry 3	Maximum 120 🗊 Maximum 120 🗊						
	Delay 0 Interval 0	Communication status register						
	Maximum 120 🛱 Maximum 120 🛱 PSW 100							
	Do not export communication status i							
	Communication shield address							
		PS8 100						
		PS8 100 Do not use communication mask addr						
	Advanced Confirm							
Station no.		Do not use communication mask addr Advanced Confirm						
Station no.		Do not use communication mask addr						

#### Project

This item is used to set the name, author and comments of the current project. If the current project has been saved, the name item displays the name of the project and cannot be modified.

	System settings	
aramete M	Ionitor Interactiv User righ Clock Equipme Engineeri	
Name:	工程	
Author:		
Remarks:		

#### 16. Sign out

This function is used to exit the TouchWin Pro editing software, which is different from the "Close" operation. If the user does not save the project, a save window will pop up to avoid losing the operation

#### 3-3-2. Edit

The Edit menu is mainly used to edit components. The corresponding shortcut keys can be found in the toolbar for the functions in editing, as shown below:

Edit	Parts	Mappin							
è c	opy	Ctrl+C							
X S	hear	Ctrl+X							
P.	aste	Ctrl+V							
D	elete	Del							
€ R	evoke	Ctrl+Z							
c≁ R	ecovery	Ctrl+Y							
D Lo	ookup	Ctrl+F	€	<b>(</b> *		X	(B)	T	
<ol> <li>E</li> </ol>	ont substi	tution	Revo <mark>k</mark> e	Recovery	Copy	Shear	Paste	Delete	Lookup

	copy operation, the original component still exists. The shortcut key is Ctrl+C
Cut	Select the target object, cut it to the clipboard, shorcut keys Ctrl+X
Paste	It is the subsequent operation of "Cut" and "Copy". After cutting or copying the object component, execute the "Paste" operation to successfully transfer or copy the target component, shorcut keys Ctrl+V
Delete	Delete target object, shorcut keys Delete
Undo	Undo history operation, shorcut keys Ctrl+Z
Redo	Restore the history operation that was undone, shorcut keys Ctrl+Y

#### Lookup

This function is used to find and replace addresses in the project.

#### 1) Lookup

It is used for address search in the project. Enter the target address and click "Search" to display the screen, control ID and address number of the target address found in the lower blank area (as shown in the right figure below).

	Find	and replace	×			Find and	replace		
0	Lookup	🔿 Repla	ce		🔿 Lookup		Repl	ace	
Lookup Search range	<u>순</u> 왕	•		Lookup Search range	全部 ● Bit address		v ⊖ Word		
Equipme	<ul> <li>Bit address</li> <li>本地设备</li> </ul>	O Word	System register	Equipme	本地设备		O Word	v 🗌 System regis	
nt Address type	PSB ~		Custom label	nt Address type	PSB	v		_	istom label
Exten	0			Exten	0				
Format (ra	ange) : DDDD(范围 : 0 - 9999	1		Format (r	ange): DDDD[障	(M) : 0 - 9999)			
Replace Equipme at Address type Address Format (n	本地设备 PSB ~ 0 2 ange)DDDD[Extent:0-9999] Lookup	Address	System register Custom label place Replace all	Replace Equipme nt Address type Address Format (r	D 0	tent:0-16777215]	tion 0 nber ddress		stem register istom label Replace al
					位置		名称		NOF
					1000011回前1 :[00001]页面1	LBO		PSB:0	The second s
		Determine C	ancel Application	·		D	etermine	Cancel	Applicatio

Look up	Select the search range. You can select a screen/window, or search in all the screens/windows.
search range	After selection, you will search within the selected range
Bit address	Set the search target as bit address
Word address	Set the search target as word address. Please note that only one of word address and bit address
	can be selected
Equipment	Select the name of the device to be searched, which can be selected from the local device (HMI
	internal) and the newly added devices in the COM port and Ethernet port devices
Address type	Select the address type. The address type here will change with the bit address or word address
	selected in the above search range. If the bit address is selected above, the address types displayed
	here are all bit address types. If the word address is selected above, the address type displayed
	here is the word address type.
Range	Set the detailed address number or address range to search. If "Range" is not checked, you only
	need to enter the address number to be searched in the rear input box, such as 0x0 under the
	modbus address; If "Range" is checked, two input boxes will appear. Enter the start address in the
	first input box and the end address in the second input box, such as 0x0~0x10. When the system
	performs the search task, it will search in 0x0~0x10, including the first and last addresses
System	After checking, the address can only be selected from the HMI system address, the device must
register	select "local device", and the specific system register name must be selected from the address
	type
Custom label	Select the address to find in the customized address label

2 Replace

It is used to replace the address used in the project. It is usually used to change the address. The replacement needs to be used together with the search, and will be replaced in the found address. During operation, you need to first set the target address to be replaced in the search, and then set the replaced address in the replacement. Click "lookup". If you only need to replace one or more of them, you can click to select the control to be replaced in the search results, and click "Replace" to replace the selected control address with a new address. If you need to replace all controls, you can click Replace All to replace all the found controls with new addresses.

It should be noted that when "Range" is checked in the search, when using range search, an "Address Offset" option will appear in the replacement, as shown in the left figure below; After checking, the location of the original address will become "offset", as shown in the right figure below:

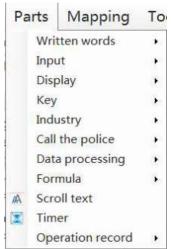
	🔾 Lookup		• R	teplace			C Lookup		Repl	lace
Lookup Search range	全郎 ● Bit address		V O Wor	rd		Lookup Search range	全部 ④ Bit address		✓ ○ Word	
Equipme	本地设备			× 🗆	System register	Equipme	本地设备			✓ □ System register
Address type	PSB	~		10	Custom label	Address type	PSB	~		Custom label
Exten	0	• ~	0			Exten	0	÷ ~ 0	6	
Format (ra	ange):DDDD[范围:	: 0 - 9999]				Format (r	ange): DDDD[范围	: 0 - 9999]		
Replace Equipme		: 0 - 9999]		~ []	System register	Replace Equipme		: 0 - <mark>99</mark> 99]		v System registe
Replace	ange) : DDDD[范围 : 本地设备 PSB	: 0 - 9999] V			System register Custom label	Replace		: 0 - 9999] V		✓ □ System registe ○ Custom label
Replace Equipme nt Address type	本地设备 PSB	~]	Address		1. St.	Replace Equipme nt Address	本地设备 PSB			
Replace Equipme nt Address type Address	本地设备 PSB	× •	Address		1. St.	Replace Equipme nt Address type Offset	本地设备 PSB	V Ade		

Case 1: When the range is checked and the address offset is not checked, all the addresses found in the range will be replaced with replacement addresses. If the search target is a-b and the replacement target is c, the replacement result is a-b replaced by c. For example, if the search range is set to 0x0-0x10 and the replacement addresses found will be replaced or replaced with 1x0.

Case 2: When the range is checked and the address offset is checked, there is an offset setting, that is, offset by the set offset in the search range. If the search target is  $a\sim b$  and the replacement offset is d, the replacement result is  $a+d\sim b+d$ . For example, if the search range is set to  $0x0\sim 0x10$ , and the replacement address type is set to 1x, then if the offset is set to 0, 0x0 will be replaced with 1x0, 0x1 with 1x1, ..., 0x10 with 1x10. If the offset is set to a different value, the analogy will follow.

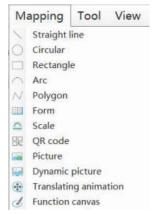
### 3-3-3. Parts

The component menu is mainly used for component editing, corresponding to the icon in the control window. Please refer to Chapter 4 for details.



#### 3-3-4. Mapping

This item includes basic tools such as straight line, circle, rectangle, arc, polygon, table, scale, QR code, picture, dynamic picture, and function canvas. There are corresponding shortcut icons in the control window, which can be realized through icons in the control window. Please refer to 4-1. drawing for specific use.



#### 3-3-5. Tool

Used for address tag library settings and preferences.

То	ol	View	Help				
	Ad	dress tag	library				
1	Advanced feature settings						
B	Hire purchase						
0	Preferences						
R	Info	ormation	setting				

1. Address tag library

It is used to customize the address label, and can also view the meaning and address correspondence of the HMI internal system address in the library.

System register

It is used to display HMI system address information for users to view and use.

Sea	arch	Ade	d to Delete I	Delete all Copy	Import e	ili# export				
_	Label name	Equipment	Station	Address type	Address	Data type	Reading and	Power off	Function	
	用户积积	专地设备	a	SPS8	0	Ell	ReadOnly	False	工程對以做	
	用户权限	本地设备	0	SPSB	1	Bit	ReadOnly	False	工程默认值	
	剩余存储	本地设备	0	SPSB	2	Bit	ReadOnly	False	工程對认信	
	存储空间	本地设备	0	SPS8	3	Bit	ReadOnly	False	工程默认值	
	屏保状态	本地设备	0	SPSB	4	Bit	ReadOnly	False	工程默认值	
	背景灯状	本地设备	0	SPSB	5	Bit	ReadOnly	False	工程默认值	
	下截后第	本地设备	0	SPSB	7	Bit	ReadOnly	False	工程默认值	
	上电后第	本地设备	0	SPSB	8	Bit	ReadOnly	False	工程默认值	
	100ms为	本地设备	0	SPSB	9	Bit	ReadOnly	Falso	工程默认信	
	1s为周期	本地设备	0	SPSB	10	Bit	ReadOnly	False	工程默认值	
	1min为周	本地设备	0	SPSB	11	Bit	ReadOnly	False	工程更以值	
	U盘弹出	本地设备	0	SPSB	12	Bit	ReadOnly	False	硬件相关	
	常开线圈	本地设备	0	SPSB	13	Bit	ReadOnly	False	工程默认信	
	常闭线圈	本地设备	0	SPSB	14	Bit	ReadOnly	False	工程默认值	
	U盘插入	本地设备	0	SPSB	15	Bit	ReadOnly	False	硬件相关	
	模块插入	本地设备	0	SPSB	18	Bit	ReadOnly	False	硬件相关	
	MOTTE	本地设备	0	SPSB	19	Bit	ReadOnly	False	通信相关	
	远程登录	本地设备	0	SPSB	20	Bit	ReadOnly	False	通信相关	

User defined label

	Address tag library	×
● User defined label ○ System register○ CodeSys标签	Query mode	
By device Equipment      Add     Query method:     Press picture elash window      Y	res 💌	
Search Add to Delete Delete all Copy	Import export	
Label name Equipment Station Address type	Address Use picture Use control	
		Determine

According to personal usage habits, create labels for HMI internal address or device address, and view the usage of each label address in this window. Refer to chapter 5-2 for specific usage methods.

Add to	To add new address tag					
	1	New address label				
	Variable name Address mode Descripti on Devic 本地设 Addre PSB Data Word type					
	Variable name	Set the label name for the address to be created				
	Address mode	Set the label name for the address to be created Select whether the address is a bit address or a word address				
	Description	Set description information for the current address tag, which is optional				
		Select the device where the address is located. You can select the local device or				
	Equipment					
	Address         Set the address corresponding to the current label					
	Data type	Set the data type of the current address				
Delete		fied address label				
Delete all	Delete all added					
Сору		ied address label				
Paste		e displayed only when there is copied content. It is used to paste the copied				
		Idress label at the specified location				
Import		ess table in CSV format of the path specified by the computer into HMI				
Export		ently added address label to the specified path of the computer in CSV form				

2. Advanced feature settings

This function is not supported in the current version.

3. Hire purchase

Implement the installment payment of the equipment and lock the equipment for encryption. Refer to chapter 4-7-4. Installments for details.

#### 4. Preferences

This section covers some preferences during project editing, including component address/ID display, grid and backup settings.

Display

It is used to set whether the component ID, address and text color used in the control are displayed.

	Preference setting
	Display Grid backups memory
	- Part
	✓ Show Component ID ✓ Display part address
	Text size 8 V Number of display 3 V
	Text color
	Determine Cancel Application
Display	Set whether to display ID on the component. The ID content is fixed and cannot be modified.
component ID	When checked, the ID will be displayed in the upper left corner of the component in the form of
	a corner mark. The difference between checking and not checking is as follows:
	Display the ID: Not display the ID:
Character size	Set the text size of component ID. The larger the value, the larger the text
Display	Set whether to display the component address on the component. If checked, the address used
component	by the component will be displayed in the upper left corner in the form of a subscript. The
address	difference between checking and not checking is as follows
	Display the address: Not display the address:
Text color	Set the display text color of component ID and component address, which is red by default and can be changed according to usage habits
Show	When checked, when the mouse drags the component to move, the alignment line will be
alignment lines	displayed when passing the aligned component. The dotted line box in the following figure
	represents the moving component, and the red line represents the alignment line aligned with
	the top of the button. If not checked, it will not be displayed
	THE COFF

#### ■ Grid

It is used to set the grid color and spacing in the screen editing area.

	Preference setting
	Display Grid backups memory
	Grid
	✓ Display grid  Lock all components
	Horizontal spacing 10 🗘 Vertical spacing 10 🗘
	Grid color
	Determine Cancel Application
Display grid	Set whether to display grid in the screen editing area. By default, it is checked, that is, the grid is
	displayed. If you do not need to display grid, you can uncheck it. Or click 🛄 in the status bar.
Horizontal	Set the density of the horizontal grid in the screen. The smaller the number, the denser the grid
space	
Vertical space	Set the density of the vertical grid in the screen. The smaller the number, the denser the grid
Grid color	Set the color of the grid according to usage habits
Lock all the	After checking, the component positions placed in all the pictures and windows of the current
components	project will be locked. After locking, you cannot drag the mouse to move the position, but you
	can adjust the position by pressing up, down, left and right on the keyboard

For example, when the horizontal and vertical spacing is changed from "20" to "5", the difference is as follows:

				Sp	oace	: 20	)			space: 5
10	3	80	3	86	3	10	3	10	3	
<u>.</u>	1	18	1	18	29	<u>86</u>	20	<u>4</u> 65	12	
				88						
<u>88</u>	39	12	30	13	50	<u>88</u>	39	18	SQ	
10	3	88	3	88	3	10	3	88	3	
10		13	3	12	30	18	30	10	2	

#### Backup

It is used for backup and scheduled saving of project files.

	memory	ips r		Grid	Display
effect until the	em cannot take	(This ite	15	mporar	Maximum te
			kups ac	<mark>cheduled b</mark> acl	Enable s
		Minut		backup 5	Scheduled
-					

Maximum	Every time a project is saved, a backup file will be generated in the Temp folder of the
temporary files	installation path. When the maximum number of files set by the user is reached, the first
	backup project will be automatically overwritten. Click "Open Backup Folder" at the
	bottom right to view the backup program
Enable scheduled	After starting this item, you can set the automatic saving time in the "Scheduled Backup
backups	Interval" below to prevent data loss. When this item is not enabled, you need to manually
	save the project data

- 5. Information setting
- Download and upload program of PLC and HMI through the TS series HMI
- LAN and WAN VNC function
- Realize MQTT communication with Xinje Cloud, Alibaba Cloud, etc

Refer to chapter 8 for details.

#### 3-3-6. View

The view menu is used to display various tools and columns. The blue box in front of each item name indicates that it is activated, while the box is not displayed, indicating that the item is not activated. Click "Restore Default" to restore the original interface of the software.



### 3-3-7. Help

Help								
1	About							
2	Help							

About Version des	Editing tools for HMI —
- HMI ed	liting tool
	Upper computer version : V1.1.2.230301A
	Lower computer version : V1.1.4.230202
	版权所有 ( C ) 2021-Xinje Electronic.Co.,Ltd
	Detailed Ok

# 3-4. Tool bar

Toolbars are divided into software toolbars and picture toolbars, which involve some operations on components and pictures. When the mouse moves over relevant components during operation, relevant text prompts will appear. The specific allocation is as follows:

1. Software toolbar: it includes new, open, save, close, download, compile, online simulation, offline simulation and system settings for project related operations. For details, please refer to Section 3-3-1. It is used to undo, restore, copy, cut, paste, delete and search operations related to project editing. For details, please refer to chapter 3-3-2. As well as data sampling, alarm input, formula editing, and operation records for global operation of the project, please refer to chapter 4 for details.

F	E 12		c*.	120	X	121	面	2	*		1		۲	1	E.	2
Newly build Open	Preservation Close	Revoke	Recovery	Copy	Shear	Paste	Delete.	Lookup	Download	Online simulation	Offline Simulator	Compile	System settings	Data sampling	Alarm entry	Recipe editing

- <b>Q</b> +	When the screen editing area is enlarged or reduced, the default size can be restored by							
Full size display	pressing this key							
E. Arial + 9 +	E. Arial • 9 • Set the display font and size of the specified object							
Select different states for multi state controls such as indicators, dynamic text strings,								
	state indicators, and buttons							
L 1 •	Select different languages for text display in multilingual label library							

2. Screen toolbar: used to operate the selected component during screen editing. When the tool is gray, it is inoperable.

### 

1	Left aligned, horizontal left aligned
<b>a</b>	Align Center, align Horizontal Center
a	Right aligned, horizontal right aligned
•0	Top alignment, horizontal top aligned
•0	Middle alignment, horizontal middle aligned
<u>=0</u>	Bottom alignment, horizontal bottom aligned
æ	Lock: lock the specified component to the position, which cannot be moved by dragging the
	mouse

đ	Unlock to move the specified component
<u>↑</u>	Move up one unit, where one unit is the vertical spacing of the grid in the preferences
¥	Move down one unit, where one unit is the vertical spacing of the grid in the preferences
<b> → </b>	Move right one unit, where one unit is the vertical spacing of the grid in the preferences
←	Move left one unit, where one unit is the vertical spacing of the grid in the preferences
ĒI	Vertical equal distance, set the vertical spacing of multiple selected components to be consistent
101	Horizontal equal distance, set the horizontal spacing of multiple selected components to be consistent
iii	Combination
<b>1</b>	Ungroup
+0+1	Equal width, based on the first selected component, set the width of all selected components to
	be consistent
÷	Equal height, based on the first selected component, set the height of all selected components to
	be consistent
0	Move the specified part to the top
8	Move the specified part to the bottom
7	Move the specified part to the previous layer
1	Move the specified part to the next layer
	Rectangle arrangement, multiple selected components are arranged according to the set
	rectangle
2-B	Point arrangement
	Rectangle linear arrangement
Ö	Circular linear arrangement
۵.	Linear arrangement
2	Polyline arrangement

# 3-5. Screen editing area

On the project screen editing platform, the user can right-click the selected part as follows:

				Up Ne					ry				
	Attribute	珨	ļ	Bc	tt	or	n	se	ett	in	g		
	Arrangement •	Ø	25	Γc	p	pi	ng	9					
æ	Locking								1				
	Delete Del		*			*			1	i.		100	1
	Copy Ctrl+C		Y.	ĮS.		V.	10	W.	8	A.	ų.	Vi 1	Ţ.
×	Shear Ctrl+X								3				
	Component common	1978	413 773	ros Mal	24	110 170			- 11 - 73	14 14	624 165	410 700	943 (T)
1	Batch copy	1.55							1				

Batch copy	Batch copy the selected parts according to certain rules
Component	Perform global common operations on the selected components, and realize special attributes
common	through "component specific"
Cut	Cut the selected part
Сору	Copy the selected part

Delete	Delete the selected part
Locking	The relative position is locked, and the element cannot be moved after operation. The
	movement function can be realized by "unlocking"
Layer	When 2 or more parts are stacked, the display layer of the target part can be adjusted through
	the layer adjustment
Тор	Move the part to the top layer
Bottom	Move the part to the bottom layer
Previous layer	Move the part to the previous layer
Next layer	Move the part to the next layer
Attribute	View or change "Display", "Font", "Color", "Position" and other operations of object
	components

# 3-6. Function area

You can drag the commonly used window here to switch to use. By default, this is the commonly used address preview and outline.

The address preview is used to view the usage of the device address added in the HMI or the communication port, so that you can intuitively check which addresses are used. Green in the address table indicates used, while gray indicates unused. Click to select an address, and you can see which pictures and controls the address is used in below. Click any component below to get its position. Double click to open the component properties directly.

The outline is used to display the Chinese names and English IDs of all components in the current screen. You can set the lock, unlock, hide and display of components here.

Address	Pre	VIE	W						*	~		
Patter	Word					Y		Outline	ąх			
Equip	the second s			捷 XD/XL/XG系列( ~ Outline					+ ^			
Statio				1					<b>A</b>			
Addre	D	5							~		[00001]页面1	
Addre	0										[指示灯按键]-LB0	6
	-	0	1	2	3	4	5	6	7	~	[指示灯按键]-LB1	<b>f</b> (1)
000000	00										[指示灯按键]-LB2	<b>f</b> ()
000000											[指示灯按键]-LB3	6
000000				÷	-	Ļ		L			[指示灯按键]-LB4	6 💿
000000	215	Ē	Ξ	F	F	F	F	÷	1		[指示灯按键]-LB5	<b>f</b> (1)
000000	50				Ľ	E			1		[指示灯按键]-LB6	ff ()
000000											[指示灯按键]-LB7	ff 💿
000000	70											

# 3-7. Component area

Display components and all components under the drawing menu, they are used for screen editing. For details, please refer to Chapter 4.

# 3-8. Output window

Display the compilation process and results of the current project.

If the project is compiled successfully, it can be downloaded normally.

If the project compilation fails, "Error occurred in compilation" will be displayed, and the cause of the error will be displayed in the error list, which can quickly locate the problem.

Output window	• 4 x
Output window Output ErrorILisi	
Output window	* # X
Output ErrorlList	
Output window Output ErrorlList Error A warning News Cate Explain	
Cate Explain	
New York Control 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	

# 3-9. Status area

Display the current HMI model, COM port communication device, Ethernet port communication device, the coordinate position of the current mouse in the editing screen, the size of the zoom screen editing area, and the control grid display.

Touch screen model: TSS-700-E Net0:信捷 XD/XL/XG系列(Modbus TCP)(COM2:信捷 XD/XL/XG系列(Modbus RTU)(COM1:信捷 XD/XL/XG系列(Modbus RTU) X:949 Y:38 🔍 🔾 📗

( <del>)</del>	Enlarge the screen editing area proportionally						
	Scale down the screen editing area						
	Whether to display grid						

# 3-10. System setting

# 3-10-1. Parameter

Parameter M	onitor	Interaction	User perm	i Clock	Device	Printer	Project	
[Screen]								
Startup	[0000]	1]Page1			~			
Screen sav	erl							
Waiting time	No S	creensaver	~					
O Display					~			
Close ba	cklight							
[Mouse cur	sor]							
Hide Mo	use	Mouse cursor		X20 (black)	-			
[Sound]	the buz	zer						
control dis	play]							
Refresh	before	communicatio	on					
[Unicode fo	ont]							
Use cust	om tex	t						
Be careful: /	After ch	ecking use cu	ustom fonts	s, Multiple fo	onts display (	can be select	ed in Chinese c	ontro

G	
Screen	Enter the startup screen number, which is the screen that runs first when the HMI downloads the
	program and powers it on. It is usually the main screen of the program or the screen with the
	highest usage frequency.
Screen saver	This function is an automatic measure when the HMI is not triggered for a long time. After a
	period of non triggering operation, the touch screen can execute the setting to turn off the
	background light or jump to the designated screen.
Waiting time	Choose a time or choose no screen saver based on user needs.
Display	When the time conditions are met, jump to the object screen.
Close	When the time conditions are met, turn off the background light.
backlight	Note: Only one operation can be selected when turning off the background light and displaying
	the screen.
Hide mouse	When checked, the mouse cursor will not be displayed when clicking on the touch area
Mouse cursor	Set the size and color of the mouse cursor display, and only black or white can be selected as the
size	color.
Sound	Used to set whether clicking on the screen produces sound when the HMI is working normally.
	By default, there is sound output. If "Turn off the buzzer" is checked here, no sound will be

	emitted when clicking on the screen or triggering an alarm when the HMI is working.
Control display	Control loading logic, default not checked to communicate before loading control, checked to
	load control before refreshing data
Unicode font	After checking, users can use a custom Unicode font library. For the fonts needed in the lower
	computer, they can import the text after importing.

#### 3-10-2. Monitor

Implement modification of human-machine interface model and display direction.

arameter M	onitor	Interaction	User permi	Clock	Device	Printer	Projec	t
[Model]								
	24x768	~		rizontal - no tical - rotate		Horizontal		180°
			Q Ver	tical - Totate		vertical - 1	otate 30	
[Description]								
HMI model :	PC-102	4x768						
Resolving po	wer:1	024 x 768						
COM1 : RS23	32/RS48	5						
Network inte	rface:1							
in the second seco								
[Zoom mod <del>e</del>								
[Zoom mod <del>e</del> Size		Equal propo	rtion					
[Zoom mode ● Size ○ samll	01	Equal propo						
<ul> <li>Size</li> <li>samll</li> </ul>	01		rtion					7
<ul> <li>Size</li> <li>samll</li> </ul>	01	large propo	rtion					1
<ul> <li>Size</li> <li>samll</li> </ul>	01	large propo	rtion					
<ul> <li>Size</li> <li>samll</li> </ul>	01	large propo	rtion					
<ul> <li>Size</li> <li>samll</li> </ul>	01	large propo	rtion					
<ul> <li>Size</li> <li>samll</li> </ul>	01	large propo	rtion					

ModelDisplay the current HMI model and display direction; If you want to modify the monitor model,<br/>you can click "OK" to take effect after selecting a new monitor model and setting the display<br/>direction correctly; The default display direction is horizontal and normal. In order to adapt to<br/>various situations, we provide options such as rotating 180°, clockwise rotating 90°, and<br/>counterclockwise rotating 90°. Rotate the appropriate options according to the actual usage<br/>situation; (Default horizontal display. If switched to a different display direction, it will<br/>automatically jump to the calibration screen after downloading and require the user to<br/>recalibrate.).DescriptionDisplay parameter information such as current screen size, resolution, brightness, color,<br/>memory, storage, USB port, COM port, etc

7 1							
Zoom mode	When changing the monitor model, the ratio between the width, height, and size of the						
	components in the screen and the size of the monitor.						
Size	The width and height values of the components remain unchanged.						
Equal	The width and height values of the components are scaled according to the display's width and						
proportion	height ratio.						
Small	The component width and height values are scaled according to the small value of the display						
proportion	width to height ratio.						
Large	The component width and height values are scaled according to the large value of the display						
proportion	width to height ratio.						
Parameter	Set the number of system registers and check the range of system registers.						
	Parameter setting ×						
	Number of I0000 Input range 1-10000 PSW:						
	Number of 3000000 Input range PFW: 1-3000000						
	Number of 10000 Input range 1-10000 PSBs:						
	Confirm Cancel						

# 3-10-3. Interaction

Mainly realize the attribute connection between the screen and registers. Click "Interaction" and the settings item shown in the following figure will appear.

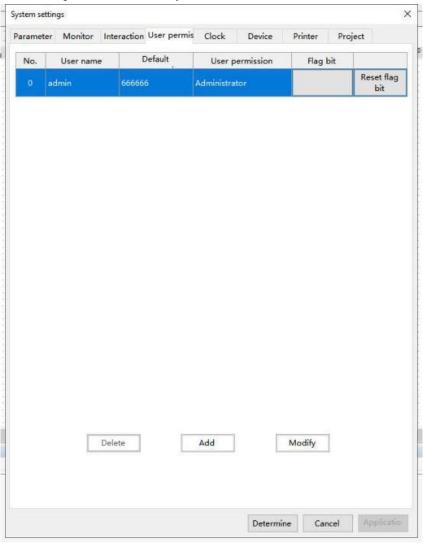
System sett	ings							×
Paramete	Monitor	Interaction	User permi	Clock	Device	Printer	Project	
Cont	rol screen e	xchange						
Device	Local De	vice			~ Sett	ings		
Addres	s PSW		~ 0					
Data	Word	✓ BCD	✓ □ Ind	irect				-
Repo	11	nt screen nur vice	nber		~ Setti	ings		
Addres	s PSW		~ 0					
Data type	Word	∼ BCD	✓ □ Ind	irect				
ontrol screen	Jump to t	he screen b	based on the	e current	register v	alue. If the	e register val	ue is 10, it indicat
exchange	a jump to	the screen	number 1(	); Use PI	C registe	rs to contro	ol screen swi	tching, and assign
	1	41				_		

	values to the registers to achieve screen switching.
Report the current	Display the screen number of the current running screen. If the current operation interface is
screen number	screen number 7, the register will display 7.
Device	The device port currently in communication.

Settings	Click to enter the address settings, and in the pop-up window, you can choose to use system
	registers or user-defined tags.
Address	Set the current register object type and address number.
Data type	Set the data type of the previously selected register, Byte represents 8-bit, Word represents
	16-bit, DWord represents 32-bit, and DDWord represents 64 bits; In the second checkbox, you
	can select decimal, hexadecimal, unsigned numbers, floating-point numbers, etc.
Indirect	The current register address changes with the indirectly specified register value, i.e. Dx
	[Dy]=D [x+Dy value] (x, y=0, 1, 2, 3), which is generally not used here.

#### 3-10-4. User permission

The user permission function plays a role in project and data protection, improving program security; Permission settings are usually used for hiding and encrypting components or screens, and related operations are only carried out when the password is correctly entered.



• User

Users are set up for their login accounts, and each user can set corresponding account name and password permissions, which are equivalent to a "password lock". Once a user has the corresponding permissions, they have the corresponding "password". A user can have a maximum of 30 permissions,

ranging from "permissions 1 to 30". Each permission is of equal level, and when adding a new user, the user can check the range of permissions that the user can operate according to their needs.

No.	User ID, mainly representing the current user ID
User name	The set user name
Password	The user password
User permission	The current user's permission level and the permissions they can operate on;
Flag bit	The corresponding permission flag for the user is set to ON after binding, and to OFF when
	not logged in. The user's login status can be operated by manipulating the flag.
Reset flag bit	Reset the bound flags.

### • Permission

Permissions are operation items specific to the page/control. Taking the screen as an example, permissions are equivalent to a "password lock" for this page. When the user selects the corresponding permission, it is equivalent to locking the corresponding page. When the user wants to jump to the corresponding page or operate the corresponding control, the corresponding user must have this permission, otherwise they cannot operate.

- This collection explains the usage methods for the page/control security section.
- (1) Screen/window security setting

Page Info			
Page	Page1		
Page No	1	*	
Page Backgro		~	
Picture si	ze		
Width	1024	a u	
Height	768		
Overlay v	vindow		
Top floor	None		~
Bottom	None		~
Screen pe	ermissio	n	
User per	mission	re Permission 1	~
Switch	to the	permission range when the	screen / window is clo
		Permission 2	¥

User permission	Set controlled permission levels; To set the permissions for this component, you need to enter the
range	password for the set permission level before the component can be used normally
Switch to the	After checking, when the screen is closed, the permission changes to the permission below. For
permission range	example, opening this page for the first time requires permission 1. When the screen is closed,
when the	the permission for this screen switches from permission 1 to permission 2, and opening this page
screen/window is	requires permission 2.
closed	

#### (2) Control related permission settings

User permission			
Cancel permission	after operation		
A prompt window	pops up when the	e user has no permis	sion range
Hide this compon	ent when the user	has no permission so	cope
User permission	Permission1	~	

Cancel permission after operation	After checking, when the operation is completed, the permission is
	cancelled and can be opened without permission
A prompt window pops up when the	After checking, when the permissions are insufficient, a corresponding
user has no permission range	window for insufficient permissions will pop up;
Hide this component when the user	When checked, the control will be hidden when the permissions are
has no permission scope	insufficient;



Password input range: 1-8 digits or character combinations.

### • Instructions for use

If multiple users require different permissions, they can be added and corresponding permissions can be selected according to the above operation. The project has an administrator permission Admin by default, which has the highest level of administrator permission and can operate all permission protection functions. The following are two ways for users to log in:

(1) Use function keys to call the user login interface for login

The operation steps are shown in the following figure:

	Appearance Sec		
Control ID	FBO		
Description			
Action Pre	ess Status	~	
Functions			
Call We	ndow [25001]		Optional functions Set coil
	Interdent Service Carl	Add	Set data
		Delete	Arithmetic
			Data transmission
			Switch screen
		Move up	Call window
all window			Close the window
	curity settings		mport CSV
	5001]User login	-	Export CSV
) Pop up			pload recipe
) Pop up			wnload recipe
			unction call
Pop up the pa	assword window	automatically. (If th	e reen printing
	Determine	Cancel Appli	catio
1			
<u> </u>		_	

Click on the function key to call the user login window (as shown in the figure below), select the username to log in, enter the password correctly, and the login success will be displayed in the bottom left corner. If the password is entered incorrectly, the login failure will be displayed.

Using User1 as an example for introduction.

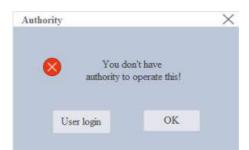
Select the username of User1 from the drop-down list, enter the correct login password 123456, and click the "Login" button to display the login successful (see left figure). At the same time, the password will be cleared. When the login is successful, permissions 1, 2, and 3 will be granted simultaneously; If you want to log out, you can also select the username of User1 from the drop-down list, enter the correct login password 123456, and click the "log out" button to display the successful logout (see the right figure). At the same time, the password will be cleared, or you can quickly log out by directly turning off the flag position. After successful logout, the user will not have the permissions they have (1, 2, 3).

L User login X	💄 User login 🛛 🕹
User name User 1 📀	User name user 1 🔿
Password	Password
Login successful Login Logout	Logout successful Login Logout

(2) Check "a prompt window pops up when the user has no permission range"; Taking the indicator key as an example, the settings are shown in the following figure:

dicator key		the state of the	1	
asic Attribute Appearance	Function bind	Security setting	Location	
Operation confirmation of	elay			
Confirm before				
🗌 Key delay				
Display control				
Enable				
Enable control				
Enable				
User permission				
Cancel permission af	ter operation			
prompt window po	and a strategy of the second	e user has no p	ermission ran	ge
Hide this component	when the user	has no permise	sion scope	
User permission		~		
			Determine	

Download to the screen, click on the indicator key, and the following window will pop up:



Click "User Login" to enter the user login interface. The operation steps can be found in the login introduction of User1 above. If you click "OK", you can close this pop-up window.

• Use cases

• Operator/administrator/manufacturer type (permission level)

Having multi-level user names, operators can set partial screens, administrators have operator permissions and partial screens, and manufacturers can set all screens;

For the permission binding section of the screen/control: only the operator can operate the screen/control and set it to permission 1; Administrators and manufacturers can set the screen/control to permission 2; Only the manufacturer can operate the screen/control and set it to permission 3;

The corresponding user permission binding is: operator corresponds to check permission 1; Administrator checks permission 1 and permission 2; The manufacturer selects permission 1, permission 2, and permission 3;

■ Single user permissions (independent of each other)

Having independent user names, corresponding permissions can be set and directly bound independently.

### 3-10-5. Clock

----

The touch screen comes standard with a clock function, which is mainly used to set the clock source and transmit the touch screen clock to externally connected PLC and other devices.

~

arameter	Monitor	Interaction User permi	Clock	Device	Printer	Project	
Disable	e clock sett	ting					
Clock sou	rce						
HMI in	ternal						
O Periph	eral						
✓ Write d	clock to per	ripheral					
Write	Continuit	ty ~					
Clock dis	play <mark>forma</mark>	t					
Decim	nal system(	) Hexadecimal					
Number	-						
Number	0	X					
D	evice	1		Register			

Disable clock setting	After checking, it will not be possible to modify the HMI internal clock for installment payments and other time encryption projects to prevent any impact on functionality after modifying the clock.
Clock source	To set the clock source for the HMI, you can choose to use the HMI internal clock or import it from an external device. The default is the HMI internal clock. When selecting an external device, the following settings will appear. Clock source O HMI internal Peripheral Addr PSW0
Clock display format	When setting the format for reading the clock from external devices, decimal or hexadecimal can be selected. Example: When communicating with the Xinje PLC through HMI, if the clock is selected to be read from an external device, and the Xinje PLC clock format is decimal, the clock display format here should also be selected as hexadecimal.
Address	Set the first address for clock reading, set it to the HMI time, and the address requires one single word (16 bits) register each for year, month, day, hour, minute, and second, excluding the week. Example: If the address is set to D0, the values of the six registers from D0 to D6 will be read from D0 onwards, and used sequentially as year, month, day, hour, minute, and second.
Write mode	After selecting "Write clock to peripheral", the method of exporting HMI clock can be set, which can be continuous, trigger, or cycle. The default is continuous transmission, which means that every second change can be written to the external address in real time; When selecting trigger or cycle, the transmission conditions need to be set, as shown in the following figure. It should be noted that when the writing method is cycle, the minimum cycle cannot be less than 100 milliseconds.
	Read PSB0   Mode Rising edg ~     Write Cycle   Cycle 100   100 0.1 sec ~   Register PSW0
Clock display format	There are two ways to write the HMI internal clock: decimal and hexadecimal, so it is necessary to choose the external format based on the actual situation. After selecting, it will be written to the target register in the corresponding format.
Number of synchronization devices	Customize the number of HMI clocks written to external devices. If multiple devices are connected to the HMI simultaneously, the number of devices can also be set here. The table below will display the corresponding number of rows based on the number set here. The first address corresponding to each device needs to be set in the table below; Similar to reading from external sources above, writing to external devices is also divided into six registers: year, month, day, hour, minute, and second, excluding weeks. Example: If the address is set

Clock display format	eral
Device	Register
Device0	Settings
Device1	Settings

# 3-10-6. Device

Mainly set communication parameters between HMI and external devices such as PLC.

_	ji.	1.55				
	COM1	Xinje				~
COM2		Xinje XC RTU				(
		Xinje XD RTU				
No	Device name	New equipm	For t ID	Port type	Communication	Station
0	Local Device	Local Device	ID	fore type	protocol	No.

New equipment	Add different device types, select COM1/COM2/Net0 on the left, and click "New Equipment"
	to add a new device.
Device name	Customize the name of the added device. When adding multiple devices to the same serial port,
	the name cannot be duplicated.
Equipment type	The selected protocol name.
Port ID	The COM port where the device is located is automatically generated by the system and does
	not need to be set
Port type	The interface type selected when creating a new device is generally RS232, RS485, RS422, or
	Net.
Communication	When in the serial port, parameters such as baud rate, data bits, parity, stop bit, etc. are
protocol	displayed here;
	When in the Ethernet port, the IP address and port number of the device are displayed here.
	Double click to modify the parameters.
Station no.	The device station number cannot be duplicated when adding multiple devices to the same
	serial port.

### 3-10-7. Printer

The Xinje TS series HMI currently supports connecting micro printers through USB or serial port. Configure the connection parameters in System Settings - Printers, and the configuration items are shown in the following figure.

	System settings ×
	Parameter Monitor Interaction User permi Clock Device Printer Project
	✓ Enable printing         Printer         Printing method       Serial port         model       BRIGHTEK WH-f         Interface       COM1
	Baud rate     9600       Check bit     None       Data bit     8 Bit       Stop bit     1 Bit
Printing method	Select the port for connecting the HMI to the printer; You can choose between serial port or USB.
Model	Select the printer brand and model; At present, the USB port only supports the "Brightek WH-E19" model; The serial port supports two models, "Prind" and "Brightek WH-E19".
Interface	Set the COM port for printer connection.
Baud rate	Set the baud rate for communication to be consistent with the printer's configuration.
Check bit	Set the communication parity bit to be consistent with the printer's configuration
Data bit	Set communication data bits to match printer configuration
Stop bit	Set the stop bit for communication to be consistent with the printer's configuration

After completing the configuration, you can find the "Print Area" control in the control area, click on it, select an area in the editing area, and configure the print trigger signal. Place the controls that need to be printed in this dashed area, and after triggering the printing signal, the content of the printing area will be printed out through the printer.

	Print area	×
	Basic Attribute Location	
an a bana bana bana ba	Control ID PA0	
	CONTOLID PAO	
153	Description	
		10
	Trigger address	
	Device Local Device ~	Settings
179	Address PSB V 0	
	ON->OFF ~ Indirect	

### 3-10-8. Project

This item is used to set the current project name, author, and comments. If the current project has been saved, the name item displays the name of the project and cannot be modified.

gs						×
Monitor	Interaction User permi	Clock	Device	Printer	Project	
Project						
	Monitor	Monitor Interaction User permi	Monitor Interaction User permi Clock	Monitor Interaction User permi Clock Device	Monitor Interaction User permi Clock Device Printer	Monitor Interaction User permi Clock Device Printer Project

# 4. Components

### 4-1. Drawing

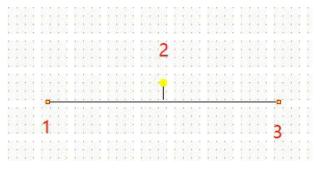
The drawing bar includes line, circle, rectangle, arc, polygon, table, scale, QR code, picture, dynamic picture, translation animation, and function canvas.

Mapping		
Straight line	Circular	Rectangle
Arc	N Polygon	Form
Scale	QR code	Picture
Dynamic picture	• Translating animation	Function canvas

#### 4-1-1. Straight line

1. Click Mapping/straight line or icon, move the cursor to the screen, click the left mouse button at the starting point, drag the cursor to the end point, and then click the left mouse button (click the right mouse button or click ESC to cancel the placement) to complete the drawing of line segments. At the same time, a property box will pop up, and you can set it in the pop-up property dialog box.

2. Double click the drawn "line", or select "line", right-click, and select "attribute" to set the attribute.



(1) During drawing, long press the Shfit key to quickly draw horizontal or vertical lines

(2) When the drawn line is selected, when the mouse is placed on point 1 or 3, the mouse shape changes from arrow to cross, long press the left mouse button to move left and right to change the length and rotation angle of the line. When the mouse is placed on point 2 (yellow point), the mouse shape changes from an arrow to a hand. Long press the left mouse button to move, and then rotate the whole figure with point 2 as the center.

### ■ Line property

		Str	aight line	
asic propSecurity se	Position			
Control ID	LO			
Describe				
Straight line				
Starting		End		
X:	423	X:	166	
Y:	280	Y:	268	
Arrow		-		
Draw the st Start arrow Starting		• · End	arrow width	
Start arrow		• · End	arrow 💛	
Start arrow Starting		• · End	arrow 💛	
Start arrow Starting Line		• · End	arrow 💛	
Start arrow Starting Line Type:		• · End	arrow 💛	

Co	ntrol ID	It is used for system management and cannot be operated by users		
D	escribe	Can be used to comment on the purpose of this component		
Straight	Starting	Set the X and Y values of the starting point of the line segment		
line	End	Set the X and Y values of the end point of the line segment		
1	Arrow	Draw the starting arrow. Check this option to set the style and size of the starting arrow		
		Draw the end arrow. Check this option to set the style and size of the end arrow		
Line	Туре	Set the type of line, including solid line, long dotted line, short dotted line, point line		
	Color Set the color of the line			
Width Set the width of the line		Set the width of the line		
	Transparency	Set the transparency of the line (the closer the slider is to the left, the lower the		
		transparency percentage, and the more transparent the component is)		

Security setting

	Position					
Display contro	1					
✓ Enable						
When	隐藏	~				
Equip	本地设备			~	Set	
Addre	PSB	~	0	0		
Enable User rights	sta ON	~	ct desig	nation		
Hide the	compone	nt when the	user has n	o permis	ssion range	
			0501 (105 (1		sion lange	
Required		权限1		~		
permissio						

Display control	Use bits to	o control whether to disp	blay the part. When	the condition is not met, the component
	will be hid	den		
Enable	When chec	cked, display control wil	l be enabled	
When validation	When valie	dation fails, it will hide t	the component	
fails				
Equipment	Current co	mmunication device		
Set	Click "Set	" to enter the address	setting interface, v	where you can set system registers and
	user-define	ed tags. You can click t	he address tag belo	w or the project tree/library/address tag
	•	set the tags (see chapter efined tags)	5-2 Address Tag I	library for the use of address tag library
			Address	×
	Equipme nt	本地设备	~	Statio n
	Address type	PSB	~	User defined label
	Address	0	Ý	System register
	Address format	[Extent:0-9999]		
				Address tag
			Determine Ca	ncel Application
Address	Set the targ	get coil for bit control		
Enable status	Set ON sta	utus to be valid or OFF s	tatus to be valid	
User rights	Set the cor	nponent authority level.	Set the permission	of this component. You need to enter the
	password	to use this component	. When there is r	o permission for this component, this
	component	t is hidden		

For example: if the equipment is set as shown in the above figure, the bit control is PSB0, and select "Hide the component when the user has no permission range", and the enable status is ON, then when the status of PSB0 is ON, the component is normally displayed, and when the status of PSB0 is OFF, the component is hidden and not displayed.

### Position

	Straight line
	Basic proc Security st Position
	PositionSizeX coord166Width (W)257Y coord268Height (H)12
	Animation  Lateral movement  Longitudinal movement
ition	Set the X and Y coordinate values of the line with the upper left point of the screen as

coordinate origin (0, 0)

X coordinate	Set the X axis coordinate value of the line
Y coordinate	Set the Y axis coordinate value of the line
Size	Set the width and height of the line
Width (W)	Set the width of the line
Height (H)	Set the height of the line
Animation	Set whether the line can be moved
Lateral	Set the horizontal display position of the line according to the value of the register, that is,
movement	modify the X axis coordinate value. X axis coordinate value=X position+the value of the
	current register
Longitudinal	Set the vertical display position of the line according to the value of the register, that is,
movement	modify the Y axis coordinate value. Y axis coordinate value=Y position+the value of the
	current register
Locking	Set whether it can be moved during editing. When "Locking" is checked, it cannot be moved
	during editing. You can unlock it by unchecking this item, or you can set it by pressing the
	shortcut keys Lock 🙆 and Unlock 🚳 on the interface

### 4-1-2. Circular

Click "Mapping/Circular" in the menu or icon in the drawing bar of the control window, move the cursor to the screen, press and hold the left mouse button at the starting point, drag the cursor to the end point, and release the left mouse button (click ESC to cancel the placement) to complete the circle drawing. At the same time, a property box will pop up, and you can set it in the pop-up property dialog box.
 Double click the drawn "circle", or select "circle", right-click, and select "attribute" to set the attribute.

Property

		C	ircular		
Basic propSecurity	se Position				
Control II	D C0				
Describe					
✓ Line					
Type:	-				• •
Color:					~
Width:					- ¥
Transparen	د [			100 🕄	
A sector					
Fill	Solid color	~	Fill color		~
Gradient	从左到右	~	End color		~
Hatch					
pattern Pattern		- <b>-</b>			
Transpare		-0	100 🛊 %		
		1			

Control ID	It is used for system management component and cannot be operated by users
Describe	Can be used to comment on the purpose of this component

Line	Туре	Set the line type of the circle, including solid line, long dotted line, short dotted line, and point line
	Color	Set the border color of the circle
	Width	Set the line width of the circle
	Transparency	Set the line transparency of the circle (the closer the slider is to the left, the lower the
		transparency percentage, the more transparent the line is)
Sector	Fill	After checking "Fill", you can set the fill color, fill style and transparency of the circle
	Fill pattern	Can be filled with solid colors, gradients and patterns
	Transparency	Set the transparency of the circle by sliding the slider (the closer the slider is to the left,
		the transparency percentage is lower, the more transparent the filled area is)
		C0 C1 C2
		transparency 100% transparency 50% transparency 0%

The set fill style, color and transparency can be previewed in the box below the transparency.

Security setting

	Circular	x
Basic pror Security se Position		
Display control I Enable When Equip Addre PSB Enable sta <sup>-</sup> ON	V     Set       V     0     0       V     ct designation	
User rights Hide the component Required user permission range	nt when the use <mark>r has no permission range</mark> 权限1	

Refer to chapter 4-1-1 straight line for security setting.

### Position

Refer to chapter 4-1-1 straight line for position.

### 4-1-3. Rectangle

1. Click "Mapping/Rectangle" in the menu bar or icon in the control window's drawing bar, move the cursor to the screen, press and hold the left mouse button at the starting point, drag the cursor to the end point, and release the left mouse button (click ESC to cancel the placement) to finish the rectangle drawing. At the same time, a property box will pop up, and you can set it in the pop-up property dialog box.

2. Double click the drawn Rectangle/Rounded Rectangle, or select Rectangle/Rounded Rectangle, right-click, and select attribute.

Property

Basic propSecurity	se Position			
Control II	R0			
Describe				
Rectangular	angle			
Fillet diame	ter: 0			
✓ Line				
Туре:	-			
Color:			~	
Width:	<u>-</u>		- <b>v</b>	
Transparen	nc		0 100	
Rectangular	3103			
Fill	area			
Fill	Solid color	✓ Fill color		~
Gradient	从左到右	✓ End color	()	~
Hatch				
Pattern Pattern		~		
Transpare		0 100 🔅 %		
	1			

Cont	trol ID	It is used for system management component and cannot be operated by users		
Des	scribe	Can be used to comment on the purpose of this component		
Rectangular	Fillet	Set the fillet diameter (0-100) to 0, which is a rectangle. The larger the value, the		
angle	diameter	larger the fillet diameter (the upper limit of the fillet diameter varies according to		
		the size of the rectangle placed)		
		Fillet Fillet Fillet diameter 83 diameter 40 diameter 0		
Line	Туре	Set the line type of the rectangle, including solid line, long dotted line, short dotted		
		line, and point line		

	Color	Set the line color of the rectangle
	Width	Set the line width of the rectangle
		Transparency 100% 50% 0%
	Transparency	Set the transparency of rectangular lines (the closer the slider is to the left, the
		lower the transparency percentage, and the more transparent the lines are)
Rectangular	Fill	After checking "Fill", you can set the fill color, fill style and transparency of the
area		rectangular area
	Fill pattern	Can be filled with solid colors, gradients and patterns
	Transparency	Set the transparency of rectangle/rounded rectangle by sliding the slider (the closer
		the slider is to the left, the lower the transparency percentage, and the more
		transparent the filled area is)
		Transparency 100% 50% 0%

The set fill style, color and transparency can be previewed in the box below the transparency

Security setting

		Rectan	gle		
sic pror Security se	Position				
Display contro	I				
When	隐藏	~			
Equip	本地设备	1152	~	Set	
Addre	PSB	~ 0	0		
Enable	sta ON 🗸 🗸	ct des	ignation		
User rights					
Hide the	component wh	en the user ha	s no permis	sion range	
Required		1	~		
permissio	on range				

Same to chapter 4-1-1. Straight line security setting.

### Position

Same to chapter 4-1-1. Straight line position part.

### 4-1-4. Arc

Click the "Mapping/Arc" icon in the menu bar or the icon in the control window's drawing bar, move the cursor to the screen, click the left mouse button at the starting point, drag the cursor to the end point, and then click the left mouse button to complete the arc drawing. At the same time, a property box will pop up, and you can set it in the pop-up property dialog box. The difference between arc and sector is whether they are closed. Double click the drawn Arc, or select the Arc, right-click, and select attribute.

Basic property

		Arc		×
Basic prop Sector	Security se Positio	n		
Control ID	A0			
Describe	-			
Arc				
Starting	270	Long side:	86	
Termination	360	Short side	2	
Center				
x:	153			
Υ:	247			
Line				
Type:			~ ~	1
Color:			~	]
Width:			~	
Transparenc	[		100	
	L			

Сс	ontrol ID	It is used for system management component and cannot be operated by users			
Ľ	Describe	It can be used to remark the purpose of this control			
Arc	Starting	Take the arc center as the base point, take the right direction of the horizontal line			
		passing through the base point as the horizontal 0°, and the angle between the line			
		passing through the base point and the starting point and the horizontal $0^{\circ}$			
	Termination	Take the arc center as the base point, take the right direction of the horizontal line			
		passing through the base point as the horizontal 0°, and the angle between the line			
		passing through the base point and the end point and the horizontal $0^\circ$			
	Long side	Set the long side of the arc			
	Short side	Set the short side of the arc			
	Center	The X and Y coordinate positions of the arc center are displayed and cannot be modified			
		Start angle 0° Start angle 0°			
		End angle 90° End angle 180°			
Line	Туре	Set the line type of arc, including solid line, long dotted line, short dotted line and point			
		line			

Color	Set the line color of the arc	
Width	Width         Set the line width of the arc	
Transparency	Set the transparency of the line (the closer the slider is to the left, the lower the	
	transparency percentage, the more transparent the line is)	

#### Sector

The arc start point, end point and arc center point are connected to form a closed figure, that is, a sector.

A sector				
Fill	Solid color	~	Fill color	~
Gradient	从左到右	~	End color	~
Hatch pattern Pattern				
Transpare		0	100 🕄 %	

Sector	Select "draw as	Select "draw as sector", and set the fill option			
Fill	Set the fill color	, fill style, and tra	nsparency of the sector		
Pattern	Can be filled wi	th solid colors, gra	idients and patterns		
Transparency	Set the transparency of the sector by sliding the slider (the closer the slider is to the left,				
	the lower the tra	the lower the transparency percentage, and the more transparent the component is)			
	Transparency	100%	0%		

The set fill style, color and transparency can be previewed in the box below the transparency

Security setting 

		Arc	
Basic prot Secto	Security se Position		
Display cont	rol		
When	隐藏・		
Equip	本地设备	✓ Set	
Addr	re psp v (	0	
Enab	le sta <sup>l</sup> ON y c	t designation	
User rights			
✓ Hide th	e component when the use	er has no permission range	
	ed user 权限1 sion range	¥	

Same to chapter 4-1-1. Straight line security setting

#### Position

Same to chapter 4-1-1. Straight line position part.

#### 4-1-5. Polygon

- 1. Click the "Mapping/Polygon" icon in the menu bar or the  $\bigwedge$  icon in the control window's drawing bar, move the cursor to the screen, press the left mouse button at the starting point, drag the cursor to move, and determine the positions of the following endpoints in turn. Double click the left mouse button (click the right mouse button or cancel the placement with the ESC key) to finish the polyline drawing. At the same time, a property box will pop up, and you can set it in the pop-up property dialog box. The difference between polylines and polygons is whether they are closed.
- 2. Double click the drawn Polyline/Polygon, or select Polyline/Polygon, right-click, and select Attribute.
- Basic property

Polyline

Polygon

Polygon	Polygon
Basic propSecurity av Postion	Basic propSecurity as Position
Control ID 80 Describe	Control ID 80 Describe
Broken line     O Polygon	⊖ Broken line
Type:	Type:
Color:	Width: Tratsparenc
Transparenc 100 🕏	
1	i Fill
Arrow	Fill Solid color v Fill color v
Image: Start arrow  Image: Start arrow    Start arrow  Image: Start arrow    Starting  Image: Start arrow	Gradient 从左則右 v End color v Flatch Pattern Pattern
	Transpare 0 100 🗐 %

(	Control ID	It is used for system management component and cannot be operated by users		
	Describe	It can be used to remark the purpose of this control		
В	Broken line	Set whether it is a polyline		
Polygon		When you select a polygon, the polyline automatically connects the start point and end		
		point to generate a polygon. You can set the fill color, fill style, and transparency of the		
		polygon		
Line	Туре	Set the line type, including solid line, long dotted line, short dotted line, and point line		
	Color	Set the line color		
	Width	Set the line width		
	Transparency	Set the transparency of the line (the closer the slider is to the left, the lower the		
		transparency percentage, the more transparent the line is)		
Arrow	Draw the start	After checking this option, you can set the style and size of the starting arrow		
	arrow			
	Draw the end	After checking this option, you can set the style and size of the end arrow		
	arrow			
	Fill	Set the fill color, fill style and transparency of polygons		
	Pattern	Can be filled with solid colors, gradients and patterns		
Tr	ansparency	Set the transparency of polygons by sliding the slider (the closer the slider is to the left,		
		the lower the transparency percentage, and the more transparent the filled area is)		
		444		
		Transparency 100% 50% 0%		
	The set fill style,	color and transparency can be previewed in the box below the transparency		

The set fill style, color and transparency can be previewed in the box below the transparency

Security setting 

Display contro	1			
When	隐藏 🗸			
Equip	本地设备	~	Set	
Addre	PSB 🗸	0 0		
Enable User rights	sta ON V	ct designation		
	component when the u	iser has no perm	ission range	
			ssioninge	
Required	user 👯 👯 1	~		

Same to chapter 4-1-1. Straight line security setting.

#### Position

Same as chapter 4-1-1. Straight line position part.

#### 4-1-6. Form

1. Click "Mapping/Form" in the menu bar or 📖 icon in the drawing bar of the control window, move the

cursor to the screen, click the left mouse button to place, click the right mouse button or click ESC to cancel the placement. Modify the length and width of the border through the border points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click the drawn "Table" or select "Table" and right-click to select Attribute.

Basic property

	Form	×
Basic propSecurity s	Position	
Control II T0		
Describe		
Interval Rows : Colun <sup>3</sup>	Contour  Co	
Outer frame		
Style	<b>~</b>	
Colou		
Grid		
Show row	separator	
Style	Colou	
Show colu	mn separator	
Style	Colou	~
🗆 Fill		
Fill color	<b>v</b>	

ontrol ID	It is used for system management control and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Rows	Set the number of rows in the table. The default value is 3
Columns	Set the number of columns in the table. The default value is 3
Contour	Set whether the table is equal in height
Equal width	Set whether the table is equal in width
Style	Select the style of the outline, including solid line, long dotted line, short dotted line,
	and point line
Color	Set the color of the outer border
Show row	Set the color and style of row separator
separator	
Show column	Set the color and style of column separator
separator	
Fill	Set the fill color in the table
ne width	Set the width of table lines
	Columns Contour Equal width Style Color Show row separator Show column separator

Security setting

sic pror Security se		Form	
Display contro			
When	隠藏・		
Equip	本地设备	✓ Set	
Addre	PSB v	0 0	
Enable	sta ON v c	t designation	
User rights			
Hide the	component when the us	er has no permission ra	inge
Required permissio		×	

Same to chapter 4-1-1. Straight line security setting.

#### Position

Same as chapter 4-1-1. Straight line position part.

#### 4-1-7. Scale

1. Click "Mapping/Scale" in the menu bar or icon in the control window's drawing bar, move the cursor to the screen, click the left mouse button to place, click the right mouse button or click ESC to cancel the placement. Modify the length and width of the border through the border points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click "Scale" or select "Scale", right-click and select Attribute.

Basic property

		Scale			×
ic propSecurity se Po	sition				
Control ID S0					
escribe					
tyle	333				_
Style 水平	~				_
cale					
Line style	¥	Line width		~	
Line color	~				
Main engraving10	\$	Main scale len	e <sup>30</sup>	٢	
✓ Sub engravin <sup>1</sup>		Sub scale leng	115	-	
✓ Axis					
ick marks					
✔ Use					
Integer bi 3	•	Decimal p0			
Upper lim 100		Register			
Lower lim <sup>0</sup>	<b>*</b>	Register			
Typeface	<u>.</u>				
Typ 微软雅黑	~	常规	~		
Col	Size	12	¥		
Scale reverse sor	t				
.ocatiot上	~				
		0	ata a	Connect	touetues!
		Deter	mine	Cancel Appl	ication

	Control ID	It is used for system management control and cannot be operated by users
	Describe	Can be used to comment on the purpose of this component
	Style	Set the scale style, including horizontal, vertical, upper semicircle, lower semicircle, full circle, and custom circle upper semicircle upper semicircle custom circle vertical full circle
Scale	Line style	Set the line style of the scale, including solid line, long dotted line, short dotted line, and point line
	Line width	Set the line width of the scale
	Line color	Set the line color of the scale
	Main scale	Set the main scale numbers
	Main scale	Set the main scale length
	length	

	Sub scale	Set the sub scale numbers
	Sub scale	
	Sub scale	Set the sub scale length
	length	
	Axis	Set whether the axis is displayed
,	Scale marks	Select it to set the following items
I	nteger digits	Set the number of integer bits of the scale mark
D	ecimal digits	Set the number of decimal places of the scale mark
1	Upper limit	Set the upper limit of the scale value, that is, the maximum value
	Register	Check "Register", and the upper limit value can be controlled by the register
]	Lower limit	Set the lower limit of the scale value, i.e. the minimum value
	Register	Check "Register", and the lower limit value can be controlled by the register
	Typeface	Set the scale font, font size, font style, color and alignment method
Scal	le Reverse Sort	When not checked, the semicircle scale is displayed counterclockwise, the horizontal
		scale is displayed from left to right, and the vertical scale is displayed from bottom to
		top; When checked, the semicircle scale is displayed clockwise, the horizontal scale is
		displayed from right to left, and the vertical scale is displayed from top to bottom
	Location	Set the scale position as up, down or center

■ Security setting

	Scale	
Basic pror Security se	Position	
<ul> <li>Display contro</li> <li>✓ Enable</li> </ul>	[	
When	隐藏 ~	
Equip	本地设备 v Set	
Addre	PSB ~ 0 0	
Enable	sta ON 🗸 ct designation	
User rights	component when the user has no permission range	
Required permissio	user 权限1 v	

Same to chapter 4-1-1. Straight line security setting.

Position

Same as chapter 4-1-1. Straight line position part.

## 4-1-8. QR code

1. Click the "Mapping/QR Code" icon in the menu bar or the 🔜 icon in the drawing bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or

click ESC to cancel the placement. Modify the length and width of the border through the border points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click QR Code or select QR Code and right-click to select Attribute.

Basic property

	QR code	×
asic prop	Security se Position	
Control	ID Q0	
Describ	e	
Type se	lection	
	QR code     O bar code	
Code se	election	
	BarcodeType QRCode © UniCode CodingMode AscII	
	CalibrationStand L(7%)	
Conten	t	
	<ul> <li>Fixed content</li> <li>Register assignment</li> </ul>	
Equip	本地设备 v Set	
Addre	PSW 🗸 0 0	
Numb er of regist	1 stom data type	

Co	ontrol ID	It is used for system management control and cannot be operated by users
Γ	Describe	Can be used to comment on the purpose of this component
Тур	e selection	You can select QR code or barcode
Code	Barcode type	Set the type of barcode. The QR code includes QRCode, DataMatrix, PDF417
selection		QRCode       It is mainly used in the Internet, logistics information tracing, retail billing applications, etc. For example, the QR code presented by mobile payment is the most commonly used QR code type)         DataMatrix       It is mainly used in the industrial field to achieve quality traceability)         PDF417       It is mainly used in the industrial field to achieve quality
		(It is mainly used for certificate management, report
		management, etc)

		Bar code Milling (Mainly used for commodity barcode)
	Coding mode	Set the encoding method of AscII or UniCode (this option is available only for QRCode types, and only has AscII for other types)
	Calibration	Set calibration standard (only available under QRCode type)
	standard	CalibrationStand L(7%) L(7%) M(15%) Q(25%) O Fixed conte H(30%)
		Calibration standard of QR code: When you encode QR code, you also create some redundant data, which will help QR reader read QR code accurately. Even if part of
		it is unreadable data, it will not affect reading correct information.
		There are four levels of error correction in the QR code, the lowest is
		L: Calibrate 7% of the font size
		M: Calibrate 15% of the font size
		Q: Calibrate 25% of the font size
		H: Calibrate 30% of the font size
Content	Fixed content	Display fixed content (click the blank part to set the content)
	Register assignment	Dynamically specifying QR Codes with registers
	Equipment	Select the current device port for communication
	Address	Set the QR code monitoring address and whether there is offset
	Number of register	Set the number of registers (you can enter the corresponding number of registers according to the content to be set. If you do not check the user-defined data type, the default is WORD-16 bits)
	Custom data type	After checking, you can set the data type. DWORD-32 bits, DDWORD-64 bits

Note: If the QR code content is specified by a register, the register should be a character input register, and data input registers are not supported.

Security setting 

Control	ty se Position				
adjournable.	C. Names and a second s				
isplay contro					
✓ Enable					
When	隐藏	~			
Equip	本地设备	- C.		~	Set
Addre			0	0	Sec
	F3D		U	V	
Enable	sta ON 🗸		ct desi	gnation	
ser rights					
Hide the	component whe	the i	user has	no permis	ssion range
Denter	user 🛛 🕅 🕅			~	
Required				~	
Permasa	unnange				

Same to chapter 4-1-1. Straight line security setting.

Position

Same as chapter 4-1-1. Straight line position part.

### 4-1-9. Picture

1. Click the "Mapping/Picture" icon in the menu bar or the in the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel the placement. Its size can be adjusted by dragging the mouse.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "GIF picture" or select "GIF picture", right-click and select "Attribute".

Basic property

		Pi	cture	×
Basic propSecurity se	Position			
Control ID	G0			
Describe				
	h			
Select	Į.	Custom		
✓ twinkle FI	icker frei0.5	ŝ	Seconc	
Rotate		10200		
Rotat	ion a 0			
✓ Transpare	nt processing			
Use s	pecified c	×	1	
			10°. 1	
Picture preview				

Control ID	It is used for system management control and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Select	Click to insert the picture in the resource library
Custom	Click to add pictures on your computer

Twinkle	Set whether the picture flickers and flicker frequency (unit: second)
Rotate	Set whether the picture is rotated and the rotation angle
Transparent	Set the specified color to make the picture transparent (only one color of the selected picture
processing	can be transparent)
Picture preview	You can preview the selected picture

# The color picker can select any color in the screen for color picking

#### **Examples of transparent processing:**

As shown in the figure below, prepare to remove the black background outside the lamb

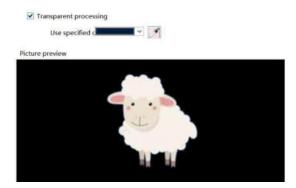


(1) Select gif from the control window to put on the screen

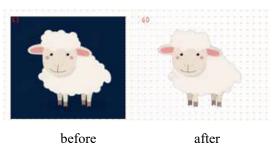
(2) Select the image to be processed from the customized path, click Transparent Processing, use the color picker to select the dark blue of the lamb background for color extraction, or select the same color as the lamb background after using the specified color

			Picture		
Basic propSecurity se	Position				
Control ID	GO				
Describe					
Select	[	Custom	step 1		
twinkle			-		
🗌 Rotate					
Transparer	nt process	ing step 2			
	pecified d		step 3		
			Here I		
Picture preview					
		æ	20		
			1		
			•		
		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	100		
		2		\$	
		1	بر ایر اور	)	
		1		)	
		-		3	

(3) After color selection, the page is displayed as shown below



(4) Click OK to display as shown below



Security setting

Transparent processing

	Picture	
Basic pror Security s	Position	
Display contro Enable When	oi 隐藏 ~	
Equip Addre Enable	本地设备 v Set PSB v 0 0 sta ON v ct designation	
Required	component when the user has no permission range d user v on range	

Same to chapter 4-1-1. Straight line security setting.

Position

Same as chapter 4-1-1. Straight line position part.

#### 4-1-10. Dynamic picture

1. Click "Mapping/Dynamic Picture" on the menu bar or click the 🔛 icon in the drawing bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel the placement. Set multiple pictures. The pictures can be switched freely according to fixed time and order. The size can be adjusted by dragging the mouse.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click "Dynamic Picture" or select "Dynamic Picture", right-click and select "Attribute".

Animation materials

Antonation 1			
AnimatioAnii	matic Security Posit	tion	
Control ID	TA0		
Describe			
	N		
Ē.		Desalination	
	Increase		
	Delete		
	Delete	Rotate	
	Delete Move up	Rotate	
	Move up	Rotate	

Cont	rol ID	It is used for system management control and cannot be operated by users			
Des	cribe	Can be used to comment on the purpose of this component			
Function	Pictures in the material library or user-defined pictures can be added (the picture size should be less than 1920 * 1080)				
	Delete	Delete the specified pictures added to the material			
	Move up	Move the specified picture up			
	Move	Move the specified picture down			
	down				
	Insert	Insert picture in this position			
	Modify	Modify the selected picture			
Fad	e-out	After checking, you can set whether the picture needs to be faded by sliding the slider (the			
		closer the slider is to the left, the higher the degree of fading)			
		Desalination     Desalination     Desalination     Rotate     Rotate     Rotate			
Ro	otate	After checking, the picture can be rotated at will to achieve the target effect (when the			
		pointer is dragged to rotate clockwise/counterclockwise, the picture will also rotate			
		clockwise/counterclockwise)			



Cycle tir		
cycle u	1000 Millis Vse addr∈ PSW0	
Switch	nodeOne way V	
	g order: <sub>er</sub> v	
Start		
Equip	本地设备 v Set	
Addre	PSB 🗸 0 0	
	ct designation	
Trigger	mc上升沿 v	
	ignal	
✓ End s		
Equip	本地设备 v Set	

Cycle time		Set the time of a cycle (that is, all pictures are switched). You can set a constant or specify it
		through a register
Switch	One way	Pictures are displayed from the first to the last, and then from the first to the last
mode	Return	Pictures are displayed in the mode of first to last, then last to first, and then first to last
Swite	hing order	Set the switching order of the picture, which is specified by the picture number (1-10, 10-1,
		or randomly set by the user)
(	Order	Pictures are displayed in order
Reve	erse order	Pictures are displayed in reverse order
Ra	andom	Pictures are displayed randomly without fixed order, and they are displayed in the order set
		by the user, separated by English commas ","
Star	rt signal	If checked, the animation starts when the specified coil is ON or OFF; If not checked, the
		animation will always act
Equ	uipment	Select the current device port for communication
	Set	Click "Set" to enter the address setting interface, where you can set and use system registers
		and user-defined tags. You can click the address tag library below or the project tree - library
		- address tag library to set the used tags (see chapter 5-2 Address Tag Library for the use of
		address tag library and user-defined tags)

			Address		×		
	Equipme	本地设备		v Statio	0	1	
	Address	PSB	~	User	defined label		
	Address	0		v 🗌 Syste	m register		
	Address format	[Extent : 0 - 9999]					
			Determine		ess tag Application		
Address	Set the	object addre	ess of the c	control star	t signal	and whether it is offset (that is, specified	
	indirect	U					
Indirect assignment	Set the	e current add	lress offset	t. The cur	rent regi	ister address changes with the indirectly	
	specifie	specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example, the					
	-	•				ned address is PSW100. When the value of	
	PSW100 register is 0, the coil controlling this element is still PSB0; When the va PSW100 register is 1, the coil controlling this element is PSB1 (and so on)						
-	15010	io register is		onuoning			
Start signal trigger	The trig	gger of rising	/falling edg	ge can be cu	istomize	d	
mode							
End signal	If checl	ked, the anim	ation ends	when the s	pecified	coil is ON or OFF	
End signal trigger , mode	The trig	gger of rising	/falling edg	ge can be cu	ıstomize	d	

Security setting

Display contro	1-		
✓ Enable			
When	隠藏 ~		
Equip	本地设备	✓ Set	
Addre	PSB v 0	0	
Enable	sta ON v ct	designation	
User rights			
Hide the	component when the use	r has no permission range	
Required	user 权限1	*	
	on range		

Same to chapter 4-1-1. Straight line security setting.

Position

Same as chapter 4-1-1. Straight line position part.

### 4-1-11. Translating animation

The use of translation animation components can help users achieve animation functions, but a single translation animation component cannot achieve animation functions. It must be combined with the components that achieve animation functions.

1. Click "Mapping/Translating Animation" on the menu bar or click the icon in the drawing bar of the control window, move the cursor to the screen, press the left mouse button at the starting point, drag the cursor to move, and determine the positions of the following endpoints in turn. Double click the left mouse button (click the right mouse button or click ESC to cancel the placement) to finish the drawing of the translating animation, and the property box will pop up at the same time.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click "Translation Animation" or select "Translation Animation" and then right-click to select "Attributes".

		Translating animation
Coordinate Control		
Control ID Describe	TRO	
x	97	間点坐玩:X=97;Y=207 经历时间:4.1秒 講点坐玩:X=304;Y=203
v	207	編成金術(X-504,Y-205 経万时间2.6秒 繊点坐标(X=214;Y=297 経万时间)2.9秒 繊点坐标(X=99;Y=208 経万时间)1.9秒 繊点坐标(X=190;Y=233

Control ID		D	It is used for system management control and cannot be operated by users		
Describe		e	Can be used to comment on the purpose of this component		
F	Endpoint	Х	Display the horizontal coordinate position of the current end point. After selecting the line		
с	coordinates		"End point coordinate" on the right, you can modify it at the left "X"		
		Y	Display the longitudinal coordinate position of the current end point. Select the line "End		
			point coordinate" on the right and modify it at the left "Y"		
	Experience time		Display the time of moving from the current endpoint coordinate to the next endpoint		
			coordinate, in seconds. After selecting the "experience time" line on the right, you can		
			modify it at the "Time" position on the left		

#### ■ Coordinate

Control

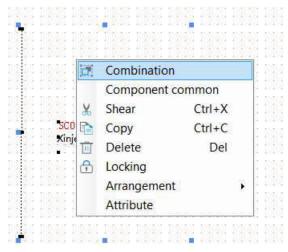
	Control	
кеер	moving	
Switc	h mode One way 🗸 🗸	
✓ Sta	art signal	
Equip	本地设备 v Set	
Addre	PSB 🗸 0 0	
	er m ON v	
Equip	本地设备 v Set	
Addre		

Keeping moving	Select w	hether the animation	repeats the ac	tion according to	the specified track; After		
	checking	, the animation will	repeat the mo	tion according to	the set track. If it is not		
	checked,	the action will be perf	ormed once				
Switch mode	One way	mode: act from the sta	rting point to	he ending point ac	cording to the drawn path;		
	Return n	node: move back and	forth from the	starting point to the	he end point and from the		
	end poin	t to the starting point a	ccording to the	drawn path			
Start signal	Select w	hether the action trig	ger is contro	lled by the bit si	gnal. When selected, the		
-	animation starts when the rising edge of the bit signal comes and remains in the ON state						
	(when th	e falling edge of the bi	t signal comes	and remains in the	OFF state)		
Equipment	Select the	Select the current device port for communication					
Set	Click "S	et" to enter the addr	ess setting int	erface, where you	can set and use system		
	Click "Set" to enter the address setting interface, where you can set and use system registers and user-defined tags. You can click the address tag library below or the project						
	-	C C		•			
		tree - library - address tag library to set the used tags (see chapter 5-2 Address Tag Library for the use of address tag library and user-defined tags)					
			y and user-den	licu tags)			
		Ad	dress	×			
	Equipme nt Address type	本地设备		Statio 0			
		PSB v		User defined label			
	Address	0	~	System register			
	Address [Extent: 0 - 9999] format						
				Address tag			
		1	Determine Car	Application			
Address							
	Set the o	bject address of the co	ontrol start sig	nal and whether it	is offset (that is, specified		
	Set the o indirectly	•	ontrol start sig	nal and whether it	is offset (that is, specified		

Indirect assignment	Set the current address offset. The current register address changes with the indirectly
	specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example,
	the current coil address is PSB0, if the indirectly assigned address is PSW100; When the
	value of PSW100 register is 0, the coil controlling this element is still PSB0; When the
	value of PSW100 register is 1, the coil controlling this element is PSB1 (and so on)
Start signal trigger	Customizable ON/OFF trigger
mode	
Reset signal	Select whether the end of the action is controlled by a bit signal. After selecting, when the
	rising/falling edge of the bit signal comes, the animation will start from the beginning
Reset signal trigger	The trigger of rising/falling edge can be customized
mode	

#### Example:

To realize the text string "Xinje Electric welcomes you!" Scroll the display from top to bottom on the screen. You can draw a vertical translation animation track on the screen, place a static text string, select a static text string and a translation animation component, click the right mouse button, and select "Combination" to facilitate the movement of the text string according to the translation animation track. The movement time and control can be set by selecting "attribute":



#### 4-1-12. Function canvas

Through C function DCMapDrawLine, DCMapDrawRect, DCMapDraw irce, DCMapDrawEllipse, DCMapDrawCircleArc, DCMapDrawEiilpseArc, the function of drawing lines, rectangles, circles, ellipses, arcs and elliptical arcs on the function canvas is realized. Clear the function canvas through DCMapClear. The function canvas background color filling function is realized through DCMapSetBackColor. Refer to 6-2-5 API Functions for the use of function canvas related functions.

- Operate process
- 1. New project, screen content making

(1) Click the "Mapping/Function Canvas" on the menu bar or the *sicence* icon on the control window's drawing bar, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel it. Modify the length and width of the border through the border points. The establishment is shown in the following figure:

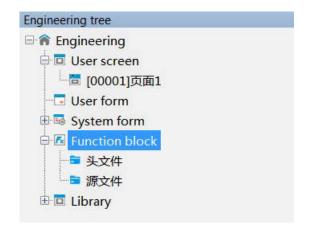
15			touch Win Pro - 工程 - [00001]页面1	64	. C 🗙
File Edit P	arts Mapping	Tool View	Help		
Newly build Open	Preservation Clo	9 •5 c sie Revoke Reci		cipe editing	<u>5</u> .
Engineering tree			× /[00001]@dit*	Outline	4 ×
B Engineering     User screen     Tooooning     Over form     System form     S Function bloc	H1.		▲ 4	13月1日日本) そ(cocort版)に	6.0 5.4
Control window		8	* -		
	q		Non i		
Burrar *	Barkünhe Mater romre	E Value			
Rapping					
	0				
Straight line	Cierolae N	Partanala			
Arr ()	Bishinon HR	Entre			
Sr ale	Call code	Detien	Sec. 1		
	canctation association	<ul> <li>Euretino canual</li> </ul>			
Data proceesing					
Alarm dientas	Alarm has	Treed chart			
h4	The second second	114			
WV fine chart	Ranout form	Formula table			
<u> 1</u>		ai.	Output window + 1 K		
Bacine transmission	alitatell	WV traced chart	Output ErrortLis Compile window25016 A		
Data tabla	Dis obart		Compile window25900 Number of compiled resource files:39		
Special parts			Compilation succeeded.		
( <u>.</u>	1111	#A	S Direct Owning - Mess	Address Preview	0.00
-	(4) (5) (5)	Touch screen o	odel: TSS-700-E NetD: 信捷 XD/XL/XG系列(Modbus TCP)(CCM2:信捷 XD/XL/XG系列(Modbus RTU)(COM1:信捷 XD/XL/XG系列(Modbus RTU) X:303 Y:S28		Office, 1

(2) When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click the Function Canvas or select the Function Canvas, right-click, and select attribute.

		F	unction canvas	×	
	Basic prope Posi	tion			
	Control ID Describe	MC0			
	Number 0 Backgrou	] ~			
Control ID	It is used for s	ystem managem	ent control and cannot be	operated by users	
Describe	Can be used to	comment on th	e purpose of this compone	ent	
Number	Set MacroDCM	Map function nu	mber		
Background	Set Backgroun	d color properti	es		

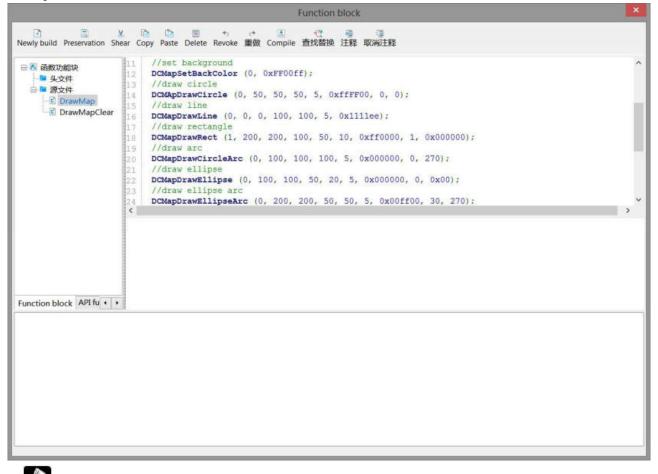
### 2. Add Function Block

(1) To create a function block, right-click the project tree - Function Block. In the pop-up dialog box, select "Add Function" to add 2 functions. Set the function name (i.e. the function block name, which can be 32 characters at most) to DrawMap and DrawMapClear:



(2) Edit the function DrawMap, DrawMapClear. Open the function editing interface. The functions are as follows:

DrawMap:



The TS series HMI uses RGB mode. One color occupies one byte, namely, 0xFF0000 is B (BLUE), 0x00FF00 is G (Green), and 0x0000FF is R (RED).

DrawMapClear:

	Function block	×
Newly build Preservation Sh	¥ 10 10 11 11 11 11 11 11 11 11 11 11 11	
<ul> <li>■ 品数功能块</li> <li>■ 头文件</li> <li>■ 課文件</li> <li>■ 読文件</li> <li>C DrawMap</li> <li>C DrawMapClear</li> </ul>	11 //clear the image 12 DCMapClear (1); 13 14 15	^
	c	~
Function block API fu +	ä	

## 3. Call DrawMap, DrawMapClear

Place a function key on the screen, select "Function Call" from the "Optional Features" on the right, click "Add to" button to add this function, select the "Call Function" on the left, and select the name of the function to be called to add the function.

		unction key		
nction Appearance	e Security set	Position		
Control ID F80				
Describe				
Action 按下状:	ts v	,		
□ 启动声音				
Selected			Optional Featu	Ires
潮田		step 2	and the second se	线圈
step .		Add to		数据
	函数i	調用	×	算
Basic properties	1250			输
			Function	换
功能函数 DrawM		✓ Edit	Function	
	apClear	ИŦ		
step				5V
step	•			5V
	Determine	Cancel	Application	方
			1.30	方
		step	1 (18)	调用
		step	1 函数	调用

Click "Appearance" to set function key text, and finally click "OK" to finish setting.

		Fu	nction ke	У			
unction	Appearance Security	set Po	sition				
			V Us	e pictu	es		
				Status	0		~
	DrawMap			Name	button_0	5_a	
				Catego	Jsvg		
			1	Dimensi	c80 × 42		
1	Change appearance	e				More p	ictures
✓ Fill							
							-
Ctata 0				An	nly fonts t	o each	1
STATES AND		• 🗹 Di	splay text	Ар	ply fonts t	o each	
State 0		Di 🗹	splay text	Ар	ply fonts t	o each	
STADESCH 1			splay text rawMap		ply fonts t	o each	
Tavt Typefa	O Multilina		rawMap	,	ply fonts t	o each	
• Tevt Typefa Ty	O Multilina	D	rawMap 常规	,	ply fonts t	o each	
Tavt Typefa	O Multilina		rawMap 常规	,	-	o each	1

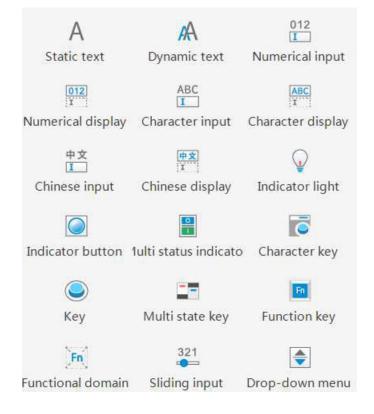
DrawMapClear function key is operated as above.

- 4. Download the program to the human-computer interface for operation.
- Position

Same as chapter 4-1-1. Straight line position part.

# 4-2. Parts

The basic components include: static text, dynamic text, value input, value display, character input, character display, Chinese input, Chinese display, indicator light, indicator button, multi status indicator light, character key, key, multi status key, function key, function domain, sliding input and drop-down menu.



# 4-2-1. Static text

Set the text to be displayed.

1. Click the "Part/Text/Static Text" icon in the menu bar or the A icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel the placement. Modify the length and width of the border through the border points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click Static Text or select Static Text and right-click to select Attribute.

Basic property

Basic propeSecurity se Position Control ID STO Describe Tevt O Multiling text Typeface Ty Times New Roman 学 常规 学 Co Size 12 学		Static	c text properties
Describe  Tovt Multiling  text  Typeface  Ty Times New Roman v 常规 v	Basic propeSec	curity se Position	
● Tevt ○ Multiling text Typeface Ty Times New Roman ~ 常规 ~	Control IE	O STO	
text Typeface Ty Times New Roman ~ 常规 ~	Describe		
Typeface Ty Times New Roman ~ 常规 ~	• Tevt		
Ali Middle_Center V Adaptive size Frame Thi 无边框 V Style V	Ty Times Co Ali Middle Frame Thi $\mathcal{F}_{Co}$	Center V	/ 常规 ✓ e 12 ✓ □ Adaptive size
Control ID It is used for system management control and cannot be operated by user			
Describe Can be used to comment on the purpose of this component		-	
Text         Set the text to be displayed. Click/double click the text to modify it	Text Set the text t	to be displayed. Clic	ck/double click the text to modify it

Multilanguage	Set up multilingual display. After selecting, you can click the "Add" text on the right side or
library	the project tree - library - label multilingual on the left side of the project interface to manage
	multilingual (see chapter 4-7 for the library description for specific use)
Typeface	Set the text font, size, color and alignment (the position displayed in the box); You can check
	the adaptive size, that is, drag the mouse to change the size of the part, and the text size will
	change accordingly
Frame	Set the thickness, style and color of the border

# 

Multi language library setting: if the current project has not edited labels in multiple languages, the text in the upper right corner is displayed as "New" (as shown in the left figure below). If the label has been edited in multiple languages, the text will be displayed as "Edit" (as shown in the right figure below).

Static text propertie	s 🔽	Static text properties
Basic propeSecurity se Position		Basic propeSecurity se Position
Control ID ST0		Control ID ST0
Describe		Describe
O Tovt   Multiling	新增	O Tavt   Multilian  Million
Enable		Form ID: 0001 V Num 1 V
		Form [ID: 000] v Num 1 v
text		Text1

# Security setting

	Static text prop	perties	
Basic prope Secur	ty set Position		
<ul> <li>Display contro</li> <li>✓ Enable</li> <li>When</li> </ul>			
Equip Addre Enable	本地设备 PSB v 0 sta <sup>ON</sup> v ct design	V Set	
User rights I Hide the Required permissio		o permission range	

Same to chapter 4-1-1. Straight line security setting.

#### Position

Same as chapter 4-1-1. Straight line position part.

#### 4-2-2. Dynamic text

Different characters can be displayed according to different register values.

1. Click "Part/Text/Dynamic Text" in the menu bar or icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel it. Modify the length and width of the border through the border points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click "Dynamic Text" or select "Dynamic Text" and right-click to select "Attribute".

Basic property

		Dy	namic text con	figuration
	Basic prope Dis Control ID Describe Read addres		Position	
	Equip 本批 Addre PSV Data Wor type		0 0 ct designation	Set
Control ID	It is used for	r system manag	gement contro	ol and cannot be operated by users
Describe	Can be used	to comment o	n the purpose	of this component

Read address	Set dynamic text object address
Equipment	Set the device port for communication
Address	Set target register number
Data type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD, Hex, Signed, Unigned,
	Floating number
Set	Click "Set" to enter the address setting interface, where you can set and use system registers and user-defined tags. You can click the address tag library below or the project tree library address tag library to set the tags used (see chapter 5-2 Address Tag Library for the use of address tag library and user-defined tags)
Indirect	Set the current address offset. The current register address changes with the indirectly
assignment	specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example: the
	current register address is PSW0, if the indirectly specified address is PSW100; When the
	value of PSW100 register is 0, the register controlling this element is still PSW0; When the
	value of PSW100 register is 1, the register controlling this element is PSW1 (and so on)
Inquiry	Dynamic text configuration         Basic propt Display Security se Position         Control ID         Describe         Equip #######         Equip ####################################
	which will not be repeated later)

# Display

The display content of the register is determined by the value of the object register, and different characters can be displayed according to the value of the object register.

			Dv	namic text configuration	×
		Paris prop	Display Security se		
		Basic prop	- apay perunty se	r wateren	
		Serial	Numerical value	Text description string	Add to
		0	0	test1 test2	
		1	1	10512	Delete
					Move up
					Move
		State 1	. )	Apply fonts to each state	
		- Typeface			
		10008	欠雅黑	~ 常規 ~	
		Co Ali Mic	idie_Center v	Size 12 V	
		Frame Thi Co Io	无边框 >	Style v	
				可变字符串1	
Сс	ontent	Set the text	to be displaye	. Wester	rmine Cancel ne contents under "Serial Number", "Numer
					lify it (you can select the contents under from the text library, and click the "
		1	ext description		
		I. I.	Text1		
				. You	can enter the multilingual settings, or the
		project tree	e - Library -	Label Multilanguage	- on the left side of the project bar for
		managemen	t (see chapter	5-1 Label Multilanguag	ge for specific use)
Item	Add	Increase the	number of dy	namic text items	
	delete	Delete the c	ontents of the	target option	
	Move up			one physical location	
	Move			wn one physical locatio	on
	down		5 .r	1	
S	tate	You can c	heck the dro	n-down list to set t	he font and border corresponding to th
3	uite			-	7 fonts to each state" button behind to set th
		-	rder in all state		Toms to each state button behind to set th
	afaca			,	position displayed in the here). Voy any share
Typ	beface				position displayed in the box). You can chec
		the adaptive change acco		urag the mouse to char	nge the size of the part, and the text size wi
F				d oploy of the 1 1 -	
Fr	ame	set the thick	chess, style an	d color of the border	

.....

Example: The setting is as shown in the figure above. When the value of PSW0 is 0, the dynamic string displays the variable string 0.

When the value of PSW0 is 1, the dynamic string displays variable string 1 and so on.





Maximum number of dynamic text strings:

When the data type is Word Usigned, the value range is 0~65535. Because the values of dynamic text strings cannot be repeated, the maximum number of dynamic text strings of this data type is 65536. The same applies to other data types.

Security setting

Basic prop Dis	play Security	se Position			
- Display cont	rol				
✓ Enable					
When	隐藏	~			
Equip	本地设备		~	Set	
Addr	e psb	✓ 0	0		
Enabl	e sta ON	✓ ct des	ignation		
User rights					
✓ Hide th	e component v	when the user ha	s no permis	ssion range	
		7限1	~		
permis	sion range				

Same to chapter 4-1-1. Straight line security setting.

Position

Same as chapter 4-1-1. Straight line position part.

# 4-2-3. Numeric input

1. Click the "Part/Input/Numerical Input" in the menu bar or the icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel it. Modify the length and width of the border through the border points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click Numeric Input or select Numeric Input and right-click to set attributes.

Basic property

			N	umeric	input a	ittribute	<b>2</b>
Basic pro <mark>D</mark> a	ata inp Sc	ale co	Notice	Appe	ara Secur	ity Position	
Contr	ol ID DI	30					
Descr	ibe						
Read ac			differen	t addre:	aneo n Tr		
Equip	本地设备				~	Set	
Addre	1000 C 1000			0	0		
Data type	Word v	Unsi	gnec ∨	ct desig	gnation		
Write a	ddress						
Equip	本地设备				~	Set	
Addre	PSW		~	0	0		
Data	Word N	Unsi	gnec 🗸				
type	Partie Hold			ct desig	gnation		

Control ID	It is used for system management control and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Read/write using different addresses	If not checked, the same address is used for reading and writing
Read address	Set the displayed address. You can also set whether there is an offset (that is, indirect assignment)
Write address	Set the write address. You can also set whether there is an offset (that is, indirect assignment)
Equipment	Current equipment port for communication
Address	Set target register number
Data type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD, Hex, Signed,
	Unigned, Floating number
Set	Click "Set" to enter the address setting interface, where you can set and use system registers and user-defined tags. You can click the address tag library below or the project tree – library - address tag library to set the tags (see chapter 5-2 Address Tag Library for the use of address tag library and user-defined tags)
Indirect assignment	Set the current address offset. The current register address changes with the indirectly specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example: the current register address is PSW0, if the indirectly specified address is PSW100; When the value of PSW100 register is 0, the register controlling this element is still PSW0; When the value of PSW100 register is 1, the register controlling this element is PSW1 (and so on)

#### **Example:**

(1) Read/input using the same address (that is, do not check read/write using different addresses)

Rea	d / write u	sing differer	nt addr	esses	
Read / v	write addre	SS			
Equip	本地设备			~	Set
Addre	PSW	~	0	0	
Data	Word 🗸	Unsignec 🗸	at dage	innetion	
type			ct des	signation	

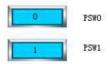
Input 1 to PSW0, and PSW0 displays 1; The number entered is the number displayed.



(2) Read/input using different addresses (that is, check read/write using different addresses)

ead ad	Idress				
Equip	本地设备			~	Set
Addre	PSW	~	0	0	
Data	Word ~	Unsignec V	and a second		
type			ct des	ignation	
Write ad	ddress				
Equip	本地设备			~	Set
Addre	PSW	~	1	0	
Data	Word ~	Unsignec 🗸		ignation	

At this time, the input box can set the value of PSW0, but the box displays the value of PSW1. For example: input 1 to PSW0, PSW0 still displays 0, and PSW1 displays 1.



Data input

ic pro Data inpuScale co Notice App	eara Security Position
Display Leading 0	
Number of digits	
Integer digit	Decimal 0
imit	
<ul> <li>Enable input upper limit</li> </ul>	Enable input lower limit
Upper 9999	Lower 0
limit	limit Reg
Enable alert color	
Upper limit	twinkle
Lower imit	twinkle
°attern ● Touch ○ Bit con' nput order ✓ Enable input order	trol
After the input is completed, it	
Input order 1	Group 1
(eyboard setting up	
Enable pop-up keyboard	
Display upper and lower	
Keyboard number [25010]KeyBoar	rd_Num_01 v
	Middle_Center ~
Keyboard pop-up position	

Di	splay	After checking, the user will not see the entered value, and the value will be displayed as "* * *"
Lea	ding 0	If the number of data digits does not meet the requirements, it shall be supplemented with 0 in
		front (For example, if the integer digits and decimal digits are set as 5 and 0 respectively for data
		input, and the leading 0 is selected, the input data will be 23 and 00023 will be displayed in the
		input box)
Nun	nber of	Set the integer and decimal digits displayed in the register
di	igits	
Limit	Enable	Set the upper limit of data input, which can also be specified by register
	input	If the upper limit is set to 10, 10 can be entered normally according to the input sequence, and 11
	upper	is not allowed to be entered.
	limit	
	Enable	Set the lower limit of data input, which can also be specified by register.
	input	If the lower limit is set to 10, you can normally enter a value of 10 or more. If you enter a value
	lower	below 10, the value in the current register will be displayed
	limit	
	Enable	Set the warning color of upper and lower limits and whether it flickers
	alert	If the same register is used in other locations and exceeds the upper and lower limits set by this
	color	register, a warning prompt will be triggered

Pattern	There are touch control a	and bit control. To	uch control means to	start the	input progra	am by touch			
	the control. For bit cont	trol, start the input	t program when the	specified	l coil is ON	. In bit con			
	state, when the coil is O	N, trigger the keyl	board to pop up, clic	k ENT to	input data,	and click E			
	to cancel the keyboard p	op up							
out order	If it is enabled, the keyb	1 1	the corresponding i	nput cont	rol in order	to set differ			
	groups.	5 1	1 8	1					
		ol). The data inn	it controls PSW0 F	PSW1 PS	SW2 and PS	SW3 are set			
	Example 1 (touch control): The data input controls PSW0, PSW1, PSW2 and PSW3 are set follows.								
			too too too						
	Input order	PSW0	Input order	er	PSW	1			
	After the input is completed, it		After the input is	completed, it					
	Input order 1	Group 1	Input order	2 0	Group 1				
	4		-						
	Input order	PSW2	Input order		PSW3				
	Enable input order		Enable input order	-					
	After the input is completed, it	Group 2	After the input is c	iompieteu, it	Group 2				
	siparonae	al and -	alperoraer -	181		154			
	same group, and the orde When you click PSW0 keyboard will automatic value input of PSW0 a	er is 1 and 2 respec ), the keyboard w cally jump to PSW	vill pop up. After o /1. After entering th	entering t e value, o	the value, c click ENT to	elick ENT, o complete			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump	er is 1 and 2 respect b, the keyboard w cally jump to PSW and PSW1 (if you to the next compo	ctively; /ill pop up. After of /1. After entering th 1 check "No more nent in the same gro	entering the value, of input in a pup after of	the value, c click ENT to sequence af completing t	click ENT, o complete ter input", the input at			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y	er is 1 and 2 respect b, the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input,	ctively; /ill pop up. After of /1. After entering th 1 check "No more nent in the same gro	entering the value, of input in a pup after of	the value, c click ENT to sequence af completing t	click ENT, o complete ter input", the input at			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 and	er is 1 and 2 respect b, the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, and PSW3.	ctively; /ill pop up. After of /1. After entering th 1 check "No more nent in the same gro you need to click th	entering t the value, of input in a pup after of the next co	the value, c click ENT to sequence af completing to omponent ag	click ENT, o complete ter input", the input at gain for inp			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 an Example 2 (bit control)	er is 1 and 2 respect b, the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, and PSW3.	ctively; /ill pop up. After of /1. After entering th 1 check "No more nent in the same gro you need to click th	entering t the value, of input in a pup after of the next co	the value, c click ENT to sequence af completing to omponent ag	click ENT, o complete rter input", the input at gain for inp			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 and	er is 1 and 2 respect b, the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, and PSW3.	ctively; vill pop up. After of v1. After entering the check "No more nent in the same grown you need to click the controls PSW0, PS	entering t the value, of input in a pup after of the next co	the value, c click ENT to sequence af completing to omponent ag	click ENT, o complete rter input", the input at gain for inp			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 an Example 2 (bit control)	er is 1 and 2 respect b, the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, and PSW3.	ctively; /ill pop up. After of /1. After entering th 1 check "No more nent in the same gro you need to click th	entering t the value, of input in a pup after of the next co	the value, c click ENT to sequence af completing to omponent ag	click ENT, o complete ter input", the input at gain for inp			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 a Example 2 (bit control) follows.	er is 1 and 2 respect b), the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, and PSW3. ): The data input	ctively; vill pop up. After of v1. After entering the a check "No more nent in the same gro you need to click the controls PSW0, PS	entering t input in s oup after o he next co SW1, PS	the value, c click ENT to sequence af completing to pmponent ag W2 and PS	click ENT, o complete ter input", the input at gain for inp			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 an Example 2 (bit control) follows.	er is 1 and 2 respect b), the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, nd PSW3. ): The data input	ctively; vill pop up. After of v1. After entering the check "No more nent in the same grown you need to click the controls PSW0, PS	entering the value, of input in a coup after of the next coup SW1, PSV	the value, c click ENT to sequence af completing to omponent ag W2 and PS	click ENT, o complete ter input", the input at gain for inp			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 as Example 2 (bit control) follows.	er is 1 and 2 respect b), the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, and PSW3. ): The data input	etively; vill pop up. After of v1. After entering the nent in the same ground you need to click the controls PSW0, PS	entering t ne value, o input in s oup after o he next co SW1, PS Bit control	the value, c click ENT to sequence af completing to pmponent ag W2 and PS	click ENT, o complete rter input", the input at gain for inp			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 an Example 2 (bit control) follows.	er is 1 and 2 respect b), the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, and PSW3. ): The data input	ctively; vill pop up. After of v1. After entering the check "No more nent in the same grown you need to click the controls PSW0, PS	entering the value, of input in a coup after of the next coup SW1, PSV	the value, c click ENT to sequence af completing to pmponent ag W2 and PS	click ENT, o complete rter input", the input at gain for inp			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 an Example 2 (bit control) follows. Pattern • Bit control Input order Input order • Input order • Pattern	er is 1 and 2 respect b), the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, and PSW3. ): The data input	ctively; vill pop up. After of v1. After entering the u check "No more nent in the same ground you need to click the controls PSW0, PS Pattern Touch Input order Mattern	entering the value, of input in a coup after of the next coup after	the value, c click ENT to sequence af completing to pomponent ag W2 and PS PS80 PS80	click ENT, o complete ter input", the input at gain for inp			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 as Example 2 (bit control) follows. Pattern Touch  Bit control Pattern Pattern Touch  Bit control	er is 1 and 2 respect b), the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, and PSW3. ): The data input	etively; vill pop up. After of v1. After entering the a check "No more nent in the same group you need to click the controls PSW0, PS Pattern Touch Input order Input order Pattern Touch	entering t ne value, o input in s oup after o he next co SW1, PS Bit control	the value, c click ENT to sequence af completing to pmponent ag W2 and PS	click ENT, o complete ter input", the input at gain for inp			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 an Example 2 (bit control) follows. Pattern • Bit control Input order Input order • Input order • Pattern	er is 1 and 2 respect b), the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, and PSW3. ): The data input	ctively; vill pop up. After of v1. After entering the u check "No more nent in the same ground you need to click the controls PSW0, PS Pattern Touch Input order Mattern	entering the value, of input in a coup after of the next coup after	the value, c click ENT to sequence af completing to pomponent ag W2 and PS PS80 PS80	click ENT, o complete ter input", the input at gain for inp			
	When you click PSW0 keyboard will automatic value input of PSW0 a keyboard will not jump selected component. If y Similarly, enter PSW2 as Example 2 (bit control) follows. Pattern Touch Bit control Input order Pattern Touch Bit control Input order	er is 1 and 2 respect b), the keyboard we cally jump to PSW and PSW1 (if you to the next compo- you want to input, nd PSW3. ): The data input PSB0 PSW0	etively; vill pop up. After of v1. After entering the a check "No more nent in the same ground you need to click the controls PSW0, PS Pattern Touch Input order Pattern Touch Input order	entering the value, of input in a coup after of the next coup after	the value, c click ENT to sequence af completing to omponent ag W2 and PS PSB0 PSB1	click ENT, o complete rter input", the input at gain for inp			

PSW0 and PSW1 are in same group, which are controlled by coil PSB0, and the sequence is 1 and 2 respectively; PSW2 and PSW3 are in same group, which are controlled by coil PSB1 in order of 1 and 2 respectively;

When PSB0 and PSB1 are set to OFF, clicking PSW0, 1, 2 and 3 will not pop up the keyboard.

When PSB1 is set to OFF and PSB0 is set to ON, the keyboard will jump out for PSW0. After entering the value, click ENT, the keyboard will automatically jump to PSW1. After entering the value, click ENT to complete the value input of PSW0 and PSW1; Similarly, when PSB0 is set to OFF, PSW2 and PSW3 are input when PSB1 is set to ON.

When PSB0 and PSB1 are both set to ON, the input program will be triggered in the order of PSW0, PSW2, PSW1 and PSW3. To cancel the input point ESC.

	<ol> <li>The keyboard pops up when the control coil is set to ON. After input, the control coil (PSB0, PSB1) will not reset automatically. If you want to re-enter data, please manually reset to ON to trigger.</li> <li>It is recommended that the control coil be set to reverse state. If it is set to instantaneous ON, take PSW0 and PSW1 above as an example. If PSB0 is set to instantaneous ON, a keyboard will pop up for PSW0 at the same time of triggering. Click ENT after input, and the keyboard will disappear. Only PSW0 can be input. Even if it is triggered again, the keyboard will only be displayed below PSW0, and the setting of PSW1 cannot be completed.</li> </ol>
	Action Set on Set off  Reverse Instantaneous on
setting	<ul> <li>to display upper and lower limit values, etc</li> <li>I. The keyboard suffix UL is the keyboard with upper and lower limits, such as [25009] KeyBoard_Num_01UL</li> <li>2. Users can also customize the keyboard.</li> <li>(1) Select the project tree - user form, right-click Add to create a new user form.</li> </ul>
	(2) "Used as keyboard display" should be selected for name and size of user-defined system form .
	Page information         Width 800         Width 800         Overlay window         Overlay window         Top floor 表         Bottom 表         Pop up window         In the middle of the screen         Show in         Monopolize         Close button         Screen permission         Required user perm ₹         Switch to the permission range when the screen / window is closed
	(3) Place the required character keys on the user form. Refer to 4-2-12 for the use of character keys. In the following example, 0-9, ESC and ENT keys are placed.
	Rejor in the following example, 0 9, 150 and 1101 Rejo are placed.

1       2       3         1       2       3         1       5       6         1       5       6         1       5       6         1       5       6         1       5       6         1       5       6         1       5       6         1       5       6         1       5       6         1       5       6         1       5       6         1       5       6         1       5       6         1       6       6         1       6       7         1       8       9         1       6       6         1       6       6         1       6       7         1       6       7         1       6       7         1       6       7         1       6       7         1       6       7         1       6       7         1       7       8         1       7       8
(4) Open the numeric input control, and a newly created "User defined keyboard" will appear at
the keyboard number. After selecting, click OK
Keyboard setting up
Enable pop-up keyboard     Display upper and lower
Keyboard number [25010]KeyBoard_Num_01
Keyboard po [25009]KeyBoard_Num_01UL [25010]KeyBoard_Num_01 [25011]KeyBoard_Hex_01
(5) At this time, click the numeric input control, and the displayed keyboard is the keyboard defined by yourself

■ Scale conversion

It is divided into input scale conversion and display scale conversion. After checking, the input or read value can be converted according to the set scale; The conversion effect can be simulated in the software, as shown below:

Bas	sic pro Data	inp Scal	e cor M	Notic	e Appe	ara	Security Pos	itio	h			
								2010-2012				
	✓ Input Data source	scale cor	versio	n			Conversi on value					
	Upper limit	9999	_				Upper limit		99	-		
	Lower	Reg					Lower	0	Reg			
	limit	Reg					limit	1	Reg			
	Preview	Laura	r limit				Data		Harr	or limit		Lower limit
	设备值	of			HMI	-	Data source		i o tota	er limi 9999	-	0
2	0	=	0	+(	0		0	) x	4	3999	-	0
									Data			Data source
T	Displa	y scale c	onvers	ion			Conversi on value					
	Upper limit	9999					Upper limit		99	-		
		Reg						0	Reg			
	Lower limit	C Reg					Lower	170	Reg			
-	Preview	Louis	r limit				Data		Upp	er limi	37	Lower limit
	HMI	of			设备值		source		0.000	9999	].	0
	0	=	0	+(	0	-	0	) x		9999		0
									Data			Data source
									De	termin	e	Cancel
ale	The inp	ut data	is c	btai	ned fro	om	the origi	nal	data	a in t	the	operating
ion	conversi	on. To	selec	t thi	is funct	tior	n, you nee	ed to	o set	the	up	per and lo
	source a	nd conv	versio	on va	alue. Tl	he	upper and	lov	ver l	imits	ca	n be consta
	register	The da	ta so	urce	is the	dat	a input of	1 th	e HI	MI. aı	nd	the conver

	written into the lower communication device after proportional conversion
Display scale	The display data is obtained from the original data in the monitoring object register after
conversion	conversion. Selecting this function requires setting the upper and lower limits of the data
	source and conversion value. The upper and lower limits can be constant or specified by the
	register. The data source is the data in the lower communication equipment, and the
	conversion value is the data displayed on the HMI after proportional conversion
Upper lower limit	Limit the upper and lower limits of the input (can be specified through the register)



If the "enable input upper/lower limit" (as shown in the left figure below) and "input/display scale

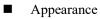
conversion" (as shown in the right figure below) are checked at the same time, the upper and lower limits of data display are the upper and lower limits of scale conversion.

Numeric i	nput attribute	1/2	Numeric	input attribu	te
asic pre Data inptScale co Notice Appear	Security Position	Basic pro Data	inp Scale cor Notice Appea	a Security Pos	ition
Display Leading 0 Number of digits Integer digit 4	Decimal 0	Data source Upper limit	9999	Conversi on value Upper limit	9999
Limit Enable input upper limit Upper 9999 limit	Enable input lower limit     Lower     0	Lower Timit	0 Reg	Lower limit	0 Reg.
	Reg     twinkle     twinkle	Preview 设备值 0	Lower limit of HMI = 0 +{ 0	Data source	Upper limit Lower limit x 9999 - 0 9999 - 0 Data source Source
Pattern Direction Dist control		♥ Displi Data source Upper limit	9999	Conversi on value Upper limit	9999
		Lower limit	0	Lower limit	0

Notice

		Nun	neric ir	nput attril	bute	
asic pro Data i	np Scale co	Notice	Appeara	Security F	Position	
Before writA	fter writii					
✓ Notifica	ation bit					
• Write	on			O Write	off	
Equip	本地设备			~	Set	
Addre	PSB	~	0	0		
			ct des	ignation		
✓ Notice	word					_
Equip	本地设备			~	Set	
Addre	PSW	×	0	0		
Data	Word 🗸	Unsignec V	ct des	ignation		
type Write value	0					

Notice	If selected "notification bit" or "notice word", the coil can be set ON/OFF, the register can be set
	value (notice word) before or after writing.



			✓ Use pictu	res	
			Status	0	~
	0000		Name	data_01	
			Catego	ŋsvg	
			Dimens	ic 80 × 30	
Frai	me				
orde	r style Solid color	~	Border	color	v
orde	r style Solid color	~	Border 常规	color	v
orde pefac	r style Solid color	v Size	常规		×

Use picture	Set whether to use pictures
Change	You can click "Change Appearance" to change the appearance, or click "More Pictures" to select a
appearance	custom picture
Fill	Fill style (solid/gradient) and fill color can be set
Frame	Border style and color can be set
Typeface	You can set the font, size, color and display position of the font in the control (you can also check
	the adaptive size, that is, drag the mouse to change the size of the part, and the number size will
	change accordingly)

Security setting

ic pro Data inp	Scale co Notice Appe	eara Security Position
Operation con	firmation delay	
🗌 Confirma	tion before	
Display contro	1	
✓ Enable		
When	隐藏 ~	
Equip	本地设备	✓ Set
Addre	PSB 🗸	0 0
Enable	sta ON 🗸 🗸	ct designation
Enable control		
✓ Enable		
Equip	本地设备	✓ Set
Addre	PSB ~	1 0
Enable	sta ON 🗸	ct designation
User rights		
The perm	ission will be cancelled	after the operation is completed
When the	user has no permission	n range, a prompt window will pop up
Calculation of the Addition of the	component when the u	iser has no permission range
Hide the		

Operation	The waiting time (s) can be set. If this option is checked, a pop-up window "Are you sure to
confirmation	execute this operation" will pop up when operating components. If you do not click "OK" or
delay	"Cancel" within the set waiting time, the pop-up window will disappear by itself and this
	operation will fail. If you click "OK" within the waiting time, the operation is successful.
	Clicking "Cancel" is invalid
Display control	Use bits to control whether to display the part. When the condition is not met, the component
	will be hidden
Enable	After selected, it will perform the display control
When validation	When validation fails, the component is hidden by default and cannot be changed
fails	
Address	Set the target coil of bit control
Enable status	Set ON status to be valid or OFF status to be valid.
	For example: if the equipment is checked as shown in the above figure, the bit control is PSB0,
	and it is hidden when validation fails, and the enable status is ON, then when the status of
	PSB0 is ON, the component is normally displayed, and when the status of PSB0 is OFF, the
	component is hidden and not displayed.
Enable control	The bit limit can be set (the enable state of the enable control can be customized). When the
	enabling conditions are met, the component can be used normally (as shown in the figure
	above: when the PSB1 is in the ON state and the trigger conditions are met at the same time,
	the component can be used; if the PSB1 is in the OFF state, the component is still unavailable
	even if the trigger conditions are met)
Indirect	Set the current address offset. The current coil address changes with the indirectly specified
assignment	register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example, the current

	coil address is PSB0, if the indirectly assigned address is PSW100; When the value of
	PSW100 register is 0, the coil controlling this element is still PSB0; When the value of
	PSW100 register is 1, the coil controlling this element is PSB1 (and so on)
User rights	Set the controlled authority level.
	After setting the permission range of the required user, the following three functions can be
	checked as required:
	(1) Cancel the permission after the operation: if this option is not checked, the corresponding
	level password must be entered for each operation of this part. After checking, you only need
	to enter it successfully once.
	(2) When the user has no permission range, a prompt window will pop up.
	(3) When the user has no permission range, hide the component.

Thoma and deviand	l a a mhin ati an a what	logging in.	(For the use of use	www.mahta accol	hometon 2 2 1 Eilo
I nere are several	l combinations wher	1 1022102 10:	cror the use of use	r rights, see ci	1abler 5-5-1. File
			(1 01 01 010 01 000		

#### - System Settings – user rights)

Ì

When a user logs in and does not migrate out, his/her permissions will remain. If you migrate out, the user will have no corresponding permission.

(1) When the user has no permission range, a prompt window will pop up

Jser rights			
The permission w	ill be cancelled aft	er the operation is completed	1
When the user ha	s no permission ra	nge, a prompt window will po	p up
Hide the compor	ent when the user	has no permission range	
Required user	权限1	~	

When this option is checked, if the user rights is not logged in, clicking the control will pop up a prompt window:

汉限提示	×
😣 操作级别高	,您没有此权限
用户登录	确定

Click User Login, and it can be used normally after successful login. If the user has logged in and has this permission, he can directly operate the component without a prompt window.

(2) Hide the component when the user has no permission range

be cancelled aft	er the operation is com	pleted
o permission ra	nge, a prompt window	will pop up
nt when the user	has no permission rang	je
权限1	~	
	o permission ra	to permission range, a prompt window at when the user has no permission rang

When this option is checked, the component will be hidden if there is no login user permission; If the user has logged in, the component will display normally.

(3) The permission will be cancelled after the operation is completed & When the user has no permission

range, a prompt window will pop up.

The permission w	ill be cancelled aft	er the operation is co	mpleted
When the user ha	s no permission ra	nge, a prompt window	v will pop up
Hide the compor	ent when the use	has no permission rar	ige
	The second s	1	3
Required user	权限1	~	

When this option is checked, if the user rights is not logged in, click the component and a prompt window will pop up:

	×
您没有此权限	
确定	
	您没有此权限 确定

Click the user log in. After logging in successfully, operate the component once. After the first operation, the system automatically cancels the permission limit of the component. Even after logging out, the component can be clicked normally. If the user has logged in, the component will display normally, and clicking the component will not pop up a prompt window.

(4) The permission will be cancelled after the operation is completed & Hide the component when the user has no permission range.

The permission w	ill be cancelled aft	er the operation is comp	leted
When the user ha	s no permission ra	nge, a prompt window w	ill pop up
Hide the comport	nent when the user	has no permission range	6

When this option is checked, if user rights is not logged in, the component will be hidden. After successful login, the component will be operated once. After the first operation, the system will automatically cancel the permission limit of the component. Even after logging out, the component will not be hidden. If the user has logged in, the component will display normally.

Position

Same to chapter 4-1-1 straight line position part.

#### 4-2-4. Numerical display

1. Click the "Part/Display/Numerical Display" in the menu bar or the icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel it. Modify the length and width of the border through the border points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click numerical display or select numerical display, right-click, and select Attribute.

# Basic property

	Numeric display properties
	Basic propData displ Scale con Appearan Security s Position
	Control ID DD0 Describe
	Read address Equip 本地设备 V Set Addre PSW 0 0 Data Word VUnsignec Ct designation
Control ID	It is used for system management control and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Read address	Set the displayed address. At the same time, set whether there is offset (i.e., indirect assignment)
Equipment	Current equipment port for communication
Address	Set target register number
Data type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed, Unigned,
	Floating number
	and user-defined tags. You can click the address tag library below or the project tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for the use of address tag library and user-defined tags)
	Address
	Equipme 本地设备 v Statio 0 n
	Address type PSW V User defined label
	Address 0 System register
	数跟类型 Word v Unsigned v Address [Extent: 0 - 9999]
	format
	Address tag
	Determine Cancel Application
Indirect	Set the current address offset. The current register address changes with the indirectly apacified register value, that is $Dx [Dy] = D [y + Dy yalve] (y, y=0, 1, 2, 3)$ . For example, the
assignment	specified register value, that is, $Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3)$ . For example: the augment register address is PSW0 if the indirectly specified address is PSW100; When the
	current register address is PSW0, if the indirectly specified address is PSW100; When the value of PSW100 register is 0, the register controlling this element is still PSW0; When the
	value of PSW100 register is 0, the register controlling this element is PSW1 (and so on)

Data display

✓ Displa	y 🗹 Leading 0	
lumber o	f digits	
Inte	ger digit 4	Decimal 0
imit		
Enable	e alarm upper limit	Enable alarm lower limit
Upper	9999	Lower 0
limit	🗌 Reg	limit 🔲 Reg
<ul> <li>Enable</li> </ul>	alert color	
Upper	<b>~</b>	twinkle

	Display	After checking, the user will not see the entered value, and the value will be displayed as "*
		<u>ት</u> ት "
	Leading 0	If the number of data digits does not meet the requirements, it shall be supplemented with 0
		in front (For example: the integer digits and decimal digits are set as 5 and 0 respectively
		for data display. When leading 0 is selected, enter 23 and 00023 will be displayed in the
		input box)
N	umber of digits	Set the integer and decimal digits displayed in the register
Limit	Enable alarm	Set the upper limit of alarm input, which can be specified by register
	upper limit	
	Enable alarm	Set the lower limit of alarm input, which can be specified by register
	lower limit	
	Enable alert color	Set the warning color of the upper and lower limits and whether it flickers

■ Scale conversion

sic prot/Da	ta displ	scale (	OnvAr	pearans	eci	urity s Posit	lion				
✓ Scale	conver	sion									
Data source						Conversi on value					
Upper	9999					Upper	99	99			
limit	🗌 Re	g				limit		Reg			
Lower	0					Lower	0				
limit	🗌 Re	g				limit		Reg			
Preview											
	03.5	ver limi	t			Data		Upper limi	t	Lov	wer limi
HMI	of			设备值	20	source		9999	-		0
0	=	0	+(	0	-	0	) x	9999			0
								Data			11753

Scale conversion Set whether to perform scale conversion. After checking, the read value can be converted according to the set scale, and the conversion effect can be previewed in the software

		The display data is obtained from the original data in the monitoring object register after			
conversion. Selecting this function requires setting the upper and lower limits of the					
		source and conversion value. The upper and lower limits can be constant or specified by the			
	register. The data source is the data in the lower communication equipment, a				
		conversion value is the data displayed on the HMI after proportional conversion			
	Upper/lower limit	Limit the upper and lower limits of data (can be specified by register)			

■ Appearance

ypeface				Tanang Providence in a Providence		
***** Name data_01   Category svg Dimensic 80 × 30    Change appearance  Change appearance  Frame Border style Solid color  Sorder style Solid color Sorder style Sorder				Use pictu	res	
Category svg Dimensic 80 × 30 Change appearance More picture Frame Border style Solid color v Border color v ypeface	-			Status	0	~
Dimensic 80 × 30 Change appearance More picture Frame Border style Solid color  v Border color v		****		Name	data_01	
Change appearance More picture Frame Border style Solid color V Border color ypeface				Catego	n svg	
Frame Border style Solid color   Border color  ypeface				Dimens	ic 80 × 30	
Border style Solid color v Border color						
ypeface		Change appear	ance		Mo	re picture
	- F		ance		Mo	re picture
		Frame		Border		re picture
y 微软雅黑 > 常规 >	Bor	rame der style Solid colo		Border		
	Bor	rame der style Solid colo		常规		

Same to chapter 4-2-3 numerical input appearance part.

■ Security setting

Display contro	1				
Enable					
When	隐藏	~			
Equip	本地设备		~	Set	
Addre	PSB	~ 0	0		
Enable	sta ON v	ct de	esignation		
Jser rights					
Hide the	component wh	en the user h	as no permi	ssion range	
Required	user 🕅	1	~		
	on range	477) 			

Same to chapter 4-2-3 numerical input security setting part.

#### Position

Same to chapter 4-1-1 straight line position part.

# 4-2-5. Character input

Click the "Part/Input/Character Input" icon in the menu bar or the icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel it. Modify the length and width of the border through the border points.
 When setting attributes, you can set them in the attribute box that pops up when placing components, or you

can double-click character input or select character input and right-click to select Attribute.

#### ■ Basic property

0	Character display properties
Ba	asic properAppearance Security set Position
	Control ID CD0
	Describe
	Coding rules ASCII v 交字符显示为空格
	Pass I High and low
1	Read address Equip 本地设备 v Set
	Equip 本地设备 V Set
	Numb 1
	er of atom data type
Control ID	It is used for system management control and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Coding rules	ASCII (select "blank characters are displayed as spaces"), UTF-8 and UTF-16 encoding rules can be selected
Password	After checking, the user will not see the entered value, and the value will be displayed as "* * *"
High and low	After checking, the display order is changed to "low byte+high byte"
	Character Input Display
	not selected high and low bed A bed C
	select high and low bade B bade D
	ABCD is set to DWORD type of the same address.
	Input abcd to A normally, then A and C display abcd, and B/D displays badc because high/low
	byte conversion is checked.
	Input abcd to B normally. At this time, B and D display abcd, and A/C displays badc because
	high/low byte conversion is not checked.

	Note: 1. Taking Xinje PLC as an example, the display of characters in the monitor is consistent								
	with that of characters without checking high/low byte conversion.								
	2. High low byte conversion refers to the conversion of both input and display of character.								
	Check the character input of high-low byte conversion. When using the keyboard to input ab,								
	perform high-low byte conversion, write ba into the register, read ba from the register when								
	eading, and then perform high-low byte conversion to display ab								
Read address	Set the read/write address (refer to chapter 4-2-3 Numerical Input for the description of								
	read/write address)								
	Read address								
	Equip 信捷 XD/XL/XG系列 ( Modbus TCP > Set								
	Addre D v 5000 1								
	Numb 1 ;tom data type								
	er of stom data type								
Equipment	Current equipment port for communication								
Address	Set target register number								
Register number	Set the character input length. One register can display two characters								
Custom data type	The default is Word. If it is checked, it can be customized as DWord and DDWord (note that								
	the data type selected here should be exactly corresponding to the data type used by the PLC								
	during monitoring, otherwise the characters will be displayed opposite to the high and low								
	bytes of monitoring)								
Set	Click "Set" to enter the address setting interface, which can also be used to set system								
	registers. Character input/character display temporarily does not support the use of address tag								
	library.								
	Address								
	Faujama								
	nt nt								
	type								
	Address 5000 System register								
	寄存器数 1 DWord V								
	Address [Extent: 0 - 16777215] format								
	Address tag								
	Determine Cancel Application								

■ Character input

Cha	aracter in	put prop	erties	
Basic pro Character No	otice App	earar Secu	rity Position	
Pattern Touch O B	it control			
Input order				
After the input	is comple	ted, it		
Input order	1		Group	
Keyboard setting up	0			
Enable pop-up Keyboard number			Asc_01U	
Keyboard po	o <mark>p-up po</mark> si	ition Midd	dle_Center	
*If an external USB k located in the direc the same window w "use pop-up keyboa	t / indirect	window,	or the keyboard is	

	Pattern	There are touch control and bit control. Touch r	neans to start the input program by touching the							
		component, and bit control means to start the inp	out program when the specified coil is ON. In the							
	bit control state, when the coil reaches ON, trigger the keyboard to pop up, cli									
		data, and click ESC to cancel the keyboard pop up	р.							
	Input order	If it is enabled, the keyboard will jump to the corresponding input component, it can set differen								
		groups.								
		Example 1 (touch control): The character input	component PSW0, PSW1, PSW2 and PSW3 are							
		set as follows:	•							
		Input order PSW0	Input order PSW1							
		After the input is completed, it	After the input is completed, it							
		Input order 1 🗘 Group 1 🗘	Input order 2 🗘 🗘 🕼 Group 1							
		Input order PSW2	Input order PSW3							
		After the input is completed, it	$\checkmark$ After the input is completed, it							
		Input order 1 Group 2 1	Input order 2 🔹 Group 2 🔹							
		PSW0 and PSW1 are in same group, and the orde	er is 1 and 2 respectively; PSW2 and PSW3 are in							
		same group, and the order is 1 and 2 respectively.								
		When you click PSW0, the keyboard will pop up. After entering characters, click ENT, the								
		keyboard will automatically jump to the bottom of PSW1. After entering characters, click ENT								
		complete the character input of PSW0 and PSW1 (if you check "No more input in sequence af								
		input", the keyboard will not jump to the next component in the same group after completing th								
		input at the selected component, and if you wan	t to input, you need to click the next component							
		again for input); Similarly, enter PSW2 and PSW								
			nponent PSW0, PSW1, PSW2 and PSW3 are set							
		as follows.	-							

O Touch   Bit control PSB0 PSW0	O Touch   Bit control  PSB0  PSW1  P
Input order	Input order
Input order	Input order 2
Pattern  O Touch  Bit control PSB1 PSW2	Pattern O Touch   Bit control PSB1 PSW3
Input order	Input order
<u>M</u>	

PSW0 and PSW1 are in same group, which are controlled by coil PSB0, and the sequence is 1 and 2 respectively; PSW2 and PSW3 are in same group, which are controlled by coil PSB1 in order of 1 and 2 respectively;

When PSB0 and PSB1 are set to OFF, clicking PSW0, 1, 2 and 3 will not pop out the keyboard. When PSB1 is set to OFF and PSB0 is set to ON, the keyboard will jump out under PSW0. After input, press ENT, the keyboard will automatically jump to the bottom of PSW1. After input, press ENT to complete the input of PSW0 and PSW1; Similarly, when PSB0 is set to OFF, PSW2 and PSW3 are input when PSB1 is set to ON.

When PSB0 and PSB1 are both set to ON, the input program will be triggered in the order of PSW0, PSW2, PSW1 and PSW3. Click ESC to cancel the input.

1. The keyboard pops up when the control coil is set to ON. After input, the control coil (PSB0, PSB1) will not reset automatically. If you want to re-enter data, please manually reset and trigger again.

2. It is recommended that the control coil be set to reverse state. If it is set to instantaneous ON, take PSW0 and PSW1 above as an example. If PSB0 is set to instantaneous ON, a keyboard will pop up below PSW0 at the same time of triggering. Click ENT after input, and the keyboard will disappear. Only PSW0 can be input. Even if it is triggered again, the keyboard will only be displayed below PSW0, and the setting of PSW1 cannot be completed.

	Action O Set on	○ Set off	Reverse	O Instantaneous on
Keyboard	Set whether to pop up the	keyboard, keyboa	ard style selection,	and keyboard pop-up position
setting up				

Notice

B	efore writ <mark>A</mark>	fter writii			_
	✓ Notifica	ation bit			
	Write	on	○ w	rite off	
	Equip	本地设备		✓ Set	
	Addre	PSB 🗸	0 0		
			ct designation	n	
	✓ Notice	word			<u></u>
	Equip	本地设备		✓ Set	
	Addre	PSW 🗸	0 0		
	Data type	Word 🗸 Unsignec 🗸	ct designation	ו	

Appearance

				✓ Use pictu	res
			_	Status	0
		AA		Name	data_0
		0.00		Catego	ŋsvg
				Dimens	sic 80 × 3
	Cha	inge appear	ance	More pict	uces
~	Frame				
Во	rder style	Solid color	r v	Border color	~
Тур	eface				
Ту	微软雅黑		~	常规	~
Со		~	Size	12	~
Ali	Middle_Cer			Adaptive size	

Same to chapter 4-2-3 numerical input appearance part.

Security setting

	Charac	ter înpu	it pr	operti	es	1
asic pro Charact	e Notice	Appea	rai S	ecurity	s Position	
Operation cor	firmation	delay -				
Confirma	tion befor		aiting	time s	1	ł
Display contro	4					
Enable						
When	隐藏		÷			
Equip	本地设备				~	Set
Addre	PSB		~	0	0	
Enable	sta ON	~		ct desi	gnation	
Enable contro	i.					
✓ Enable						
Equip	本地设备				~	Set
Addre	PSB		~	0	0	
Enable	sta ON	¥		ct desi	gnation	
User rights						
The perm	ission wil	be canc	elled	after t	he operati	on is
When the	user has	no perm	issio	n range	, a promp	t
🗐 Hide the	compone	nt when	the u	iser has	no permi	ssion
Required	luser	无			v	
				Determ	nine.	Cancel

Same to chapter 4-2-3 numerical input security setting part.

Position

Same to chapter 4-1-1 straight line position part.

## 4-2-6. Character display

Click the "Part/Display/Character Display" in the menu bar or the icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel it. Modify the length and width of the border through the border points.
 When setting attributes, you can set them in the attribute box that pops up when placing components. You can

also double-click Character Display or select Character Display, right-click, and select Attribute.

Basic

	Character display properties	E
Basic prope	PrAppearance Security set Position	
Contr	ol ID CD0	
Descr	ibe	
Codin rules Pase	s □ High and low	
	Arress 本地设备 v Set	
Addre		
Numb er of		

Control ID	It is used for system management control and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Coding rules	ASCII, UTF-8 and UTF-16 encoding rules can be selected
Password	After checking, the user will not see the entered value, and the value will be displayed as "* * *"
High and low	After checking, the display order is changed to "low byte+high byte"
	Character Input Display
	not selected high and low A A C
	select high and low bade B bade D
	ABCD is set to DWORD type of the same address.
	Input abcd to A normally, then A and C display abcd, and B/D displays badc because high/low
	byte conversion is checked.
	Input abcd to B normally. At this time, B and D display abcd, and A/C displays badc because
	high/low byte conversion is not checked.
	Note: 1. Taking Xinje PLC as an example, the display of characters in the monitor is consistent
	with that of characters without checking high/low byte conversion.
	2. High low byte conversion refers to the conversion of both input and display of character.
	Check the character input of high-low byte conversion. When using the keyboard to input ab,
	perform high-low byte conversion, write ba into the register, read ba from the register when
	reading, and then perform high-low byte conversion to display ab
Read address	Set the read address
Equipment	Current equipment port for communication
Address	Set target register number
Register number	Set the character input length. One register can display two characters
Custom data type	The default is Word. If it is checked, it can be customized as DWord and DDWord (note that
	the data type selected here should be exactly corresponding to the data type used by the PLC
	during monitoring, otherwise the characters will be displayed opposite to the high and low
Set	bytes of monitoring)
Set	Click "Set" to enter the address setting interface, which can also be used to set system registers. Character input/character display temporarily does not support the use of address tag
	library
	Address Statio
	nt Address psw v User defined label
	Address 0 System register
	寄存器数 1 Word V
	Address [Extent: 0 - 9999]
	format
	Address tag
	Determine Cancel Application



asic prope Appearance Security set	Position		
	Use pictu	ires	
	Status	0	~
AA	Name	data_01	
	Catego	nysvg	
	Dimens	sic 80 × 30	
Change appearance		Mo	ore pictures
└── ✓ Frame			
Border style Solid color	v Border	color	~
		~	
Typeface	し 学祖		
Ty 微软雅黑	> 常規 ize 12		

Same to chapter 4-2-3 numerical input appearance part.

Security setting

	Characte	er display p	rope	rties
ic prope Appe	earance Security sett	Position		
Display contro Enable When				
Local Annal Marco	総蔵く			
Equip	本地设备	112 11	~	Set
Addre	PSB v	0	0	
Enable	sta ON 🗸	ct designa	tion	
User rights				
Hide the	component when the	user has no	permi	ssion range
Required permission			~	

Same to chapter 4-1-1 straight line security setting part.

Position

Same to chapter 4-1-1 straight line position part.

# 4-2-7. Chinese input

1. Click the "Part/Input/Chinese Input" icon in the menu bar or the icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel the placement. Modify the length and width of the border through the border points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "Chinese Input" or select "Chinese Input" and right-click to select Attributes.

Basic property



Control ID	It is used for	r system mana	gement control	rol and cannot be operated by users				
Describe	Can be used to comment on the purpose of this component							
Coding rules	It defaults to GB2312 and cannot be modified							
Read/write	Set the read/write address (refer to chapter 4-2-3. description of read/write address of							
address	numerical input)							
Equipment	Current equ	Current equipment port for communication						
Address	Set target re	egister number						
Register number	Setting char	Setting character input length, different encoding rules, and different Chinese characters that						
	can be displ	can be displayed in one register;						
	UTF-8: 3 re	UTF-8: 3 registers can display 2 Chinese characters;						
	GB2312, Unicode: 1 register can display 1 Chinese character.							
Custom data type	The default is Word. If checked, it can be customized as DWord or DDWord							
Set	Click "Set"	to enter the ac	ldress setting i	g interface, where you can set and use system registers				
	Address tag	glibrary is not s	supported for C	r Chinese input/Chinese display				
			Address	s 🔀				
	Equipme	<b>本地设备</b>		Statio 0				
	Address			n				
	type	SW	~	User defined label				
	Address 0			System register				
	寄存器数 1	Wor	vd ∽					
	Address [	Extent : 0 - 9999]						
	Tormat							
				Address tag				
				Address tag				
			Determi	rmine Cancel Application				

Input 

.

	Chine	ese input		
asic prop Input	Notice Appearane	Security se Positio	n	
When password	d * is checked, the cont	ents of the registe	er are display	ed as "**** "
Pattern				
<ul> <li>Touch</li> </ul>	O Bit control			
Input order				
Enable input	t order			
After the inr	out is completed, it			
The sector sector sector sector sector	No Contraction of the Product of Street Street			
Input ord	er 1	Group		
Keyboard setting	up			
<ul> <li>Enable pop-</li> </ul>	up keyboard			
Keyboard numb	er [25007]KeyBoard_/	Asc_01U	Ŷ	
Keyboard	pop-up position Mid	ile_Center	~	
Keyboard preview	N			
And the standard stands	207 XD4 205	NGC NOT 31	00 100	1070
KEU KEI KEZ	3 4 5 6	7 8	9 0	Backspace
QW		NIG KIT I	OP	
Caps A	S D F	G H J	K K	Enter
Esc Z	X XI C NO NIG	NUT NOT N	845 8837	KB40 KB40
	2		KB38	KB39 KB47

Password	After checking, the user will not see the entered text, and the text will be displayed as "* * *"							
Pattern	There are touch control and bit control. Touch means to start the input program by touching the							
	component, and bit control means to start the input program when the specified coil is ON. In the							
	bit control state, when the coil reaches ON, trigger the keyboard to pop up, click ENT to enter							
	data, and click ESC to cancel the keyboard pop up.							
Input order	If it is enabled, the keyboard will jump to the co	prresponding input component, it can set different						
	groups.							
	Example 1 (touch control): The Chinese input co	mponent PSW0, PSW1, PSW2 and PSW3 are set						
	as follows:							
	Input order PSW0 Input order PSW1							
	After the input is completed, it	☑ After the input is completed, it						
	Input order 1 Group 1	Input order 2 Group 1 🗘						
	Input order PSW2 Input order PSW3							
	After the input is completed, it	<ul> <li>After the input is completed, it</li> </ul>						
	Input order 1 🔮 Group 2 荣	Input order 2 Group 2						
	same group, and the order is 1 and 2 respectively.	er is 1 and 2 respectively; PSW2 and PSW3 are in p up. After entering characters, click ENT, the						

keyboard will automatically jump to the bottom of PSW1. After entering characters, click ENT to complete the character input of PSW0 and PSW1 (if you check "No more input in sequence after input", the keyboard will not jump to the next component in the same group after completing the input at the selected component, and if you want to input, you need to click the next component again for input); Similarly, enter PSW2 and PSW3.

Example 2 (bit control): The Chinese input component PSW0, PSW1, PSW2 and PSW3 are set as follows.

Pattern O Touch   Bit control PSB0 PSW0	Pattern Touch  Bit control PSB0 PSW1
Input order	Input order
Input order	Input order
Pattern  Touch  Bit control PSB1 PSW2	Pattern O Touch   Bit control PSB1 PSW3
Input order	Input order
Input order 1	Input order

PSW0 and PSW1 are in same group, which are controlled by coil PSB0, and the sequence is 1 and 2 respectively; PSW2 and PSW3 are in same group, which are controlled by coil PSB1 in order of 1 and 2 respectively;

When PSB0 and PSB1 are set to OFF, clicking PSW0, 1, 2 and 3 will not pop out the keyboard.

When PSB1 is set to OFF and PSB0 is set to ON, the keyboard will jump out under PSW0. After input, press ENT, the keyboard will automatically jump to the bottom of PSW1. After input, press ENT to complete the input of PSW0 and PSW1; Similarly, when PSB0 is set to OFF, PSW2 and PSW3 are input when PSB1 is set to ON.

When PSB0 and PSB1 are both set to ON, the input program will be triggered in the order of PSW0, PSW2, PSW1 and PSW3. Click ESC to cancel the input.

1. The keyboard pops up when the control coil is set to ON. After input, the control coil (PSB0, PSB1) will not reset automatically. If you want to re-enter data, please manually reset and trigger again.

2. It is recommended that the control coil be set to reverse state. If it is set to instantaneous ON, take PSW0 and PSW1 above as an example. If PSB0 is set to instantaneous ON, a keyboard will pop up below PSW0 at the same time of triggering. Click ENT after input, and the keyboard will disappear. Only PSW0 can be input. Even if it is triggered again, the keyboard will only be displayed below PSW0, and the setting of PSW1 cannot be completed.

Action

O Set on

Reverse

Instantaneous on

Keyboard Set whether to pop up the keyboard, keyboard style selection, and keyboard pop-up position setting

○ Set off

#### Notice

			T-			
Basic prop Ir	nput N	otice App	earan(Se	ecurity se	Position	
Before wriat	ter writ					
✓ Notifica	ation bit					
Write	on			⊖ Write	off	
Equip	本地设备			~	Set	
Addre	PSB	~	0	0		
			ct desi	gnation		
✓ Notice	word					
Equip	本地设备			~	Set	
Addre	PSW	~	0	0		
Data	Word 🗸	Unsignec 🗸	ct desi	gnation		
type	Fea					
Write	0					
value						

Notice If Enabled, you can choose to write the target coil ON, OFF or the target register to a constant (notification word) before or after writing.

■ Appearance

Ch	hinese input
ic prop Input Notice Appeara	and Security se Position
	Use pictures
	Status 0 ~
<b>中</b>	Name data_01
	Categorysvg
	Dimensic 80 × 30
	Dimensicou x 50
Change appearance	More picture
Change appearance	
P	More picture
Frame Border style Solid color	More picture
✓ Frame	More picture
Frame Border style Solid color	✓ Border color ✓ ✓

Same to chapter 4-2-3 numeric input appearance part.



The font for Chinese input can only be Microsoft Yahei by default, and no other font can be

set.

Security setting

		Chinese i	nput	
lasic prop Inp	ut Notice	Appearant Secur	rity se Po	sition
Operation co	nfirmation de	lay		
Confirma	tion before	Waiting time seconds	1	۲
Display contro	ol			
Enable				
When	隐藏	v		
Equip	本地设备		¥	Set
Addre	PSB	✓ 0	0	
Enable	sta ON	✓ ct desig	nation	
Enable contro	1			
✓ Enable				
Equip	本地设备		~	Set
Addre	PSB	~ 0	0	
Enable	sta ON	✓ ct desig	nation	
User rights				
The perm	nission will be	cancelled after th	e operati	on is completed
When the	e user has no	permission range,	a prompt	t window will pop up
Hide the	component	when the user has	no permi	ssion range
	and the second second	181		
Require	a user	1999年	~	

Same to chapter 4-2-3 numeric input security setting part.

#### Position

Same to chapter 4-1-1 straight line position part.

## 4-2-8. Chinese display

Click "Parts/Display/Chinese Display" in the menu bar or icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel the placement. Modify the length and width of the border through the border points.
 When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "Chinese Display" or select "Chinese Display" and right-click to select Attributes.

Basic property

	Chinese display
	Basic properAppearance Security set Position
	Control ID TD0
	Describe
	Coding rules Read address Equip 本地设备 v Set Addre pSW v 0 0
	Numb 1 ;tom data type
Control ID	It is used for system management control and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Coding rules	You can choose from three encoding rules: GB2312, UTF-8, and Unicode.
Read address	Set the read address
Equipment	Current equipment port for communication
Address	Set target register number
Register number	Set the character input length. One register can display two characters
Custom data type	The default is Word. If checked, it can be customized as DWord or DDWord
Set	Click "Set" to enter the address setting interface, which can also be used to set system
	registers. Address tag library is not supported for Chinese input/Chinese display
	Address
	Equipme 本地设备 V Statio 0
	nt n Address PSW V User defined label
	type
	Address 0 System register
	Address [Extent: 0 - 9999]
	format
	Address tag
	Determine Cancel Application

Appearance

prope Appearance Secu				
		🗹 Use pictu	res	
	-	Status	0	~
<b></b>		Name	data_01	
1.20		Catego	ŋsvg	
		Dimens	ic 80 × 30	
Change appear	ance		Mo	re pictures
] Fill				
	10			No.
Fill pattern Solid color	r Y	Fill colo	r	~
/ Frame				
		Border	color	v
	r v	Border	color	×
	r v	Border	color	Y
order style Solid colo	r •	Border 業规 ~	color	Y
order style Solid colo	r V	常规 ~	]	¥

Same to chapter 4-2-3 numeric input appearance part.

The font displayed in Chinese can only be Microsoft Yahei by default, and no other font can be set.

Security setting

			ACCOUNTS NO.		
ic prope Appea	arance Security set	t Position			
Display control					
Enable					
When	隐藏	e			
Equip	本地设备		~	Set	
Addre	PSB	~ 0	0		
Enable s	sta ON 🗸 🗸	ct desig	nation		
User rights					
Hide the c	omponent when t	he user has r	o permi	ssion range	
Required permissio			~		

Same to chapter 4-1-1 straight line security setting part.

Position

Same to chapter 4-1-1 straight line position part.

## 4-2-9. Indicator light

Displays the status of the specified coil.

1. Click the "Parts/Key/Indicator light" in the menu bar or the icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel it. Modify the length and width of the control through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when you place components, or you can double-click the Indicator light or select the Indicator light and right-click to set attributes.

Basic property

			Indicator light
Basic prope	App	earance Security set	Position
Contr		LIO	
Read ac Equip			✓ Set
Addre		× 0	
		ct	t designation
logic			
۲	Posit	ive logic	O Negative logic
✓ twi	nkle		
۲	On st	atus flashes	○ Off status flashes
		Flicker fr	requency 0.1 🙋 🖌

Control ID	It is used for system management control and cannot be operated by users					
Describe	Can be used to comment on the purpose of this component					
Read address	Set the read address					
Equipment	Current equipment port for communication					
Set	Click "Set" to enter the address setting interface, where you can set and use system registers and user-defined tags. You can click the address tag library below or the project tree - library -					
	address tag library to set the tags used (see chapter 5-2 Address Tag Library for the use of					
	address tag library and user-defined tags)					
	Address					
	Equipme 本地设备 v Statio 0 n					
	Address type VSB V User defined label					
	Address 0 System register					
	Address [Extent:0-9999] format					
	Address tag					
	Determine Cancel Application					
Address	Set the target coil number					
Indirect	Set the current address offset. The current coil address changes with the indirectly specified					
assignment	register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example, the current					

	coil address is PSB0, if the indirectly assigned address is PSW100; When the value of
	PSW100 register is 0, the coil controlling this element is still PSB0; When the value of
	PSW100 register is 1, the coil controlling this element is PSB1 (and so on)
Logic	Select positive logic or negative logic (positive logic: coil is on in ON state, coil is off in OFF
	state; negative logic: coil is off in ON state, coil is on in OFF state)
Twinkle	Select whether to flash, including ON status flashing, OFF status flashing and flashing
	frequency setting

## Appearance

asic prope Appearance Security set	Position		
	Use pict	ures	
	Status	0	~
OFF	Name	lamp_05_b	
	Catego	onjsvg	
	Dimen	sic 60 × 60	
Change appearance		More	pictures
		100.0	Pris tational
			-
State 0 •	Dicplay toyt     A	pply fonts to each	
-	Display text     A		- C
Tevt     O     Multiling			
• Tevt O Multiling	OFF		
Tevt     Multiling     Typeface	OFF		
<ul> <li>Tevt</li> <li>Multiling</li> <li>Typeface</li> <li>Ty</li> <li>微软推黑</li> </ul>	OFF × <sup>常规</sup>	Y	
<ul> <li>Tavt</li> <li>Multiling</li> <li>Typeface</li> <li>Ty</li> <li>微软推黑</li> </ul>	OFF	v v	

Appearance	You can check whether to use pictures. If you check, you can set the appearance of the	
	indicator in the (0, 1) two states. After selecting the state in the upper right corner, click	
	'Change Appearance" or click "More Pictures" to select a custom picture to change the	
	appearance	
Fill	Fill style and color can be set	
State	You need to check "Display Text" to set the text prompt content of the indicator in the (0, 1)	
	two states, and you can set whether to use multiple languages (see chapter 4-7 for the specific	
	use of multiple language libraries). Check the drop-down list to set the font corresponding to	
	the corresponding status of the indicator light, or click the "apply fonts to each status" button	
	to set the fonts in all statuses	
Typeface	You can set the font, size, font style, color and the display position of the font in the	
	component (you can also check the adaptive size, that is, drag the mouse to change the size of	
	the component, and the text size will change accordingly)	

Security setting

		Indica	torlight		×
Basic prope Appe	arance Security s	et Position	1		
Display contro	1				
Enable					
When	診療	~			
Equip	本地设备		~	Set	
Addre	PSB	~ 0	0		
Enable	sta ON 🗸	ct d	esignation		
User rights					
🕑 Hide the	component whe	n the user	has no permi	ssion range	
Required			~		

Same to chapter 4-1-1 straight line security setting part.

Position

Same to chapter 4-1-1 straight line position part.

## 4-2-10. Indicator button

Control the status of the specified coil and display the status of the specified coil.

1. Click "Parts/Key/Indicator Button" in the menu bar or in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel the placement. Modify the length and width of the control through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click the "Indicator Button" or select the "Indicator Button" and then right-click to select Attribute.

Basic property

		Indica	itor button		
ic prope	Appearance	unction bi Securit	v set Position		
Contr Descr	ol ID LB0				
Rea	id / write usin	g different address	es		
Read / v	write address				
Equip	本地设备		∽ Set		
Addre	PSB	~ 0	0		
		ct desigr	nation		
<mark>Operat</mark> i	on				
۲	Set on	⊖ Set off	O Reverse	O Instantaneous on	
logic					
۲	Positive logi	5	O Negative lo	gic	
🗌 twi	nkle				
۲	On status flas	hes	Off status fl	ashes	
		Flicker frequence	y 0.1 8	Y	

Control ID	It is used for system management control and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Read/write using	If not checked, the same address is used for reading and writing (refer to chapter 4-2-3
different addresses	description of reading/writing address for numerical input)
Read address	Set the displayed address; You can also set whether there is an offset (that is, indirect
	assignment)
Write address	Set the write in address; You can also set whether there is an offset (that is, indirect
	assignment)
Equipment	Current equipment port for communication
Address	Set the target coil number
Set	Click "Set" to enter the address setting interface, where you can set and use system
	registers and user-defined tags. You can click the address tag library below or the
	project tree – library - address tag library to set the tags (see chapter 5-2 Address Tag
	Library for the use of address tag library and user-defined tags)

				Addr	ress	×	
		Equipme nt	本地设备		~	Statio 0	1
		Address type	PSB	~		User defined label	
		Address	0	1	×	System register	
		Address format	[Extent: 0 - 9999]				
				De	etermine Car	Address tag	
Indirect	assignment	Set the	current address	offset.	The curren	t coil address cl	hanges with the indirectly
		specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For					
		example, the current coil address is PSB0, if the indirectly assigned address is PSW100;					
		When the value of PSW100 register is 0, the coil controlling this element is still PSB0;					
		When th	e value of PSW	100 reg	gister is 1, th	e coil controlling	g this element is PSB1 (and
		so on)					
Operation	Set ON	Set the c	ontrol coil to log	gic 1 sta	ate		
	Set OFF	Set the c	ontrol coil to log	gic 0 sta	ate		
	Reverse	Set the c	ontrol coil to the	e oppos	site state		
	Instantaneous	When th	e key is pressed	l, the c	oil is in logi	c 1 state, and wh	nen the key is released, the
	ON	coil is in logic 0 state					
Ι	ogic	Select positive logic or negative logic (positive logic: coil is on in ON state, coil is off					
		in OFF state; negative logic: coil is off in ON state, coil is on in OFF state)					
Tv	vinkle	Select whether to flash, including ON status flashing, OFF status flashing and flashing					
		frequenc	y setting				
Enat	ole audio	When th	e trigger condit	ions ar	e met, the cu	ustomized audio	can be played. At present,
		this func	tion is only ava	ailable	in the TS5L	series. For spec	ific usage, see chapter 5-4
		Use of A	udio Resource I	Library			

■ Appearance

		Indicator but	ton		
ic prope Ap	pearanceFunction bi	Security set Po	sition		
	$\bigcirc$	✓ Us	e pictur	es	
		2	Status	0	~
	OFF	22 13	Name	lampbutton_	06_b
		1	Categor	ysvg	
		19	Dimensi	<b>c</b> 60 × 60	
	Change appearance				ore pictures
Fill	Change appearance			IVIS	are pactures
THE FILL					
			-		
		☑ Display text	Ар	ply fonts to ea	ch
State 0 Tavt	• O Multilina	Display text	Ар	ply fonts to ea	ch
State 0	- O Multilina	Display text	Ар	ply fonts to ea	ch
tate 0	O Multilina		Ар	ply fonts to ea	ch
tate 0 Tavt			Ap	ply fonts to ea	ch
Tavt		OFF		ply fonts to ea	ch

Appearance	You can check whether to use pictures. If you check, you can set the appearance of the				
	indicator in the $(0, 1)$ two states. After selecting the state in the upper right corner, click				
	Change Appearance" or click "More Pictures" to select a custom picture to change the				
	appearance				
Fill	Fill style (solid/gradient) and fill color can be set				
State	You need to check "Display Text" to set the text prompt content of the indicator in the $(0, 1)$				
	two states, and you can set whether to use multiple languages (see chapter 4-7 for the specific				
	use of multiple language libraries); Check the drop-down list to set the font corresponding to				
	the corresponding status of the indicator light, or click the "apply fonts to each status" button				
	to set the fonts in all statuses				
Typeface	You can set the font, size, font style, color and the display position of the font in the				
	component				

Function binding

		Indicator button
Basic prope	Appearance Function b	irSecurity set Position
Key	When pressed $~$ $\sim$	
		Add to
		Delete
	-	Move
		Move

Calling the C function can complete more and more complex operations and communications. Function use is equivalent to chapter 4-2-15 item (10) function key - function call.

Key operation		Set the operation mode, including pressing and releasing
Function item Add to		Add function
	Delete	Delete the function
	Move	Move the target function up one physical location
	up	
Move		Move the target function down one physical location
	down	

	函数	调用	>
功能函数		<ul> <li>✓ Edit</li> </ul>	Function
	<ul> <li>● 串行执行</li> </ul>	并行执行	
	Determine		Application

Functio	on	Select the function to be called from the drop-down menu
Edit/Func	tion	Click to enter the function editing page
Serial exec	ution	The task calling this function can only continue the subsequent processing after the
		function is executed. Therefore, this function must have appropriate exit conditions
Parallel exe	cution	Call the task of this function, create a new task to execute the function, and the caller will
		continue the subsequent processing

Security setting

	Indicator button
	Basic prope Appearance Function bi Security set Position
	Operation confirmation delay Confirmation before Waiting time 2
	C Key delay
	Display control ✓ Enable When 隐藏 ✓ Equip 本地设备 ✓ Set Addre PSB ✓ 0 0 Enable sta ON ✓ ct designation
	Enable control
	✓ Enable
	Equip     本地设备     Set       Addre     pSB     1     0       Enable stal ON      ct designation
	User rights
	<ul> <li>When the user has no permission range, a prompt window will pop up</li> <li>Hide the component when the user has no permission range</li> </ul>
	Required user 权限1 ~
	Determine Cancel Application
Operation	The waiting time (s) can be set. If this option is checked, a pop-up window "Are you sure to
confirmation	execute this operation" will pop up when operating components. If you do not click "Confirm"
delay	or "Cancel" within the set waiting time, the pop-up window will disappear by itself and this
	operation will fail. If you click "OK" within the waiting time, the operation is successful. If
V av dalar	you click "Cancel", the operation is invalid.
Key delay	The operation will not take effect until the set delay time is long pressed
Display control	Use bits to control whether to display the component. When the condition is not met, the
Englis	component will be hidden
Enable	When checked, display control will be enabled
When validation fails	Set the display of the component when validation fails
Address	Set the target coil for bit control
Enable status	Set ON status to be valid or OFF status to be valid.
	For example, if the equipment is checked as shown in the figure above, the bit control is PSB0,
	and it is hidden when the verification fails, and the enabling status is ON, then the component
	will be displayed normally when the status of PSB0 is ON, and it will not be displayed when
	the status of PSB0 is OFF

Enable control	The bit limit can be set (the enabling state of the enable control can be customized). When the			
	enabling conditions are met, the component can be used normally (as shown in the figure			
	above: when the PSB1 is in the ON state and the trigger conditions are met at the same time,			
	ne component can be used; if the PSB1 is in the OFF state, the component is still unavailable			
	even if the trigger conditions are met)			
User rights	Set the controlled authority level.			
	After setting the permission range of the required user, the following three functions can be			
	checked as required:			
	(1) Cancel the permission after the operation: if this option is not checked, the corresponding			
	level password must be entered for each operation of this component. After checking, you only			
	need to enter it successfully once			
	(2) When the user has no permission range, a prompt window will pop up			
	(3) When the user has no permission range, hide the component.			



# the user rights function please refer to chapter 4-2-3 numerical input.

Position

Same to chapter 4-1-1 straight line position part.

## 4-2-11. Multi-state indicator

Different states are displayed according to different values of registers.

1. Click "Part/Key/Multi state Indicator" in the menu bar or icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel it. Modify the length and width of the control through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click the "Multi state Indicator" or select the "Multi state Indicator", right-click and select Attribute.

Basic properties

	Multi status indica	tor	,	×
Basic <mark>pro</mark> p	erAppearance Security set Position			
	rol ID ML0		_	^
Desc	ribe			
Register	Word register O Multi bit			
Read a	ddress			
Equip	本地设备 ~ S	et		
Addre				
Data	Word V Unsigner V			
Numb of Stat				
State	Condition	twinkle	Frequency	
0	PSW0 == 0		t 7	
1	PSW0 == 0		1	
2	PSW0 == 0		/	
3	其他(错误)		1	
Attribu	te			
• Ext	ent 🔘 Bit			
Read	A None V A	0	Use re	
Illegal	● Display error status 显示空白	Error notific	ation	
<			>	×
		Determi	ne Cancel	

Control ID	It is used for system management control and cannot be operated by users			
Describe	Can be used to comment on the purpose of this component			
Register	The word register or multi bit can be selected, and the status of the status number will be			
	displayed if the condition of the status number is met			
	Word register: display different states according to different values of the set register.			
	Multi bit: different states are displayed according to different values of registers formed			
	by coils			
Read address	Set the read address			
Equipment	Current equipment port for communication			
Address	Set target register number or coil number			
Data type	Byte-8Bit; Word-16Bit; DWord- 32Bit; DDWord -64Bit; BCD format; Hex; Signed value;			
	Unigned value; Floating number			
Set	Click "Set" to enter the address setting interface, where you can set and use system			
	registers and user-defined tags. You can click the address tag library below or the project			
	tree - library - address tag library to set the tags (refer to chapter 5-2 Address Tag Library			
	for the use of address tag library and user-defined tags)			
	Address			
	Equipme 本地设备 v Statio 0			
	Address psw v User defined label			
	Address 0 System register			
	教研発型 Word V Unsigned V Address [Extent:0-9999]			
	format			
	Address tag			
	Determine Cancel Application			

Indirect assignment	Set the current address offset T	he current co	1 address changes with the ir	directly	
muneet assignment	Set the current address offset. The current coil address changes with the indirectly specified register value, that is, $Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3)$ . For example,				
			- · · ·	-	
	the current coil address is PSB0, if	the indirectly	assigned address is PSW100; W	/hen the	
	value of PSW100 register is 0, the	coil controllin	ng this element is still PSB0; W	hen the	
	value of PSW100 register is 1, the coil controlling this element is PSB1 (and so on)				
Number of state	Set the number of statuses. The low	ver status disp	lay table will synchronously inc	rease or	
	decrease the number of statuses				
State display table	After setting in the lower attribute	column, you d	an directly observe the set statu	is in the	
			•		
	status display table (you cannot modify it directly on the table, but only through the lower attribute)				
Attribute – word					
	状态数 5 💿				
register	状态条件	闪烁	频率		
	0 D0 == 1		0.1秒/次		
	1 D0 < 2		0.1秒/次		
	2 D0 <= 3		/		
	3 D0 < 2 And D0 > 1		1		
	4 D0 < 2 Or D0 > 1		1		
	5 其他(错误)		1		
	屬性				
	● 范围 ○ 位				
	读取值 < v A None v	A 2	使用寄存器		
	☑ 闪烁 频率 0.1 秒 ~				

(1) Range: Numerical comparison method: "<", ">", "<=", ">=", "==", "!="; None: only one numerical value. Such as status 0, 1, 2.

And: Both numerical judgment conditions must be met. Such as state 3.

Or: Any numerical value can be judged to meet the conditions. Such as state 4.

Blinking: When flashing is checked, the flashing frequency can be set, and the setting will be displayed in the status display table above synchronously.

(2) Bit: take PSW100 as an example.



When PSW100.0 is ON, PSW100 flashes at a frequency of 0.1 seconds per time and the font display status is 0.

When PSW100.1 is ON, PSW100 font display status 1.

	When PSW100.2 is ON, PSW100 flashes at the frequency of 1 second/time and the font				
	display status is 2.				
	When PSW100.3 is OFF, PSW100 font displays status 3.				
	When PSW100.4 is OFF, PSW100 flashes at the frequency of 2 seconds/time and the font				
	display status is 4.				
	If the status of PSW100.0-PSW100.4 is inconsistent with the set conditions, PSW100 font				
	will display error status.				
Attribute – Multi bit	The comparison method of word register is to directly read the internal value of the				
111110 000 1110000 010	register to determine whether the conditions are met. However, the value of the register				
	cannot be directly read by the combination of multi bit. The value of the register is				
	represented by the combination of multiple coils. The following describes how the multi				
	bit combination represents the value of the register				
	多状态描示灯 ? ×				
	基本属性 外观 安全设置 位置				
	按件ID ML0				
	描述				
	寄存器模式 ○ 字寄存器 ④ 多位组合				
	设 备 信捷 XD/XL/XG系列 (Modbus RTU) V 设置				
	地 址 M ~ 0 1				
	位 数 4 💼 🗌 间接描定				
	状态数 5 🗣				
	状态         条件         闪烁         频率				
	0 多位组合 == 1 ☑ 0.1秒/次				
	1         多位组合 < 2         2         0.1秒/次           2         多位组合 <= 3         /				
	3 多位组合 < 2 And 多位组合 > 1 /				
	4 多位組合 < 2 Or 多位組合 > 1 □ /				
	5 其他 (错误) / / / / / / / / / / / / / / / / / / /				
	▲III ● 范围				
	读取值 < v A And v > v B A 2 □ 使用寄存器				
	□ 内焼 (淡海 0.1 秒) ↓ B 1 □ 使用寄存器				
	非法输入 🖲 显示错误状态 🔿 显示当前状态 🗌 错误通知				
	As shown in the figure above, the number of digits set is 4. The coil states of M0, M1, M2				
	and M3 represent different values. The minimum number is 0 and the maximum number				
	is 15.				
	(1) When M0 is on and others are off, it represents the value 1				
	(2) When M1 is on and others are off, it represents the value 2				
	(3) When M2 is on and others are off, it represents the value 4				
	(4) When M3 is on and others are off, it represents the value 8				
	(5) When all are off, it represents the value 0				
	(6) When it is fully lit, it represents the value 15				
	And so on				
Illegal input	When the value of the register does not meet any of the set states, the checked state (error				
	state or current state) will be displayed, and the error notification can be selected (the set				
	coil light will be on when illegal input occurs)				



If the conditions meet multiple settings at the same time, the top status will prevail.

Appearance

Wulu S	status indicator		>
Basic prope Appearance Security set Po	osition		
	✓ Use pictu	res	î
	Status	0 ~	
状态0	Name	multilamp_01_a	
<b>UNDIC</b>	Catego	<b>D</b> evg	
	Dimens	ic 60 × 60	
Change appearance	1	More pictures	
☑ Fill			
State 0 · V D	isplay text App	ly fonts to each state	
	at a second second	,	
Tost     Multiling			
Tevt     Multiling			
Tevt O Multilina			
	₩ <del>×</del> 0		
	状态0		
	状态0		
	状态0		
Typeface			
	常规	<b>∨</b> ]	

Appearance	You can check whether to use pictures. If you check, you can set the appearance of the			
	multi state indicator in multiple states. After selecting the state in the upper right corner,			
	click "change appearance" or click "more pictures" to select a custom picture to change t			
	appearance			
Fill	Fill style (solid/gradient) and fill color can be set			
Status	You need to check "Display Text" to set the text prompt content of the multi status indicator			
	in different states, and you can set whether to use multiple languages (refer to chapter 5-1			
	Label Multiple Languages for the specific use of multiple language libraries). Tick the			
	drop-down list to set the font corresponding to the corresponding status of the multi status			
	indicator, or click the "apply fonts to each status" button to set the font of all statuses			
Typeface	The font, size, color and alignment can be set (the display position of the font in the			
	component)			



The appearance states have pictures for 3 states and 1 error state by default. When there are more than 4 states, you need to manually add the appearance in different states in the gallery.

Security setting

asic prope Appe	arance Security sett	Position		
- Display contro ☑ Enable	i —			
When	隐藏・			
Equip	本地设备	~	Set	
Addre	PSB v	0 0		
Enable	sta ON 🗸 🗸	ct designation		
User rights				
I Hide the	component when the	user has no permi	ission range	
Required	user 权限1 on range	~		

Same to chapter 4-1-1 straight line security setting part.

#### Position

Same to chapter 4-1-1 straight line position part.

### 4-2-12. Key

Controls the status of the specified coil.

1. Click the "Part/Key/Key" in the menu bar or the 🥯 icon in the basic part bar of the control window, move

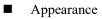
the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel the placement. Modify the length and width of the component through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click the "key" or select the "key" and right-click to select attribute.

Basic property

			Key			2
Basic prop	eAppearan	Function bi Sec	urity set Po	osition		
Contr	rol ID BTO					
Descr	ribe					
Write a	ddress					
Equip	本地设备		~	Set		
Addre	PSB	~ 0	0			
		ct de	signation			
Action						
	Set on	○ Set off	O Rev	erse	O Instantaneous on	

	ontrol ID	It is used for system management control and cannot be operated by users				
Γ	Describe	Can be used to comment on the purpose of this control				
Wri	ite address	Set the write in address				
Ec	quipment	Current equipment port for communication				
I	Address	Set the target coil number				
	Set	Click "Set" to enter the address setting interface, where you can set and use system				
		registers and user-defined tags. You can click the address tag library below or the project				
		tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for				
		the use of address tag library and user-defined tags)				
		Address				
		Equipme 本地设备 v Statio 0 n				
		Address psB v User defined label				
		Address 0 System register				
		Address [Extent : 0 - 9999]				
		format				
		Address tag				
		Determine Cancel Application				
		Center Application				
Indired	et assignment	Set the current address offset. The current coil address changes with the indirectly				
		specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example,				
		the current coil address is PSB0, if the indirectly assigned address is PSW100; When the				
		value of PSW100 register is 0, the coil controlling this element is still PSB0; When the				
		value of PSW100 register is 1, the coil controlling this element is PSB1 (and so on)				
Action	Set ON	Set the control coil to logic 1 state				
	Set OFF	Set the control coil to logic 0 state				
	Reverse	Set the control coil to the opposite state				
	Instantaneous	When the key is pressed, the coil is in logic 1 state, and when the key is released, the coil				
	ON	is in logic 0 state				
Ena	able audio	When the trigger conditions are met, the customized audio can be played. At present, this				
		function is only available in the TS5L series. For specific usage, see chapter 5-4 Use of				
		Audio Resource Library				



c pr	ope AppearanceFunction	bi Secur	rity set Positi	on		
			Use I	oictu	res	
			Sta	itus	0	~
OFF		Na	me	button_05_a		
			Cat	tego	Ŋsvg	
			Dir	nens	ic 80 × 42	
1	Change appearance	-p	1		More	pictures
F						processing and
10.0			-			
			and a set			-
te	0		isplay text	Ар	ply fonts to each	
te Te			isplay text	Ар	ply fonts to each	
			OFF	Ар	ply fonts to each	
Te				Ар	ply fonts to each	
Te	evt 🔿 Multilina				ply fonts to each	
Te	evt O Multiling		OFF <sup>常规</sup>			

Appearance	You can check whether to use pictures. If you check, you can set the appearance of the key in
	the (0, 1) two states. After selecting the state in the upper right corner, click "Change
	Appearance" or click "More Pictures" to select a custom picture to change the appearance
Fill	Fill style (solid/gradient) and fill color can be set
State	You need to check "Display Text" to set the text prompt content when the key is in the $(0, 1)$
	two states, and you can set whether to use multiple languages (see chapter 5-1 Label Multiple
	Languages for the specific use of multiple language libraries). Tick the drop-down list to set
	the font corresponding to the corresponding state of the button, or click the "apply fonts to
	each state" button to set the font in all states
Typeface	You can set the font, size, color and display position of the font in the component

Function binding

		Кеу	×
asic prope	Appearance Function b	Security set Position	
Key	When pressed ~		
		Add to	
		Delete	
		Move	
		Move	

Same to chapter 4-2-10 indicator button.

■ Security setting

		Key		
sic prope Appe	arance Function bi Sect	urity set	Position	
Operation con	firmation delay			
Confirmation	tion before Waitin	g time	1	•
🗌 Key delay				
Display contro	1			
C Enable				
When	隐藏 ~			
Equip	本地设备		¥	Set
Addre	PSB v	0	0	
Enable	sta ON 🗸 🗸	ct desig	gnation	
Enable control				
Enable				
Equip	本地设备		~	Set
Addre	PSB v	0	0	
Enable	sta ON 🗸 🗸	ct desig	gnation	
User rights				
The perm	ission will be cancelle	d after th	e operati	on is completed
When the	user has no permissio	on range,	a prompt	t window will pop up
Hide the	component when the	user has	no permis	ssion range
			•	
Required	user 00001		×	

Same to chapter 4-2-10 indicator button security setting part.

Position

Same to chapter 4-1-1 straight line position part.

## 4-2-13. Multi state key

Pressing this component can control the status of different coils or set different values for registers.

1. Click "Part/Key/Multi state Key" in the menu bar or in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel it. Modify the length and width of the control through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click the "Multi state key" or select the "Multi state key" and right-click to select Attribute.

Basic property

		Multi state key
Basic prope	ertAppearance F	unction bin Security sett Position
Contr Descr Register – Read ac	ibe	ister
Equip	本地设备	✓ Set
Addre	PSB	~ 0 0
Number of States	3	\$
Currer state	nt 0	✓ Set value 1 ✓
State	Set value	Action
0	1	PSB0置ON; PSB1置OFF; PSB2置OFF;
1	2	PSB0置OFF; PSB1置ON; PSB2置OFF;
2	4	PSB0置OFF; PSB1置OFF; PSB2置ON;

~ 115	
Control ID	It is used for system management control and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Register	Multi bit or word register can be selected
Multi bit	The status of the coil in different states can be set (as shown in the figure above, when the
	number of bits is set to 3, the number of states is at most $2^{3}=8$ . You can pull down the
	current state to set the value in each state, and the value represented by the lighting of
	PSB0, PSB1, and PSB2 coils will be automatically generated under the action bar)
Equipment	Current equipment port for communication
Address	Set the target coil address
Indirect assignment	Set the current address offset. The current coil address changes with the indirectly
	specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example,
	the current coil address is PSB0, if the indirectly assigned address is PSW100; When the
	value of PSW100 register is 0, the coil controlling this element is still PSB0; When the
	value of PSW100 register is 1, the coil controlling this element is PSB1 (and so on)
Set	Click "Set" to enter the address setting interface, where you can set and use system
	registers and user-defined tags. You can click the address tag library below or the project
	tree - library - address tag library to set the tags used (see chapter 5-2 Address Tag Library
	for the use of address tag library and user-defined tags)

	Address
	Equipme 和地设备       Statio 0 n         Address type       PSB          Address 0       System register         Address format       [Extent: 0 - 9999]
	Address tag           Determine         Cancel         Application
Word register	The register value in different states can be set (as shown in the figure below, the current state can be pulled down to set the value in each state. When the state is 0, the value of PSW0 is 1; when the state is 1, the value of PSW0 is 2; when the state is 2, the value of PSW0 is 4)
	Multi state key
	Basic propert Appearance Function bin Security sett Position Control ID MB0 Describe Register Word register O Multi bit
	Read address
	Equip     本地设备     V     Set       Addre     pSW     V     0     0
	Data       Word       Vunsigner       ct designation         Number of       3       Image: Constraint of the state         Current       0       Image: Set value         state       1
	State Set value Action
	0         1         PSW0質1           1         2         PSW0置2
	2 4 PSW0置4

■ Appearance

	oper Appear	Research and	and the second se			interior and interior		
	6			🗹 Use j	pictur	es		
				Sta	itus	0		~
	(( 状	\$0		Na	me	lampbu	itton_24_a	
				Ca	tegor	svg		
	0	/		Dir	nensi	80 × 80	)	
	cl			J <u>I</u>				
	7	e appearanc	e				More p	ncture
V 1	-111					-		-
tate	0		VD	isplay text	App	ly fonts	to each	
tate		Multiling	₽ D	isplay text	Apr	ly fonts	to each	
			₽ D	isplay text 状态0	Арр	oly fonts	to each	
<b>О</b> т <i>.</i>			₽ D		Арр	oly fonts	to each	
<b>О</b> т <i>.</i>	wt O		V D		Арр		to each	

Appearance	You can check whether to use pictures. If you check, you can set the appearance of the multi state key in different states. After selecting the state in the upper right corner, click						
	Change appearance" or click "More pictures" to select a custom picture to change the						
	appearance						
Fill	Fill style (solid/gradient) and fill color can be set						
State	You need to check "Display Text" to set the text prompt content of the multi status key in						
	different states, and you can set whether to use multiple languages						
Typeface	You can set the font, font style, size, font style, color and the display position of the font						
	in the component						

Function binding

		Multi state key	5	×
Basic prope	Appearance Function	n bincSecurity sett	Position	
Key	When pressed v			
		Add to		
		Delete		
		Move		
		Move		

Same to chapter 4-2-10 indicator button.

Security setting

	Multi state	e key	
sic proper App	earance Function bin Security	setti Positio	n
Confirma		1	•
Key delay			
Display contro			
When	電纜		
Equip	本地设备	× 5	et
Addre		0	
Enable	sta ON v ct desig	nation	
Enable control			
Enable			
Equip	本地设备	~ S	et
Addre	PSB V 0	0	
Enable	sta <sup>:</sup> ON v ct desig	nation	
User rights			
The perm	ission will be cancelled after th	e operation i	s completed
When the	user has no permission range,	a prompt wi	ndow will pop up
Hide the	component when the user has i	no permissio	n range
Required			neeraal <del>a</del> dd N
Required	user same	Y	

Same to chapter 4-2-10 indicator button security setting part.

#### Position

Same to chapter 4-1-1 straight line position part.

### 4-2-14. Character key

1. Click the "Part/Key/Character Key" in the menu bar or the *ico* icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel it. Modify the length and width of the control through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click the "character key" or select the "character key" and then right-click to select attribute.

■ Basic property

Control ID	It is used for system management control and cannot be operated by users				
Describe	Can be used to comment on the purpose of this component				
Keyboard entry	Enter the ASCII code corresponding to the key. The ASCII code value corresponding to				
	the commonly used keys is shown below:				
	1-0X31 $2-0X32$ $3-0X33$ $4-0X34$ $5-0X35$ $6-0X36$ $7-0X37$				
	8-0X38 9-0X39 0-0X30 ESC-0X1B ENT-0XD				
Enable audio	When the trigger conditions are met, the customized audio can be played. At present, this				
	function is only available in the TS5L series. For specific usage, see chapter 5-4 Use of				
	Audio Resource Library				

Appearance

	Character key
	Basic prope AppearanceSecurity sel Position
	Use pictures Status 0 ~ Name keyboard_01_a Category svg Dimensic 60 × 42
	Change appearance More pictures
	State 0
	1
	Typeface Ty Arial       加粗 Co
Appearance	You can check whether to use pictures. If you check, you can set the appearance of the key in
	the (0, 1) two states. After selecting the state in the upper right corner, click "Change
	Appearance" or click "More Pictures" to select a custom picture to change the appearance
Fill	Fill style (solid/gradient) and fill color can be set

State	You need to check "Display Text" to set the text prompt content when the key is in the $(0, 1)$
	two states, and you can set whether to use multiple languages (see chapter 5-1 Label Multiple
	Languages for the specific use of multiple language libraries). Tick the drop-down list to set
	the font corresponding to the corresponding state of the button, or click the "apply fonts to
	each state" button to set the font in all states
Typeface	You can set the font, size, color and display position of the font in the component

Security setting

	Character key	
c prope Appe	arance Security set Position	
Operation con	firmation delay	
Key delay	Delay time: 01s 1	
Display contro	i	
✓ Enable		
When	隐藏 >	
Equip	本地设备	Set
Addre	PSB 🗸 0 0	
Enable	sta ON v ct designation	
nable control		
Enable control		
Equip	本地设备 >	Set
Addre		Jet
Enable		
Jser rights		
The perm	ission will be cancelled after the operatio	n is completed
When the	user has no permission range, a prompt	window will pop up
Hide the	component when the user has no permiss	sion range
Required		ann a ann a sean 17. Bhu

Key delay	The operation will not take effect until the set delay time is long pressed
Display control	Use bits to control whether the part is displayed. When the conditions are not met, the
	component is hidden. It is hidden by default and cannot be modified
Enable	When checked, display control will be enabled
When validation	Set the display of the component when validation fails
fails	
Address	Target coil with positioning control
Enable state	Set ON status to be valid or OFF status to be valid.
	For example, if the equipment is checked as shown in the figure above, the bit control is PSB0,
	and it is hidden when the verification fails, and the enable state is ON, then the component will
	be displayed normally when the status of PSB0 is ON, and it will not be displayed when the
	status of PSB0 is OFF.
Enable control	The bit limit can be set (the enable state of the enable control can be customized). When the
	enabling conditions are met, the component can be used normally (as shown in the figure
	above: when the PSB1 is in the ON state and the trigger conditions are met at the same time,
	the component can be used; if the PSB1 is in the OFF state, the component is still unavailable
	even if the trigger conditions are met)
User rights	Set the controlled authority level.
	After setting the permission range of the required user, the following three functions can be
	checked as required:
	(1) Cancel the permission after the operation: if this option is not checked, you need to enter
	the corresponding level password for each operation of this part. After checking, you only need

to enter it once
(2) When the user has no permission range, a prompt window will pop up
(3) When the user has no permission range, hide the component.



## Refer to chapter 4-2-3 for the use of user rights function.

Position

Same to chapter 4-1-1 straight line position part.

## 4-2-15. Function key

Pressing this component can realize multiple functions at the same time.

1. Click the "Part/Key/Function Key" icon in the menu bar or the icon in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel it. Modify the length and width of the control through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click Function Key or select Function Key and right-click to select Attribute.

■ Function

function Appearance Security set	Position		
Control ID F80			
Describe			
Action 按下状态	*		
□ 启动声音			
Selected		Optional Features	
(0.置注机(PS80	آ آ	设置线圈	
设置数据 PSW0	Add to	设置数据	
F5W0		四則的运算	
		数据传输	
	Delete	画面切换	
		调用窗口	
	Move up	关闭窗口	
	The second se	导入CSV	
	· · · · · · · · · · · · · · · · · · ·	导出CSV	
	Move down	上传配方	
		下载配方	
		函数调用	
		6530,98(75)	
<u></u>			

Control ID	It is used for system management control and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Action	Set the operation mode, including press state and release state
Enable audio	When the trigger conditions are met, the customized audio can be played. At present, this
	function is only available in the TS5L series. For specific usage, see chapter 5-4 Use of

		Audio Resource Library
Operations	Add to	Add functions
	Delete	Delete functions
Move up Move down		Move the target option function up for one physical location
		Move the target option function down for one physical location
Optional fo	eatures	Select the corresponding function, click the "Add to" button to add the function item to
		the left list - Selected Functions. Double click the selected function to enter the setting
		window

# (1) Set coil

Basic Attribu	tes Security settings					
Operati Set		◯ Set off		0	Negate	
Write a	The second s					
Devic	本地设备		~	Settin		
Addre	PSB	✓ 0				
			ct			

Operation	Set ON	Set the control coil to logic 1 state
	Set OFF	Set the control coil to logic 0
	Reverse	Set the control coil to the opposite state
Write address		Set the write in address
Equipment		Current equipment port for communication
Address S		Set target coil address
Indirect ass	ignment	Set the current address offset. The current coil address changes with the indirectly
		specified register value, that is, Dx[Dy]=D[x+Dy value] (x, y=0, 1, 2, 3). For example,
		the current coil address is PSB0, if the indirectly assigned address is PSW100; When the
		value of PSW100 register is 0, the coil controlling this element is still PSB0; When the
		value of PSW100 register is 1, the coil controlling this element is PSB1 (and so on)
Set		Click "Set" to enter the address setting interface, where you can set and use system
		registers and user-defined tags. You can click the address tag library below or the project
		tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for
		the use of address tag library and user-defined tags)

	Add	ress	×		
Equipme	本地设备	Statio	0		
Address type	PSB v	Use	r defined label		
Address		v 🗌 Sys	em register		
Address format	[Extent:0-9999]				
		Add	lress tag		
	D	etermine Cancel	Application		
Basic Att	butes Security settings	Set coil		×	
	permission				
	When the user has no autho	rity, a prompt window w	ill pop up		
	nissions None	~			
		Determine	Cancel	Application	

(2) Set data

Basic Attribu	00 0						
Dasic Allibu	es Security se	ettings					
Operati	on						
	Set Constant	-		O Plus		01	Minus
Ú						0.	0.0100-0000
Write a	adress			10			
Devic	本地设备			~	Settin		
Addre	PSW	~	0				
Data	Word Y	Insignec 🗸					
type			Ind	irect			

Operation	Constant	The specified value setting of the specified object is equivalent to the data setting (it can be	
Operation	Constant		
		set as a constant or specified through a register)	
	Plus	You can set the value added each time (it can be set as a constant or specified through the	
		register), and set the increment value and upper limit value and whether to cycle	
	Minus	You can set the value of each decrement (which can be set as a constant or specified	
		through the register), the decrement value, the lower limit value and whether to cycle	
Write	address	Set the write in address	
Equipment		Current equipment port for communication	
Address		Set the target coil address	
Data	a type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value	
		Unigned value, Floating number	
S	Set	Click "Set" to enter the address setting interface, where you can set and use system	
		registers and user-defined tags. You can click the address tag library below or the project	

	tree - library - address ta the use of address tag lib	e ;	e (	hapter 5-2 Add	ress Tag Library for
		Address	×		
	Equipme nt 本地设备	~ S	tatio <sub>0</sub>		
	Address type	v	User defined label		
	Address 0		System register		
	数据类型 Word ~ Unsigned	~			
	Address [Extent:0+9999] format				
			Address tag		
		Determine Cancel	Application		
Indirect assignment	Set the current address o	ffset. The currer	t coil address c	hanges with the	e indirectly specified
	register value, that is,	Dx [Dy]=D [x+	Dy value] (x,	y=0, 1, 2, 3	). For example, the
	current coil address is PS	SB0, if the indire	ectly assigned a	ddress is PSW	100; When the value
	of PSW100 register is 0	, the coil control	lling this eleme	nt is still PSB0	; When the value of
	PSW100 register is 1, th	e coil controlling	g this element is	s PSB1 (and so	on)
Security setting	Set the user's permission	n range and whe	ther to pop up	a prompt wind	ow when there is no
	permission				
		Set data		×	
	Basic Attributes Security settings				
	User permission				
	User Required	authority, a prompt w	indow will pop up		
	Permissions	~			
		Determ	ine Cancel	Application	
				100	

## (3) Arithmetic

		A	ithmetic		•
	butes Securit	y settings			
Operati					
۲	+	0 -	○ ×	O÷	
Left ope	erand		Right oper	and	
C		Use reç	0	Use rec	
Enal	ble upper limit	t	🗌 Enable	lower limit	
Write ad	ddress				
Devic	本地设备		✓ Settin	1	
Addre	PSW	~ 0			
Data type	Word 🗸 Un	signec 👻 🗌 Ind	irect		
Preview					
		PSW	0 = 0 + 0		
			Determine	Cancel Applica	tion

Operation	From left to right, add (+), subtract (-), multiply (×), Divide (÷)
Left operand	Sets the value of the left operand, which can be a constant or specified by a register
Right operand	Sets the value of the right operand, which can be a constant or specified by a register
Enable upper limit	Function key - for upper limit of the arithmetic object register, you can enter a constant or
	specify it by the register
Enable lower limit	Function key – for lower limit of the arithmetic object register, you can enter a constant or
	specify it by the register
Write address	Set the write in address
Equipment	Current equipment port for communication
Set	Click "Set" to enter the address setting interface, where you can set and use system
	registers and user-defined tags. You can click the address tag library below or the project
	tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for
	the use of address tag library and user-defined tags)
	Address
	Equipme 本地设备 v Statio 0 n
	Address type PSW V User defined label
	Address 0 System register
	数据类型 Word V Unsigned V
	Address [Extent: 0 - 9999]
	format
	Address tag
	Determine Cancel Application
Address	Set the target register address
Data type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,
Dutatype	Unigned value, Floating number
Indirect assignment	Set the current address offset. The current coil address changes with the indirectly
	specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example,
	the current coil address is PSB0, if the indirectly assigned address is PSW100; When the
	value of PSW100 register is 0, the coil controlling this element is still PSB0; When the
	value of PSW100 register is 1, the coil controlling this element is PSB1 (and so on)
Security setting	Set the user's permission range and whether to pop up a prompt window when there is no
	permission
	Arithmetic
	Andifficac
	Basic Attributes Security settings
	User permission User permission When the user has no authority, a prompt window will pop up
	User Remained
	Permissions None V

## (4) Data transmission

Transfer the specified source register/coil data to the target register/coil, for batch data transmission.

		Data transmission	×
Basic Attribu	tes Security settings		
Transmis sion typ	Word	O Bit register	
Register	1	]	
Source ad	Idress		
Devic	本地设备	✓ Settin	
Addre	PSW	× 0	
Data	Word V Unsigne	c v Indirect	
type			
Destinatio	n address		
Devic	本地设备	✓ Settin	
Addre	PSW	Y 0	
Data	Word V Unsigne	c v Indirect	
type			
2.			-
		Determine Cancel Application	

Transmission type	You can choose whether to transfer word register (register value) or bit register (coil		
51	status)		
Number	The number of data block transfer can be set		
Source address	Read the first address information of the register		
Target address	Write the first address information of the register		
Equipment	Current equipment port for communication		
Address	Set the target register address		
Set	Click "Set" to enter the address setting interface, where you can set and use system registers and user-defined tags. You can click the address tag library below or the project tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for the use of address tag library and user-defined tags)		
	Equipme nt Address       本地设备 、 Statio 0 n         Address       PSW 、 User defined label         Address       0		
	Determine Cancel Application		
Indirect assignment	Set the current address offset. The current coil address changes with the indirectly specified register value, that is, $Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3)$ . For example, the current coil address is PSB0, if the indirectly assigned address is PSW100; When the value of PSW100 register is 0, the coil controlling this element is still PSB0; When the value of PSW100 register is 1, the coil controlling this element is PSB1 (and so on)		
Security setting	Set the user's permission range and whether to pop up a prompt window when there is no permission		

	C	Data transmission		
Basic Attributes Se	ecurity settings			
	he user has no auth	nority, a prompt window	w will pop up	
User Require Permissions		~		

## (5) Screen switch

Jump to the specified screen.

	Switch so	reen	×
Basic Attributes	Security settings		
<ul> <li>Start</li> </ul>			
() 前幅画面			
O Screen			
Pop up th	e password window	automatically.	(If the target
	Provenue and the		1
	Determine	Cancel	Application

Start screen	System startup display screen			
The last screen	Jump to the original screen			
Screen ID	Select the screen ID to jump to			
The password window	If checked, and the screen to be switched has higher authority, the user login window will			
will pop up	pop up automatically			
automatically				
Security setting	Set the user's permission range and whether to pop up a prompt window when there is no			
	permission			
	Switch screen			
	Basic Attributes Security settings			
	User permission			
	When the user has no authority, a prompt window			
	User Required None			
	Permissions			
	Determine Cancel Application			

(6) Call window

Switch or pop-up the specified window.

	Call win	dow	×
Basic Attributes	Security settings		
Switch	[25001]User login	~	
🔘 Pop up			
Pop up th	e password window a	automatically	. (If the target
	Determine	Cancel	Application

Switch window	The window number to be switched can be set; Switching can only pop up one window at			
	the same time			
Pop up	You can set the number of the window to pop up; Pop up can pop up multiple windows at			
	the same time			
The password window	If checked, and the screen to be switched has higher authority, the user login window will			
will pop up	pop up automatically			
automatically				
Security setting	Set the user's permission range and whether to pop up a prompt window when there is no			
	permission			
	Call window			
	Basic Attributes Security settings			
	User permission			
	When the user has no authority, a prompt window			
	User Required Permissions			
	Determine Cancel Application			

## (7) Close window

You can choose to close the specified window or all windows.

	Close the v	vindow	>	
Basic Attributes	Security settings			
O Close all w	vindows			
• Close the	[25001]User login	~		
	Determine	Cancel	Application	

Close all the window	All windows of the current screen can be closed	
Close window	The window number to be closed can be set	
Security setting	Set the user's permission range and whether to pop up a prompt window when there is no	
	permission	

	Close th	e window	
Basic Attributes	Security settings		
User permi When User Requ Permission	the user has no a	uthority, a pro	ompt window
	Determine	Cancel	Application

# (8) Import csv data

The previously stored data can be called in for reference or updated in the HMI.

		导入(	SV数据			
lasic propert	ties Security setting					
源文件 File location	• USB drive					
文件名称	CE.csv					
	● 固定文件名	O Date spe	ecifies the	Register		
数据块首	tetat					
	本地设备		✓ Set			
Addre	PSW	0 0				
Numb	1	typ	e			
Data capaci Data cor						
Serial	Title	Data type	Data format	个数	Integer	Decimal
<ul> <li>✓ 执行状</li> <li>✓ 执行结</li> </ul>	1300	Delete	Move up	Move dow	n	
✔ 执行边	程 PSW0					
			Determine	Cance	el A	pplication

Source	File	You can only import from the USB flash disk.			
file	location	When simulating, the storage location for imported files is in the software directory:			
		Temp/Run/storage/udisk.			
	File name	It can be set as a fixed file name (the file name is defined by itself), a file name specified by			
		the date, or a file name specified by the contents of the register (the file name only supports			
		characters, not Chinese, and cannot contain special characters)			
Data b	lock start	Set the object type and first address of the import destination address, which is generally set			
ad	dress	as the internal register PSW or PFW of the HMI			
Equ	ipment	Current equipment port for communication			
Address		Set target register number			
Custom	Data Type	If it is not checked, the default type is Word, and you can also select Dword or DDword;			
		Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,			
		Unigned value, Floating number			

Data capacity	Data capacity to be imported each time (maximum data capacity 65535)
Data content	Select the same title, data type, data format, number of words, integer digits, and decimal
	digits as the table to be imported
Add to/delete	Add/delete imported row information
Move up/down	Change the order of added lines
Execution status	The bit indicates whether it is in the import status. When it is ON, it indicates that it is in the
	import status. After the import is successful, the OFF status will be restored
Execution result	The running result of the import operation is represented by the value in the register;
	0: Import succeeded; 1: Wrong file name; 2: Error file index; 3: The file path does not exist;
	4: File creation failed; 5: The import data format does not match; 6: Export data failed; 7:
	Error in reading and writing PLC; 8: The USB drive has been ejected
Execution process	The implementation progress of the import is indicated by numerical display (the progress is
	indicated by a numerical value between 0 and 100, and 100 indicates completion)
Security setting	Set the user's permission range and whether to pop up a prompt window when there is no
	permission
	导入CSV数据
	Basic Attributes Security settings
	User permission
	When the user has no authority, a prompt window will pop up
	User Required Permissions

## (9) Export csv data

This function can transfer the data in the HMI to the USB flash disk in the form of CSV files.

目标文件 File location 文件名称 区E.csv ④ 固定文件名	Equip 2 Addre p Numb 1		✓ 0 0 typ	v Set			
capacity 100 Data content Serial Title Data type Data format 个数 Integer Decima Add to Delete Move up Move down □ 执行状态	File location	CE.csv			Register		
Serial     Title     Data type     Data format     个数     Integer     Decimal       Add to     Delete     Move up     Move down       助行结果	capacity						
<ul> <li>□ 执行状态</li> <li>□ 执行结果</li> </ul>			Data type	Data format	个数	Integer	Decim

Data source start<br/>addressSet the data type and first address of the export data, which is generally set as the internal<br/>register PSW or PFW of the HMI

Equip	oment	Current equipment port for communication
Add	lress	Set the target register address
Custom I	Data Type	If it is not checked, the default type is Word, and you can also select Dword or DDword;
		Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,
		Unigned value, Floating number
Target file	File	Only the USB flash disk position can be selected for export.
	location	
		When simulating, the storage location for imported files is in the software
		directory: Temp/Run/storage/udisk.
	File name	It can be set as a fixed file name (the file name is defined by itself), a file name specified
		by the date, or a file name specified by the contents of the register (the file name only
		supports characters, not Chinese, and cannot contain special characters)
Data c	apacity	Data capacity to be exported each time (maximum data capacity 65535)
Data c	content	Select the same title, data type, data format, number of words, integer digits, and decimal
		digits as the table to be imported
Add to	/delete	Add/delete imported row information
Move u	ıp/down	Change the order of added lines
Execution	on status	The bit indicates whether it is in the export status. When it is ON, it indicates that it is in
		the export status. After the export is successful, the OFF status will be restored
Execution	on result	The running result of the export operation is represented by the value in the register;
		0: Export succeeded; 1: Wrong file name; 2: Error file index; 3: The file path does not
		exist; 4: File creation failed; 5: The import data format does not match; 6: Export data
		failed; 7: Error in reading and writing PLC; 8: The USB drive has been ejected
Executio	n process	The exported execution progress is represented by numerical display (the progress is
		represented by a numerical value between 0 and 100, and 100 indicates completion)
Security	y setting	Set the user's permission range and whether to pop up a prompt window when there is no
		permission
		导出CSV数据
		Basic Attributes Security settings
		User permission
		User Required
		Permissions None V

# (10) Upload recipe

Upload the recipe data in the corresponding equipment data area to the HMI.

Basic Attribu	tes Security	settings					
配方	原		~	Recipe	Re	gister	
Word numbe per line Recipe Devic	e upload ado	dress			Cattin	1	
Addre	本地设备 PSW	~	0	~	Settin		
Data	Word V	l.		lirect			
type				lirect			
🔲 кес	ipe transte	r completio	n tiag				
					121		

Recipe	e source	Data upload object register address (click recipe configuration to set relevant information					
		about the recipe, and refer to chapter 4-6 recipe					
Reg	gister	When this option is checked, the value in the register can be used to control which recipe					
		group is exported (if the value in the register is 0, it means that the upload and download					
		of recipe group 0 is performed at this time; if the value in the register is 1, it means that					
		the upload and download of recipe group 1 is performed at this time)					
Words	per line	The number of words in each line is calculated according to the selected recipe source					
		and cannot be modified					
Recipe	Equipment	Current equipment port for communication					
upload	Set	Click "Set" to enter the address setting interface, where you can set and use system					
address		registers and user-defined tags. You can click the address tag library below or the project					
		tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for					
		the use of address tag library and user-defined tags)					
		Address					
		Equipme 本地设备 v Statio 0 n					
		Address type User defined label					
		Address 0 System register					
		数据类型 Word V Unsigned V					
		Address [Extent: 0 - 9999] format					
		Address tag					
		Determine Cancel Application					
	Address	Set the target register address					
	Data type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,					
		Unigned value, Floating number					
	Indirect	Set the current address offset. The current register address changes with the indirectly					
	assignment						
		the current register address is PSW0, if the indirectly specified address is PSW100; When					
		the value of PSW100 register is 0, the register controlling this element is still PSW0;					
		When the value of PSW100 register is 1, the register controlling this element is PSW1					
		(and so on)					
Recipe	transfer	The indicator lights up when the recipe transfer is completed					
comple	tion flag						

Security setting	Set the user's permission range and whether to pop up a prompt window when there is no permission
	Upload recipe
	Basic Attributes Security settings
	User permission User has no authority, a prompt window will pop up User Required
	Permissions None V

# (11) Recipe download

Download the recipe data of the HMI to the corresponding equipment data area.

Recipe	e source	data Download object register address (click Recipe Configuration to set relevant					
		information about recipe)					
Register a	assignment	When this option is checked, the value in the register can be used to control which recipe					
		group is exported (if the value in the register is 0, it means that the upload and download					
		of recipe group 0 is performed at this time; if the value in the register is 1, it means that					
		the upload and download of recipe group 1 is performed at this time)					
Words	per line	The number of words in each line is calculated according to the selected recipe source					
		and cannot be modified					
Recipe	Equipment	Current equipment port for communication					
download	Set	Click "Set" to enter the address setting interface, where you can set and use system					
address		registers and user-defined tags. You can click the address tag library below or the project					
		tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for					
		the use of address tag library and user-defined tags)					
		Address					
		Equipme 本地设备 Statio 0 n					
		Address PSW V User defined label					
		Address 0 System register					
		教派学型 Word V Unsigned V					
		Address [Extent:0-9999] format					
		Address tag					
		Determine Cancel Application					
		Determine Cancer Application					
	Address	Set target register address					
	Data type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,					
		Unigned value, Floating number					
	Indirect	Set the current address offset. The current register address changes with the indirectly					
	assignment	specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example:					
	0	the current register address is PSW0, if the indirectly specified address is PSW100; When					
		the value of PSW100 register is 0, the register controlling this element is still PSW0;					
		When the value of PSW100 register is 1, the register controlling this element is PSW1					
		(and so on)					
Recipe	transfer	The indicator lights up when the recipe transfer is completed					
-	tion flag						
	y setting	Set the user's permission range and whether to pop up a prompt window when there is no					
Jocant	,						

	Do	wnload recipe	
Basic Attributes S	Security settings		
User permiss	n the user has no author	ity, a prompt windo	w will pop up

# (12) Call function

Calling the C language function can complete more complex operations and communications.

	function ca	H.		
Basic Attributes	Security settings			
Function	<ul> <li>Edit Function</li> </ul>			
a				
	erial executior() Paralle	l execution		

Function	Select the function to be called from the drop-down menu						
Edit/function	Click to enter the function editing page						
Serial execution	The next task can be done after the current task is completed. Therefore, this function						
	must have appropriate exit conditions						
Parallel execution	Call the task of this function, create a new task to execute the function, and the caller will						
	continue the subsequent processing						
Security setting	Set the user's permission range and whether to pop up a prompt window when there is no						
	permission						
	function call						
	Basic Attributes Security settings						
	User permission						
	When the user has no authority, a prompt window will						
	User Required None						
	Permissions						
	Determine Cancel Application						
	Conter Appreciation						

Appearance

	A Statement		Function k	889).		
uncti	on Appearance	Security set	Position			
_			1	Jse pictu	ires	
				Status	0	~
	OF			Name	button_05_a	
_	~			Catego	ŋsvg	
		_	3	Dimens	ic 80 × 42	
	Change	appearance			More	pictures
		ppearance			more	presences
			*			
State	0	• •	Display tex	t Ap	oply fonts to each	
			OFF			
Туре Ту	eface 微软雅黑		OFF × 常	规	×	
				規	× ×	
Ty Co			~ 常	规	×	
Ty Co	微软雅黑	V Si	~ 常	规	v v	

Change	You can check whether to use pictures. If you check, you can set the appearance of the function
appearance	keys in different states. After selecting the state in the upper right corner, click "Change
	Appearance" or click "More Pictures" to select a custom picture to change the appearance
Fill	Fill style (solid/gradient) and fill color can be set
State	You need to check "Display Text" to set the text prompt content of the function key in the $(0, 1)$
	two states. You can set whether to use multiple languages (see chapter 5-1 Label Multiple
	Languages for the specific use of multiple language libraries); Tick the drop-down list to set the
	font corresponding to the corresponding state of the function key, or click the "apply fonts to
	each state" button to set the font in all states
Typeface	You can set the font, size, font style, color and the display position of the font in the component

Security setting

		Function	key .		
Function	Appearance Security set	tt Position			
Operatio	on confirmation delay				
		iting time	1		
🗌 Key	delay				
Display	ontrol				
🖌 Ena	ble				
When	隐藏	~			
E	quip 本地设备		~	Set	
A	ddre <sub>PSB</sub>	~ 0	0		
E	nable sta <sup>r</sup> ON 🛛 🗸	ct design	nation		
Enable c	ontrol				
🖌 Ena	ble				
E	quip 本地设备		~	Set	
A	ddre <sub>PSB</sub>	× 1	0		
E	nable sta ON 🗸 🗸	ct desigr	nation		

Operation	The waiting time (s) can be set. If this option is checked, a pop-up window "Are you sure to							
confirmation	execute this operation" will pop up when operating components. If you do not click "Confirm"							
delay	or "Cancel" within the set waiting time, the pop-up window will disappear by itself and this							
	operation will fail; If you click "OK" within the waiting time, the operation is successf							
	Clicking "Cancel" is invalid							
Key delay	The operation will not take effect until the set delay time is long pressed							
Display control	Use bits to control whether to display the part. When the condition is not met, the component							
	will be hidden. It is hidden by default and cannot be modified							
Equipment	Current equipment port for communication							
Address	Set the coil address for bit control							
Indirect	Set the current address offset. The current coil address changes with the indirectly specified							
assignment	register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example, the current							
	coil address is PSB0, if the indirectly assigned address is PSW100; When the value of							
	PSW100 register is 0, the coil controlling this element is still PSB0; When the value of							
	PSW100 register is 1, the coil controlling this element is PSB1 (and so on)							
Set	Click "Set" to enter the address setting interface, where you can set and use system registers							
	and user-defined tags. You can click the address tag library below or the project tree - library -							
	address tag library to set the tags (see chapter 5-2 Address Tag Library for the use of address							
	tag library and user-defined tags)							
	Address							
	Equipme 本地设备 V Statio 0							
	Address PSB V User defined label							
	Address 0 System register							
	Address [Extent: 0 - 9999]							
	format							
	Address tag							
	Determine Cancel Application							

Enable	When checked, display control will be enabled					
When validation	Set the display of the component when validation fails					
fails						
Enable state	Set ON status to be valid or OFF status to be valid.					
	For example: if the equipment is checked as shown in the above figure, the bit control is PSB0,					
	and hide is selected when validation fails, and the enabling status is ON, then when the stat					
	of PSB0 is ON, the component is normally displayed, and when the status of PSB0 is OFF, t					
	component is hidden and not displayed.					
Enable control	The bit limit can be set (the enabling state of the enable control can be customized). When the					
	enabling conditions are met, the component can be used normally (as shown in the figure					
	above: when the PSB1 is in the ON state and the trigger conditions are met at the same time,					
	the component can be used; if the PSB1 is in the OFF state, the component is still unavailable					
	even if the trigger conditions are met)					

#### Position

Same to chapter 4-1-1 straight line position part.

# (13)Screen printing

Print current information through printer.

	Screen printing		×
	Basic Attributes	Security settings	
	<ul> <li>Picture source</li> <li>Display cur</li> </ul>	e rent O Register assignment O Specify Window	a.
Picture sour	Current d	Determine Cancel App isplay window, register specified, specified window	licatio

The connection and configuration of the printer are detailed in chapter 3-10-7 Printer.

## 4-2-16. Function domain

The function is the same as the function key. This part is a hidden component in the screen, and the specified action will be executed when the required conditions are met. Different from the function keys that need to be manually triggered, the function domain is automatically triggered after the set conditions are met, not only by the key triggering. For the hidden effect in the screen, the function field is generally set as a common component in use, to achieve the purpose that it can be executed in all screens.

1. Click the menu bar "Part/Key/Function domain" or the control window basic part bar icon, move the cursor to the screen, click the left mouse button to place, click the right mouse button or click ESC to cancel the placement. Modify the control length and height through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click the "Function domain" or select the "Function domain" and right-click to select "Attribute" to set attributes.

Pattern	Function	Position	
Control	ID FF0		
Describ	e		
Action r	node		
۲	Screen		
0	Screen		
0	Coil		
0	Timing		
0	Continuo		
0	First scan afte	er	

Pattern

Control ID	It is used for system management control and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Action mode	Set the operation mode. You can only select one trigger action
Screen start	The first scan after the start of the screen where the function domain is located, and the
	relevant functions are executed once
Screen close	The first scan after the screen where the function domain is located is closed, and the
	relevant functions are executed once
Coil	The rising edge means that when the specified coil jumps from OFF to ON, the relevant
	functions are executed once
	The falling edge means that when the specified coil jumps from ON to OFF, the relevant
	functions are executed once
Timing	When the screen is called, after all functions are executed, there are 2 options below for the
	next execution time:
	1. "Timing/continuous mode coil limit" controls whether the current mode is executed
	according to the ON/OFF of the coil
	2. "Display timing interval time" user-defined display register to display timing interval in
	real time (unit: ms), which can only be displayed but not set

Continue	When the screen is called, each scan will execute relevant functions							
	When the "Timing (seconds)" or "Continuous" option is selected, the "Timing/Continuous							
	Mode Coil Limit" can be selected to set the control coil, that is, when only this coil is s							
	ON/OFF, this function executes							
First scan after	For the first scan after downloading the screen, relevant functions are executed once, and							
downloading	the simulation is invalid							
First scan after	The first scan after the system is powered on and started, and the relevant functions are							
startup	executed once, and the simulation is invalid							
Logic	Only when the value of the specified register is $<, >, \leq, \geq, ==$ the constant value, the							
	relevant function is executed once							
	Note: When the specified register is a floating point number, a setting for the number of							
	decimal places will be added. During the setting, pay attention to the consistency between							
	the number of decimal places set for the constant value and the number of decimal places							
	set.							
	杏存器设置							
	地址							
	地 址 PSW 0 0							
	数据类型 DWord v Float v □ 间接指定							
	确定取满应用							
	● 数值逻辑条件 PSW0 小数位数 0 毫							
	== ~ 0							

■ Function

Pattern	Function	Position		
Selected	function		Op	tional Features
			Add to	设置线圈
				设置数据
				四则运算
			Delete	数据传输
				画面切换
				调用窗口
			Move up	关闭窗口
				导入CSV
			Move down	导出CSV
				上传配方
				下载配方
				函数调用

Item	Add to	Add the function
	Delete	Delete the function
	Move up	Move the target function up one physical location

Move down Move the target function down one physical loc		Move down	Move the target function down one physical location
	Optional features		Select the corresponding function, click the "Add" button to add the function item to the
			left list. Double click the selected function to enter the setting window

# (1) Set coil

Doerati		1	100			
Set on		○ Set o	off	O Negate		
Write a	ddross					
			1.0			
Devic	本地设备		¥ .	✓ Settin		
Addre	PSB	~ 0				
			direct			
			direct			

Operation	Set ON	Set the	control coil	to logic 1 sta	ate			
	Set OFF	Set the	control coil	to logic 0				
	Reverse	Set the	control coil	to the oppos	ite state	;		
Write ad	dress	Set the	Set the write in address					
Equipn	nent	Current	Current equipment port for communication					
Addre	ss	Set targ	et coil addr	ess				
Indirect ass	ignment	Set the	current ad	ddress offset	. The	current coil a	address changes with the indirectly	
		specifie	d register v	value, that is,	Dx[Dy	]=D[x+Dy va	llue] (x, y=0, 1, 2, 3). For example,	
		the curr	ent coil ado	dress is PSB(	0, if the	indirectly ass	signed address is PSW100; When the	
		value of	f PSW100	register is 0,	the co	il controlling	this element is still PSB0; When the	
		value of PSW100 register is 1, the coil controlling this element is PSB1 (and so on)						
Set		Click "	Click "Set" to enter the address setting interface, where you can set and use system					
		register	s and user-	defined tags.	You ca	n click the ad	dress tag library below or the project	
		tree - li	brary - addi	ress tag libra	ry to se	t the tags (see	chapter 5-2 Address Tag Library for	
		the use	of address t	ag library an	d user-o	lefined tags)		
				Address		×		
		Equipme	本地设备		÷	Statio 0	1	
		Address type	PSB	~		User defined label		
		Address	Address 0 System register					
		Address format						
						Address tag		
				Determine	e Canc	el Application	1	

## (2) Set data

Operati	on					
•	Set Consta	nt	O PI	us	O Minus	
-						
Write ad						
Devic	本地设备			✓ Set	tin	
Addre	PSW	~	0			
Data	Word 🗸	Unsignec 🗸				
type			Indirect			

Operation	Constant	The specified value setting of the specified object is equivalent to the data setting (it can be
		set as a constant or specified through a register)
	Plus	You can set the value added each time (it can be set as a constant or specified through the
		register), and set the increment value and upper limit value and whether to cycle
	Minus	You can set the value of each decrement (which can be set as a constant or specified
		through the register), the decrement value, the lower limit value and whether to cycle
Write	address	Set the write in address
Equi	pment	Current equipment port for communication
Ado	dress	Set the target coil address
Data	a type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,
		Unigned value, Floating number
S	Set	Click "Set" to enter the address setting interface, where you can set and use system
		registers and user-defined tags. You can click the address tag library below or the project tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for
		the use of address tag library and user-defined tags)
		Address
		Equipme 本地设备 v Statio 0 n
		Address type User defined label
		Address 0 System register 数据类型 Word v Unsigned v
		Address [Extent: 0 - 9999]
		format
		Address tag
		Determine Cancel Application
T 11	•	
Indirect a	ssignment	Set the current address offset. The current coil address changes with the indirectly specified
		register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example, the
		current coil address is PSB0, if the indirectly assigned address is PSW100; When the value
		of PSW100 register is 0, the coil controlling this element is still PSB0; When the value of
		PSW100 register is 1, the coil controlling this element is PSB1 (and so on)

# (3) Arithmetic

			Ari	thmetic			2
Operati		0.	2	0	) ×	O÷	
Left ope	23 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Use reț		Rig	ht operand	🗌 🗆 Use reç	
🗌 Enal	ole upper lim	it —			Enable lowe	er limit	
Write ad Devic	ddress 本地设备			~	Settin		
Addre	PSW	~	0				
Data type	Word 🗸 Unsignet 🗸 🗌 Indir			rect			
Preview	P.1.		PSWO	) = 0 +	0		
				Determine	e Can	cel Applica	tion

Operation	From left to right, add (+), subtract (-), multiply (×), Divide (÷)
Left operand	Sets the value of the left operand, which can be a constant or specified by a register
Right operand	Sets the value of the right operand, which can be a constant or specified by a register
Enable upper limit	Function key - for upper limit of the arithmetic object register, you can enter a constant or
	specify it by the register
Enable lower limit	Function key – for lower limit of the arithmetic object register, you can enter a constant or
	specify it by the register
Write address	Set the write in address
Equipment	Current equipment port for communication
Set	Click "Set" to enter the address setting interface, where you can set and use system
	registers and user-defined tags. You can click the address tag library below or the project
	tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for
	the use of address tag library and user-defined tags)

		Address			×		
	Equipme nt	本地设备			~	Statio 0	
	Address type	PSW		~		User defined label	
	Address	0				System register	
	数据类型	Word N	Unsigned	*			
	Address format	[Extent : 0 - 9	9999]				
				D	etermine Car	Address tag	
Address	Set the ta	rget regist	er address	5			
Data type	Byte-8Bi	t, Word-10	6Bit, DWo	ord-	32Bit, DDWo	rd -64Bit, BCD fo	ormat, Hex, Signed value,
	Unigned	value, Flo	ating num	ıber			
Indirect assignment	Set the	current ac	ldress off	set.	The current	coil address cha	inges with the indirectly
	specified	register v	register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example,			0, 1, 2, 3). For example,	
	the curre	nt coil add	lress is PS	SB0,	if the indirec	tly assigned addre	ess is PSW100; When the
	value of	PSW100	register is	0, t	he coil contro	olling this elemen	t is still PSB0; When the
	value of l	PSW100 r	egister is	1, th	e coil controll	ing this element is	s PSB1 (and so on)

# (4) Data transmission

Transfer the specified source register/coil data to the target register/coil, for batch data transmission.

Transmi	• • Word	O Bit register	
Register	1		
Source ad	dress		
Devic	本地设备	✓ Settin	
Addre	PSW	<ul> <li>✓ 0</li> </ul>	
Data type	Word V Unsigner	V Indirect	
Destinatio	n address		
Devic	本地设备	✓ Settin	
	PSW	~ 0	
Addre			
Addre Data type	Word V Unsigner	Indirect	

Transmission type	You can choose whether to transfer word register (register value) or bit register (coil
	status)
Number	The number of data block transfer can be set
Source address	Read the first address information of the register
Target address	Write the first address information of the register
Equipment	Current equipment port for communication
Address	Set the target register address
Set	Click "Set" to enter the address setting interface, where you can set and use system

	register	s and use	er-define	ed tags	s. You car	click the add	lress tag library b	elow or the project
	tree - lil	orary - a	ddress ta	ag libr	rary to set	the tags (see	chapter 5-2 Addre	ess Tag Library for
	the use	of addres	ss tag lił	orary a	and user-d	efined tags)		
				Address	s	×		
	Equipme	本地设备			Ŷ	Statio 0		
	Address type	PSW	w			User defined label		
	Address	0				System register		
	数据类型	Word ~	Unsigned	~				
	Address format	[Extent : 0 - 9	999]					
						Address tag	1	
				Deterr	mine Can	cel Application		
Indirect assignment	Set the	current	address	s offse	et. The c	urrent coil a	ddress changes v	with the indirectly
	specifie	d registe	r value,	that is	s, Dx [Dy]	=D [x+Dy va	lue] (x, y=0, 1, 2,	3). For example,
	the curr	the current coil address is PSB0, if the indirectly assigned address is PSW100; When the					SW100; When the	
	value of	f PSW1(	0 regist	ter is (	0, the coil	controlling the	his element is stil	ll PSB0; When the
	value of	f PSW10	0 registe	er is 1,	, the coil c	ontrolling this	s element is PSB1	(and so on)

(5) Screen switch

Jump to the specified screen.

	Switch	screen		x
• Start				
○ 前幅画面				
O Screen				
Pop up t	he password win	dow automati	ically. (If the	
	Determine	Cancel	Application	n
stem startup	display screen			

		1973 I I I I I I I I I I I I I I I I I I I
	Start screen	System startup display screen
The last screen Jump to the original screen		Jump to the original screen
Screen ID Select the screen ID to jump to		Select the screen ID to jump to
	The password window	If checked, and the screen to be switched has higher authority, the user login window will
	will pop up	pop up automatically
	automatically	

(6) Call window

Switch or pop-up the specified window.

	Call v	vindow	×
• Switch	[25001]User	ogin 🗸	
O Pop up			
Pop up t	he password win	dow automat	ically. (If the
	Determine	Cancel	Application

Switch window	The window number to be switched can be set; Switching can only pop up one window at
	the same time
Pop up	You can set the number of the window to pop up; Pop up can pop up multiple windows at
	the same time
The password window	If checked, and the screen to be switched has higher authority, the user login window will
will pop up	pop up automatically
automatically	

## (7) Close window

You can choose to close the specified window or all windows.

		Close th	e window	×
	O Close all w	indows		
	• Close the	[25001]User	ogin 💊	•
	[	Determine	Cancel	Application
Close all the window	All windows of	f the current scr	een can be clos	sed
Close window	The window nu	umber to be clos	sed can be set	

(8) Import csv data

The previously stored data can be called in for reference or updated in the HMI.

File	e U disk						
File	CE.csv						
name	• Fixed file	🔘 Dat	e spe <mark>ci</mark> fy	he file 🔘	Register		
	ck first address			In cost Hards			
	本地设备		~	Settin			
Addre		~ 0	Word_Strin	ig ∽			
Regist	L	····	;t				
Data capacit Data con							
No.	Title	Data typ	e D	ata format	number	Integer	Decim
	Add	Delete	M	oveun	Move do	MD.	
Execut	Add tion status tion results tion process	Delete	м	ove up	Move dow	vn	

Source	File	You can only import from the USB flash disk.
		Tou can only import noin the OSD flash disk.
file	location	When simulating, the storage location for imported files is in the software directory:
		Temp/Run/storage/udisk.
	File name	It can be set as a fixed file name (the file name is defined by itself), a file name specified by
		the date, or a file name specified by the contents of the register (the file name only supports
		characters, not Chinese, and cannot contain special characters)
Data b	lock start	Set the object type and first address of the import destination address, which is generally set
ad	dress	as the internal register PSW or PFW of the HMI
Equ	ipment	Current equipment port for communication
Ad	Address Set target register number	
Custom	Data Type	If it is not checked, the default type is Word, and you can also select Dword or DDword;
		Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,
		Unigned value, Floating number
Data	capacity	Data capacity to be imported each time (maximum data capacity 65535)
Data	content	Select the same title, data type, data format, number of words, integer digits, and decimal
		digits as the table to be imported
Add	to/delete	Add/delete imported row information
Move	up/down	Change the order of added lines
Execut	tion status	The bit indicates whether it is in the import status. When it is ON, it indicates that it is in the
		import status. After the import is successful, the OFF status will be restored
Execut	tion result	The running result of the import operation is represented by the value in the register;

	0: Import succeeded; 1: Wrong file name; 2: Error file index; 3: The file path does not exist;
	4: File creation failed
Execution process	The implementation progress of the import is indicated by numerical display (the progress is
	indicated by a numerical value between 0 and 100, and 100 indicates completion)

## (9) Export csv data

This function can transfer the data in the HMI to the USB flash disk in the form of CSV files.

	导出CSV数据	×
De	a source fist address vic 本地设备	
File	ation CE.csv	r
ca	ta pacity a content Title Data type Data format number	Integer Decimal
	Add Delete Move up Move execution status kecution results	down
	xecution process	
	Determine Cance	
Data source start address	Set the data type and first address of the export data, register PSW or PFW of the HMI	, which is generally set as the internal

add	ress	register PSW or PFW of the HMI	
Equip	oment	Current equipment port for communication	
Ado	lress	Set the target register address	
Custom I	Data Type	If it is not checked, the default type is Word, and you can also select Dword or DDword;	
		Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,	
		Unigned value, Floating number	
Target file	File	Only the USB flash disk position can be selected for export.	
	location	When simulating, the storage location for imported files is in the software	
		directory: Temp/Run/storage/udisk.	
	File name	It can be set as a fixed file name (the file name is defined by itself), a file name specified	
		by the date, or a file name specified by the contents of the register (the file name only	
		supports characters, not Chinese, and cannot contain special characters)	

Data capacity	Data capacity to be exported each time (maximum data capacity 65535)			
1 2				
Data content	Select the same title, data type, data format, number of words, integer digits, and decimal			
	digits as the table to be imported			
Add to/delete	Add/delete imported row information			
Move up/down	Change the order of added lines			
Execution status	The bit indicates whether it is in the export status. When it is ON, it indicates that it is in			
	the export status. After the export is successful, the OFF status will be restored			
Execution result	The running result of the export operation is represented by the value in the register;			
	0: Export succeeded; 1: Wrong file name; 2: Error file index; 3: The file path does not			
	exist; 4: File creation failed			
Execution process	The exported execution progress is represented by numerical display (the progress is			
	represented by a numerical value between 0 and 100, and 100 indicates completion)			

# (10) Upload recipe

Upload the recipe data in the corresponding equipment data area to the HMI.

			1003	1.0	and the second sec	
配方法	原		~	Recipe	Register	
Word numbe per line	â.					
Recipe	upload add	ress				
Devic	本地设备			~		
Addre	PSW	~	0			
Data	Word 🗸	Unsignec 🗸				
type			Ind	irect		
LINC	ibe transie	r compieuo	u nau			
				Determine	Cancel Ac	plication

Recipe	e source	Data upload object register address (click recipe configuration to set relevant information				
		about the recipe, and refer to chapter 4-6 recipe)				
Reg	gister	When this option is checked, the value in the register can be used to control which recipe				
		group is exported (if the value in the register is 0, it means that the upload and download				
		of recipe group 0 is performed at this time; if the value in the register is 1, it means that				
		the upload and download of recipe group 1 is performed at this time)				
Words	per line	The number of words in each line is calculated according to the selected recipe source				
		and cannot be modified				
Recipe	Equipment	Current equipment port for communication				
upload	Set	Click "Set" to enter the address setting interface, where you can set and use system				
address	registers and user-defined tags. You can click the address tag library below or the proj					
		tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for				
		the use of address tag library and user-defined tags)				

				Address	×		
		Equipme nt	本地设备	v	Statio 0	1	
		Address type	PSW	~	User defined label		
		Address	0		System register		
		数据类型	Word ~ Unsigned	~		1	
		Address format	[Extent: 0 - 9999]				
					Address tag		
				Determine Ca	ncel Application		
	Address	Set the	target register ad	ldress			
Ι	Data type	Byte-8E	Bit, Word-16Bit,	DWord- 32Bi	t, DDWord -64	4Bit, BCD format, Hex, Signed value,	
		Unignee	d value, Floating	g number			
	Indirect	Set the current address offset. The current register address changes with the indirectly					
a	ssignment	specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example:					
		the current register address is PSW0, if the indirectly specified address is PSW100; When					
		the valu	ue of PSW100 1	register is 0, 1	the register co	ntrolling this element is still PSW0;	
		When t	he value of PSV	W100 register	is 1, the regis	ter controlling this element is PSW1	
		(and so	on)				
Recipe tra	ansfer	The ind	icator lights up v	when the recip	e transfer is co	ompleted	
completio	on flag			-			

# (11) Recipe download

Download the recipe data of the HMI to the corresponding equipment data area.

配方	源	~	Recipe	Specified	
Word numbe per lin	e			-	
	download address	-			
Devic	本地设备		~	Settin	
Addre	PSW	~ 0			
Data	Word V Unsigned	· •			
type			lirect		
	ре паняет сотри	сион нау			
		and a second second			

Recipe	Recipe source data Download object register address (click Recipe Configuration to set releva					
		information about recipe)				
Register a	assignment	When this option is checked, the value in the register can be used to control which recipe				
		group is exported (if the value in the register is 0, it means that the upload and download				
		of recipe group 0 is performed at this time; if the value in the register is 1, it means that				
		the upload and download of recipe group 1 is performed at this time)				
Words per line		The number of words in each line is calculated according to the selected recipe source				
		and cannot be modified				
Recipe	Equipment	Current equipment port for communication				
download	Set	Click "Set" to enter the address setting interface, where you can set and use system				
address		registers and user-defined tags. You can click the address tag library below or the project				
		tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for				

		.1	C 11	. 1		1 6 14	
		the use	of addre	-		er-defined tag	(S)
		Faultant			Address	Chatle	1
		Equipme	本地设备		~	Statio 0	
		Address type	PSW		*	User defined label	
		Address	0			System register	
		数据类型	Word ~	Unsigned	~		
		Address format	[Extent: 0 - 99	99]			
						Address tag	
					Determine Ca	ncel Application	
							-
	Address	Set targ	get regist	er addr	ess		
	Data type	Byte-8	Bit, Wor	d-16Bit	t, DWord- 32	Bit, DDWord	-64Bit, BCD format, Hex, Signed value,
		Unigne	ed value,	Floatin	ig number		
	Indirect	Set the	e current	addres	s offset. The	current regis	ster address changes with the indirectly
	assignment	specifi	ed registe	er value	e, that is, Dx	Dy]=D [x+D	y value] (x, y=0, 1, 2, 3). For example:
		the cur	rent regi	ster add	lress is PSW(	), if the indire	ctly specified address is PSW100; When
		the val	lue of PS	SW100	register is 0	, the register	controlling this element is still PSW0;
		When	the value	e of PS	W100 registe	er is 1, the re	gister controlling this element is PSW1
		(and so	on)				
Recipe	transfer	The in	dicator li	ghts up	when the rec	ipe transfer is	completed
comple	tion flag						

## (12) Call function

Calling the C language function can complete more complex operations and communications.

	function call
á	Function al V Edit Function
	● Serial execution Parallel execution
L	Determine Cancel Application
Function	Select the function to be called from the drop-down menu
Edit/function	Click to enter the function editing page
Serial execution	The next task can be done after the current task is completed. Therefore, this function
	must have appropriate exit conditions
Parallel execution	Call the task of this function, create a new task to execute the function, and the caller will
	continue the subsequent processing

# (13)Screen printing

Print current information through printer.

ter assignment 🔘 Specify Window

Picture source Current display window, register specified, specified window

The connection and configuration of the printer are detailed in chapter 3-10-7 Printer.

Security setting

力有起域					?	×
模式	功能	安全设置	位置			
使能控制 🗹 启用验证						
设 音	本地设备			~	设置	
地址	P5B	~	0	0		
启用状态	ON V			间接指定		

The bit limit can be set (the enabling state of the enable control can be customized). When the enabling condition is met, the component can be used normally (as shown in the figure above: when PSB0 is in the ON state and the trigger condition is met at the same time, the component can be used; if PSB0 is in the OFF state, the component is still unavailable even if the trigger condition is met).

## Position

Same to chapter 4-1-1 straight line position part. (It is not allowed to modify the size and move horizontally and vertically).

## 4-2-17. Sliding input

The value can be displayed in the slider area, or the value in the set data address can be changed by dragging and sliding.

1. Click "Part/Input/Sliding Input" in the menu bar or in the basic part bar of the control window, move the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel the placement. Modify the control length and height through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "Sliding Input" or select "Sliding Input" and right-click, and then select "Attributes" to set attributes.

## Basic property

				1	Sliding	input					×
Basic profA	ppeara	Scale anc	Notio	ce Sec	urity : Po	osition					
Contr	ol ID SI	0									
Descr	ibe										
Read add	ress										
Equip	本地设备	ł			~	Set					
Addre	PSW		*	0	0						
Data type	Word	✓ Unsigne	k ∨ (	t desig	nation						
Attribut	e										
Maxim um	100						1inimu n value	0			
		🗌 Reg	ister						Regist	er control	
Directi	Show r	ight		~			1inimu 1 scale	1			
Incr	ease or	1			tiple imum sc		Change	the	write value	in real time	

Control ID	It is used for system management component and cannot be operated by users
Describe	Can be used to comment on the purpose of this component
Read address	Set the register address, and set whether the address is offset (that is, specified indirectly)
Equipment	Current equipment port for communication
Address	Set target register number
Data type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed
	value, Unigned value, Floating number
Set	Click "Set" to enter the address setting interface, where you can set and use system registers and user-defined tags. You can click the address tag library below or the project tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for the use of address tag library and user-defined tags)
	Address
	Equipme 本地设备 V Statio 0
	Address PSW Y User defined label
	Address 0 System register
	数据类型 Word V Unsigned Y
	Address [Extent: 0 - 9999] format
	Address tag Determine Cancel Application
Indirect assignment	Set the current address offset. The current register address changes with the indirectly
	specified register value, that is, $Dx [Dy]=D[x+Dy value]$ (x, y=0, 1, 2, 3). For example: the current register address is PSW0, if the indirectly specified address is
	PSW100; When the value of PSW100 register is 0, the register controlling this element
	is still PSW0; When the value of PSW100 register is 1, the register controlling this

		element is PSW1 (and so on)
Property	Maximum	The upper limit value of the sliding input display value can be set as a constant or set
		through the register
	Minimum	The lower limit value of the sliding input display value can be set as a constant or set
		through the register
	Direction	Set the sliding direction, including up, down, left and right
	Minimum	The smallest numeric unit to increment or decrement when dragging the slider
	scale	
	Increase or	You can set the change size of the value each time you move the slider
	decrease the	
	minimum	
	scale per click	
	Chang the	If checked, the value in the corresponding register will change in real time as the slider
	write value in	is dragged.
	real time	If not checked, the value in the corresponding register will not change in real time
	during sliding	during the slider dragging process

Appearance

Basic pro Appe	earanScale and No	otice Security Po	sition		
			Appearance of	slide rail	
			Height	10/01	101
			setting Width setting	30	
				260	•
			St	tyle selection	
			Backgroun d color		~
			Border		~
			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		
			Fill color		~
Slider appe Width	arance				
setting	30	Height setting	50		
	St	tyle selection			

Appearance	Set the height, width, style and color of the slide rail (when modifying, you can observe the
of slide rail	modification results in the left preview in real time
Slider	Set the height, width, style and color of the slider (when modifying, you can observe the
appearance	modification results in the left preview in real time

■ Scale and mark

		Slidi	ng input			×
asic Atti Appea	ar Scale and Notice Se	ecurity :	Location			
Display scal	le					
Scale positio	n  ● 上方		C	下方		
Major scale			ajor scale			
equal fractio Minor scale	n 3 🛊		igth nor scale	10	•	
equal fractio			igth	9		
Line	I I I I I I I I I I I I I I I I I I I			14	. 3040	
Scale mark co	old 🗸 🗸	So	ale mark s		~	
Scale mark w	id 1 v	1				
		1				
Show num	ieric marks					
Intege	r c3		Decimal 2			
Fo	Times New Roman	~	General	~		
Col	Times New Roman		1			
cor	×	Size	12	~		
Display pe	rcentage					
- popul pe	reentage					

If checked, scale will be displayed; if unchecked, scale will not be displayed
Set the scale display position, which can be displayed above or below the slider
Set the number and length of major and minor scales
Set the color, style, and width of tick marks
Set the display format of the scale mark. Choose one of the two display methods
You can set the number of integer and decimal digits of the displayed number, and
whether the font, size, color, font style and horizontal and vertical directions are
aligned
You can set the font, size, color, font style, horizontal and vertical alignment of the
displayed percentage
Set whether the axis is displayed at the bottom of the scale

Notice

		Sliding		
Basic pro Appe	earar Scale and Notice	Security P	osition	
Notice				
Before writ	ing After writing			
✓ Notifica	ation bit			
Write of the second s	on	01	Write off	
Equip	本地设备		✓ Set	
Addre	PSB v	0 0	)	
	17	ct designatio	on	
✓ Notice	word			
Equip	本地设备		✓ Set	
Addre	PSW 🗸	0 0	)	
Data	Word 🗸 Unsignec 🗸	ct designatio	on	
type	0			
Write value	0			

# Notice If notification bit or notice word is enabled, you can select to write the target coil ON, OFF or the target register to a constant before or after writing. If not enable them, the notification function will not take effect

Security setting

	Sliding input	×
Basic Atti Appear	ar Scale and Notice Security sLocation	^
<ul> <li>Display contro</li> <li>✓ Enable</li> <li>When</li> </ul>	隐藏 >	
Devic	本地设备 v Settin	
Addre	PSB V 0	
Enable	Sta ON v Indirect	
Enable control		
Devic	本地设备 v Settin	
Addre	PSB v 1	
Enable	Sta ON v Indirect	
	rmission after operation	
A prompt	window pops up when the user has no permission range component when the user has no permission scope	
Hide this	component when the user has no permission scope	

display control	Use bit to control whether to display the part, and hide the part when the condition is not met
enable	When checked, display control will be enabled
When validation fails	Set the display of this part when validation fails
device	The equipment port for current communication

address	Set the target coil for bit control							
setting	Click "Setting" to enter the address setting interface, where you can set the use of system							
	registers and user-defined tags. You can click the address tag library or project							
	tree-library-address tag library below to set the used tags (see 5-2 Address tag library for the							
	use of address tag library and user-defined tags)							
	Address							
	Device 本地设备 V Statio 0 n No.							
	Address PSB V User defined label							
	Address 0 System register							
	Address [range: 0 - 9999]							
	format							
	Address Label							
	Determine Cancel Application							
enable state	Set the ON status to be valid or the OFF status to be valid.							
	For example, if the device is checked as shown in the figure above, the bit control is PSB0, the							
	selection is hidden when the verification fails, and the enable status is ON, then when the							
	PSB0 status is ON, the component is normally displayed, and when the PSB0 status is OFF,							
	the component is hidden and not displayed.							
enable control	The bit limit can be set (the enabling state of the enable control can be customized). Only when							
	the enabling conditions are met can the component be used normally (as shown in the figure							
	above: When the PSB1 is in the ON state and the trigger conditions are met, the component							
	can be used; if the PSB1 is in the OFF state, even if the trigger condition is met, the component							
	is still unavailable)							
user permission	Set a controlled permission level. After setting the permission range of the required user, the							
	following two functions can be checked as required:							
	(1) After the operation is completed, the user's permission will be cancelled: If this option is							
	not checked, the corresponding level password will need to be entered each time the							
	component is operated. After checking, only one successful entry is required.							
	(2) When the user has no permission range, a prompt window will pop up.							
	(3) Hide the component when the user has no permission range.							

Refer to chapter 4-2-3 for the use of permission functions.

## Location

Same to location part of chapter 4-1-1 straight line.

## 4-2-18. Drop down menu

Call the pull-down window, click the selected key to set the register value, and close the pull-down window.

1. Click the menu "Parts/Key/Dropdown Menu" or the drop-down menu icon in control window's basic

parts bar ", move the cursor to the screen, click the left mouse button to place, click the right mouse button, or use the ESC key to cancel the placement. Modify the length and width of the component through boundary points.

- 2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click the "drop-down menu" or select the "drop-down menu" and right-click to select "basic attribute" for attribute settings.
- Basic attribute

			Drop-down menu	8	×
. I	Basic AttricAppearan	Notice Security se Lo	ocation		^
	Control ID	DM0			
1	_				
	Description				
- 1	Mode Dr	op-down m <sup>,</sup> v			
- 11	Read address				
	Devic 本地设备	ŧ	✓ Settin	1	
	Addre psw	~ 0			
	Data Word	V Unsignec V			
	type		ndirect		
- 11					
	• Ed	it	0	Command mode	
	Number <sup>3</sup>	V Pop u	ip mcDown 🗸	Label content i	s multilingual
- 11			·		
- 1	Index	corresponding value	label content		Move up
	<b>b</b> 0	0	0		
	1	1	1		Move
	2	2	2		
	3(error)	其他			
ontrol ID	It is used for s	system manager	nent control, and c	annot be operated by	users
escription			he purpose of this		
mode		rop down menu			
		-	ow all the options		
			the options withou	t clicking	
			0	C	
	drop down a		1 2		
	drop down m	enu	4		

list box style

read address	Set the register address and set whether to offset the address (i.e. indirectly specify)
device	Device port currently communicating
address	Set target register number
data type	Byte-8Bit; Word-16Bit; DWord-32Bit; DDWord -64Bit; BCD; Hex; Signed; Unigned;
	Floating number
setting	Click "Settings" to enter the address setting interface. This interface allows you to set and use system registers and user-defined tags. You can click the address tag library or project tree library address tag library below to set the tags used (see 5-2 Address Tag Library for the use of address tag library and user-defined tags)  Address  Address  Statio  User defined label
	type
	Address 0 System register
	数据类型 Word VInsigned V Address format [range:0-9999]
	Address Label
	Determine Cancel Application
indirect	Set the current address offset. The current register address changes as the indirectly specified
designation	register value changes, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). Example: The
edit	current register address is PSW0, if the indirectly specified address is PSW100; When the value of the PSW100 register is 0, the register that controls this component remains PSW0; When the value of the PSW100 register is 1, the register that controls this component is PSW1 (and so on) That is, determine the setting value and text corresponding to each drop-down option through the
	register address
	Edit     Command mode
	Number <sup>3</sup> v Pop up mc Down v Label content is multilingual
	Index     corresponding value     label content       0     0     0       1     1     1       2     2     2       3(error)     其他
number	Set the number of drop-down options (1-255)
pop up mode	Set the pop-up method for drop-down options, which can be selected from up or down. This item
	cannot be set when the above mode is selected as "List Box"
index	The serial number of the drop-down option, which is not displayed in the control when actually used
corresponding	The register setting value corresponding to the current option which is not displayed in the
value	control during actual use
label content	The text description displayed above the option can be modified by double clicking
label content is	selected this item, click the label content, then click the <b>set</b> to set multi-language. Or manage
multilingual	it in the project tree - Library - Label Multilingual - on the left of the project interface (see 5-1 Label Multilingual for specific usage)

	Nun	lumber <sup>3</sup> Y Pop up i		pmcDown 🗸	Label content	is multilingual
		Index	corresponding value	label content		Move up
	*	0	0	0		
		1	1	1		Move
		2	2	2		
		3(error)	其他	in a second s		
move up	Move	the specifie	ed option up			
move down	Move	the specifie	ed option down			
	this ite Read Device	em is only f address 本地设备 e PSW		oses and does not	also become gray ar	nd cannot be set; Note that rating permissions
		〇 Edit Device 5地1	0 <u>6</u>	Comm.	and mode	
		Command	ser list)		~	

Appearance

E	rop-down menu	
Basic Athil Appearant Notice Security si Locati	on	
	Name category Size	menu_01_a avg 16 × 16
Status 0 Arrow Style Status 1 Arrow Style Arrow background		
Color Selected Item Color Background cc	V Border	
Font settings Index labe 0 v Cop	y this property to each	5
Fo 前载雅黑	General v 12 v	

status 0 arrow style	Select the appropriate arrow style in the gallery
status 1 arrow style	Select the appropriate arrow style in the gallery
arrow back ground	Select the appropriate arrow background style in the gallery
color	You can set the color, background color, and border color of the selected item
font settings	"You can set the font, font style, size, font style, color, and display position of the font in the
	control through the number of the drop-down index label (you can click "Copy this property to
	each" to format the font in all states)"

## ■ Notice

I			Drop-	down menu			
	Basic Attril App	earan Notice	Security se Location				
	Error messa	ige					-11
		cation bit					
	• Write	-	C	) Write off			
	Devic	THURLE		✓ Set	tin		
	Addi	e psg	~ 0				
			Indire	ct			
	✓ Notic	e word					
	Devic	本地设备	1140 A.	v Set	tin		
	Addr	e psw	~ 0				
	Data	Word 🗸 (	Insignec 🗸 🗌 Indire	ct			
	type						
	Write	to 0					
I	value						
error messa	_		d, when the value $\frac{1}{2}$			-	
error messa	other n or write not take	umbers that e a constant e effect nbet 5	are not set to 0, 1 to the target regis	1, 22, 33, an ter; If Enabl	ud 4), it will w le is not check	rite ON or OFF t	o the target co on function wi
error messa	other n or write not take	umbers that e a constant e effect nber 5	are not set to 0, 1 to the target regis	1, 22, 33, an ter; If Enabl	ud 4), it will w le is not check	rite ON or OFF t	o the target co on function wi
error messa	other n or write not take	umbers that e a constant e effect nber 5 Index 0	are not set to 0, 1 to the target regis Pop u corresponding value 0	1, 22, 33, an ter; If Enabl p mcDown label conter 0	ud 4), it will w le is not check	rite ON or OFF t	o the target co on function wi
error messa	other n or write not take	umbers that e a constant e effect nber 5 Index 0 1	are not set to 0, 1 to the target regis Pop u corresponding value 0 11	1, 22, 33, an ter; If Enabl p mcDown label conter 0 1	ud 4), it will w le is not check	rite ON or OFF t	o the target co on function wi
error messa	other n or write not take	umbers that e a constant e effect nber 5 Index 0 1 2	are not set to 0, 1 to the target regis Pop u corresponding value 0 11 22	1, 22, 33, an ter; If Enabl p m Down label conter 0 1 2	ud 4), it will w le is not check	rite ON or OFF t	o the target co on function wi is multilingual Move up
error messa	other n or write not take	umbers that e a constant e effect nber 5 Index 0 1 2 3	are not set to 0, 1 to the target regis Pop u corresponding value 0 11 22 33	1, 22, 33, an ter; If Enabl p mc Down label conter 0 1 2 3	ud 4), it will w le is not check	rite ON or OFF t	o the target co on function wi is multilingual Move up
error messa	other n or write not take	umbers that e a constant e effect nber 5 Index 0 1 2	are not set to 0, 1 to the target regis Pop u corresponding value 0 11 22	1, 22, 33, an ter; If Enabl p m Down label conter 0 1 2	ud 4), it will w le is not check	rite ON or OFF t	o the target co on function wi is multilingual Move up

#### Security setting

	Drop-down menu
Basic Attril Appearan	Notice Security se Location
Operation con	firmation delay
Confirm b	before Waiting time second 1
Display contro	1
When	隠蔵~
Devic	本地设备 v Settin
Addre	PSB v 0
Enable	Sta ON v Indirect
Enable control	
Devic	本地设备 v Settin
Addre	PSB v 0
Enable	Sta ON V Indirect
User permissio	on and a second s
Cancel pe	ermission after operation
A prompt	t window pops up when the user has no permission range
☐ Hide this	component when the user has no permission scope
User per range	mission Permission1 v

Same to the security setting part of chapter 4-2-3. numerical input.

#### Location

Same to location part of chapter 4-1-1 straight line.

#### 4-2-19. File browse

Used to display files in the USB drive.

1. Click on the file browsing icon <sup>(2)4303</sup> in the basic components bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button or use the ESC key to cancel the placement. Modify the length and width of the control through boundary points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click "File Browser" or select "File Browser" and right-click to select "Properties" for attribute settings.

Basic property

件浏览							×	
基本属性	外观	安全设置	位置					
控件ID	FBC0							
描述	100000				1			
显示文件类的								
局服	名							
					添加			
					HØR			
				确定	取消	加用		

Control ID	Used for system management controls, user cannot operate.						
Description	Can be used to annotate the purpose of this control.						
Display file	You can click the "Add" button to add the file extension name that needs to be displayed, which						
type	includes but is not limited to PDF, CSV, doc, etc.						
	×						
	请输入要添加后缀:						
	确认取消						
	The left list can display the added suffix names						
	显示文件类型						
	后期名						
	CESV PDF doo						
	戦略余						
	Click the "Delete" button to delete suffix rows that do not need to be displayed in the list						

Appearance

文件浏览 ×	
基本属性 外观 安全设置 位置	
选中项目颜色	
字体     部     電規       酸色     ・     大小     12	
对齐 Middle_Center V	
确定取消且用	
Color The background color of the control and the color of the selected item can be set.	

index label (you can click "Copy this property to each state" to format the font for all states).

Security setting

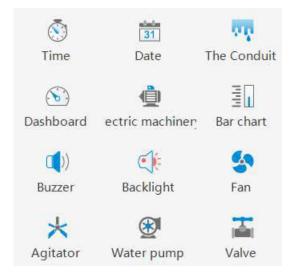
Same as chapter 4-2-3. Numerical input in the safety settings section.

Location

Same as chapter 4-1-1. Straight line location part.

# 4-3. Device

The device bar includes: time, date, pipe, dashboard, motor, bar chart, buzzer, backlight, fan, mixer, water pump, and valve.



## 4-3-1. Time

This control is used to display the current time of the HMI.

- 1. Click the "<sup>()</sup>" time icon in the control window's device bar or menu bar "Parts/Industry/Time", move the cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel the placement. Modify the length and width of the border through boundary points.
- 2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "Time" or select "Time" and then right-click and select "attributes" to set attributes.
- Basic attribute

	Time	×
Basic Att Appe	ara Security Location	
Control ID	TEO	
Description		
Time forma		
○ 12 hour	system <ul> <li>24 hour system</li> </ul>	
	Format HH:MM:SS v	
trol ID It is used	for system management control, and cannot be opera	ited by users
ription Can be u	sed to comment on the purpose of this control	
e format Set the t	me format, including "12 hour system" and "24 hour s	system", with 4 formats

Appearance

\_\_\_\_

				Use pictu	ires	
E			_	Status	0	~
				Name	data_01	
L				catego	<b>ry</b> svg	
2				Size	80 × 25	
	Change appearance			More	pictures	
-	Border					
	Border order style	Pure colo	r	- Border co	blor	~
	order style	Pure colo	r	• Border co	olor	~
В	order style	Pure colo	r v	<ul> <li>Border co</li> <li>General</li> </ul>	7	~

appearance	To set the display appearance, click "Change Appearance" or "More Pictures" to make
	changes
use pictures	Set whether to use pictures
fill	Set the fill color and fill style for the appearance (solid/gradient)
border	Set the fill color and fill style of the border (solid/gradient)
font	Set scale font, color, size, and alignment

Security setting

	Time	×
Basic Att Appeara	Security Location	
Display contro	1	
✓ Enable		
When	隠藏・	
Devic	本地设备 v Settin	
Addre	PSB v 0	
Enable	Sta ON v Indirect	
User permissio	n	
✓ Hide this	component when the user has no permission scope	
User peri range	mission Permission1 v	
– User permissio ☑ Hide this User per	component when the user has no permission scope	

Same to chapter 4-1-1 straight line security setting part.

#### Location

Same to chapter 4-1-1 straight line location part.

#### 4-3-2. Date

This control is used to display the current date (year month day) of the touch screen.

1. Click the date icon in the menu bar "Parts/Industry/Date" or 🛅 in the control window, move the cursor to

the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel the placement. Modify the length and width of the border through boundary points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "Date" or select "Date" and right-click to select "attributes" to set attributes.

Basic attributes

Basic Att Appea	a Security Location	
Control ID	DE0	
Description		
Date format	4-digit year	

v		it is used for system management control, and cannot be operated by users
de	escription	Can be used to comment on the purpose of this control
date	format	set the date format
format	display 4-digit	Set whether to display a 4-digit year
	year	
	show week	Set whether to display the week

Appearance

		Use pictu	res	
		Status	0	~
		Name	data_01	
		catego	rysvg	
		Size	80 × 25	
Ch	ange appearance		Mo	re pictures
✓ Border				
Product da	Pure color	✓ Border c	olor	•
Border style				
Border style				
	×	General 🗸		

change appearance	To set the display appearance, click "Change Appearance" or "More Pictures" to make
	changes
use pictures	Set whether to use pictures
fill	Set the fill color and fill style for the appearance (solid/gradient)
boarder	Set the fill color and fill style of the border (solid/gradient)
font	Set scale font, color, size, and alignment

Security setting

	Date	>
Basic Att Appeara	Security Location	
Display control		
Enable		
When	隐藏 ~	
Devic	本地设备 v Settin	
Addre	PSB v 0	
Enable	Sta ON 🗸 🗌 Indirect	
User permissio	n	
Hide this d	component when the user has no permission scope	
User pern	mission Permission1	

Same to chapter 4-1-1 straight line security setting part.

#### Location

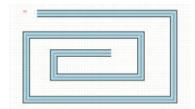
Same to chapter 4-1-1 straight line location part.

#### 4-3-3. Pipe

This control is used to simulate pipe movements in the field control system.

1. Click the pipe icon in the menu bar "Parts/Industry/pipe" or in the control window's device bar, move the cursor to the screen, press the left mouse button at the starting point, drag the cursor to move, and determine the positions of the subsequent end points in turn. When it is the last vertex, double-click the left mouse button to complete the pipe layout, and click the right mouse button or press ESC to cancel placement.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "Pipe" or select "Pipe" and right-click to select "attributes" for attribute settings.



Basic attributes

	The Conduit	×
asic AttricAppearan	Security si Location	^
Control ID	PO	
Description		
Action mode		
Action mode	wing O Bit limited	
	wing 🔿 Bit limited	
<ul> <li>Always flo</li> </ul>	wing O Bit limited	
<ul> <li>Always flo</li> <li>Direction</li> </ul>		
<ul> <li>Always flo</li> <li>Direction</li> <li>Forward</li> </ul>	O Reverse	

control ID	It is used for system management control, and cannot be operated by users
description	Can be used to comment on the purpose of this control
action mode	Set the action mode of the fluid, including always flow and bit limited
always flowing	the fluid will always flow          Action mode            • Always flowing         • Bit limited         Direction            • Forward         • Reverse         Speed            • Constant speed1             • Register assignment
bit limited	When the flow conditions are met, the fluid will flow (as shown in the figure below, when PSB0 is ON, the fluid will flow forward) Action mode Action mode Attion mode Flow conditions ON OFF Reed address Devic #JEX255 Addre pSB O Indirect Direction Forward Reverse Speed Constant speed Register assignment
device	Device port currently communicating
address	Set target coil number

setting	and use sy project tree	stem registers a e - library - add	nd user-define lress tag libra	ting interface. This interface d tags. You can click the add any below to set the tags used rary and user-defined tags)	ress tag library or
			Address	×	
	Device	本地设备		✓ Statio 0	
	Address type	PSB	~	User defined label	
	Address	0		System register	
	Address format	[range : 0 - 9999]			
			Determi	Address Label	
Indirect designation	specified re The curren the value o When the (and so on)	egister value, th nt coil address is of the PSW100 value of the PS )	hat is, Dx [Dy] s PSB0, if the register is 0, th W100 register	rent coil address changes w =D $[x+Dy value]$ (x, y=0, 1, indirectly specified address is e coil that controls this eleme is 1, the coil that controls this	2, 3). Example: s PSW100; When ont remains PSB0; s element is PSB1
flow condition				ON or OFF (only available wh	
read address		ntrolled coil ad		whether there is an offset (th	nis option is only
direction	Set the flow	w direction of th	ne fluid, includi	ing forward and reverse direct	ions
speed	control the (When the	speed.	e register is "0,	nanually set a constant speed , flow at the lowest speed of	-

#### ■ Appearance

	The Conduit	×
Basic Attril AppearancSecurity se Loca	tion	
	The Conduit Height Border 20 💭 Backgrou 20 V Border V	

the	height	Set the height of the pipe
conduit	border (%)	Set the border width ratio of the pipe
	background	Set the background color of the pipe
	border	Set the color of the pipe periphery
slider	style	Set the style of the slider, including rectangles and arrows
	width	Set the width of the slider
	height	Set the height of the slider
	space	Set the interval of the slider
	state	Set the slider in two states: ON or OFF
	background	Set the color of the slider in both ON/OFF states

# =(height\*border width%) / 2.

Security setting

The Conduit	×
Security se Location	^
隐藏 >	
本地设备 v Settin	
PSB V 0	
Sta ON 🗸 🗌 Indirect	
n	
component when the user has no permission scope	
nission Permission1 v	
	Security se Location 隐藏 ~ 本地设备 ~ Settin PSB ~ 0 Sta ON ~ Indirect n component when the user has no permission scope

Same to chapter 4-1-1 straight line security setting part.

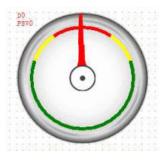
Location

Same to chapter 4-1-1 straight line location part.

### 4-3-4. Dashboard

This control is used to display the meter.

Click the dashboard icon in the menu bar "Parts/Industry/Dashboard" or Sin the device bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel the placement. Modify the length and width of the border through boundary points.
 When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click "Dashboard" or select "Dashboard" and right-click to select "attributes" to set attributes.



			Contraction of the second seco	hboard		
asic Attrib	range App	pearan Securit	y se Locatio	n		
Control	ID D0					
Descrip	tion					í l
Descrip	uon					
	\$1066 D-009					
Read add	dress					
Read add	dress 本地设备		A.V. 528	*	Settin	
	本地设备	v	0	~	Settin	
Devic	本地设备		0		Settin	

contr	ol ID	It is used for system management control, and cannot be operated by users								
descr	iption	Can be used to comment on the purpose of this control								
read	device	Select the	Select the device port currently communicating with Click "Setting" to enter the address setting interface. This interface allows you to set and							
address	setting	Click "Set								
		use syster	use system registers and user-defined tags. You can click the address tag library or							
		project tre	e – library	- address t	ag library be	low to se	et the tags used (see 5-2 A	Address		
		Tag Libra	ry for the us	e of addres	s tag library a	and user-	defined tags)			
					Address		×			
		Device	本地设备			→ St	atio No.			
		Address type	PSW		~		User defined label			
		Address	0	)		System register				
		数据类型	Word ~	Unsigned	~					
		Address format								
						1	Address Label			
					Determine	Cancel	Application			
	address		Set the monitoring address of the instrument, and set whether to offset the address (i.e indirectly specify)							
	data type	Byte-8Bit	; Word-16B	Bit; DWord	- 32Bit; DDV	Word -64	Bit; BCD; Hex format; S	Signed;		
		Unigned;	Floating r					-		
	indirect	Set the cu	urrent addre	ess offset.	The current r	egister a	ddress changes as the ind	directly		
	specify	specified	register valı	ue changes	, that is, Dx	[Dy]=D	[x+Dy value] (x, y=0, 1,	2, 3).		
		Example:	The current	t register a	ddress is PS	W0, if t	ne indirectly specified add	dress is		

	PSW100; When the value of the PSW100 register is 0, the register that controls this
	component remains PSW0; When the value of the PSW100 register is 1, the register that
	controls this component is PSW1 (and so on)

# Range

	1	Dashboard		×
Basic Attril range Appear	an Security si Loca	ation		
Range				
Maximum ra 1	00	Minimum rang 0		
Use F	PSWO	Use		
Display color:	~	Fan ring width	÷	
Fan ring radit <sup>50</sup>	÷			
Alarm interval				
Upper limit of al	80	Lower limit of all 20	T	
Use	PSW0	Use		
Upper limit color	~			
Color beyond lo	~			
✓ Danger zone				
Upper hazard vi	90	The following he 10		
Use	PSW0	Use		
Display color:	~			

ran	nge	max range	Set the maximum value of the instrument. You can set a constant or choose to use
			register control
		min range	Set the minimum value of the instrument. You can set a constant or choose to use
			register control
		display color	Set the display color of the meter
		fan ring width	Set the fan ring width for the meter display
		fan ring radius	Set the fan ring radius for the instrument display
alarm		upper limit of	Set the maximum alarm value of the instrument. You can set a constant or choose
interv	al	alarm	to use register control
		lower limit of	Set the minimum alarm value of the instrument. You can set a constant or choose to
		alarm	use register control
		upper limit	Set the color exceeding the upper limit, which will be displayed when the reading
		color	value of the instrument exceeds the upper limit value
		color beyond	Set the color exceeding the lower limit, which will be displayed when the reading
		lower limit	value of the instrument exceeds the lower limit value
dan	nger	upper hazard	Set the maximum dangerous value of the instrument. You can set a constant or
ZO	ne	value	choose to use register control
		lower hazard	Set the minimum dangerous value of the instrument, which can be set as a constant

value	or controlled by registers
display color	Set the color of the danger range, and display the set color when the reading value
	of the instrument register is within the danger range

The range of the danger zone should be greater than or equal to the range of the alarm zone. If equal, the color displays the color of the danger zone.

Appearance

		Dashboard	
sic Attril range App	pearancSecurity se Lo	cation	
		Dial style:	~
(( 💿		Directio () Clockwise	Anti-clockwise
	/ [4]	Starting ang <sup>0</sup>	٢
		End angle: 360	•
		Transparei	100
		Syncopation dial	_
Needle style			
Needle style		V Interior color:	Y
Axis Pivot style:	0	Interior color:	<b>•</b>
	0 -	Interior color:	<b>v</b>
Pivot style:	0 -		
Pivot style:	Cale positi Outside		<b>v</b>
Pivot style:			▼ ▼
Pivot style:	•	✓ Scale color	
Pivot style:	•	<ul> <li>✓ Scale color</li> <li>Major scale lenç7</li> </ul>	
Pivot style:	\$ \$	<ul> <li>✓ Scale color</li> <li>Major scale lenç7</li> </ul>	¢

dial style	You can select a dial style in the drop-down box
direction	Set the direction indicated by the needle, clockwise or counterclockwise
starting angle	Set the starting angle of the meter $(0^{\circ}-359^{\circ})$
end angle	Set the ending angle of the meter $(0^{\circ}-360^{\circ})$
transparency	Set the transparency of the dial. (Tick off the syncopation dial to set the
	transparency.) You can complete the setting by sliding the slider. The closer the
	slider is to the left, the smaller the value, and the more transparent the component
syncopation dial	It is possible to cut off the dial that is not in the starting and ending angles

needle	needle style	You can select a needle style in the drop-down box				
style	interior color	Set the internal color of the needle				
axis	pivot style	You can select a pivot style in the drop-down box				
	interior color	Set the interior color of the pivot				
	external color	Set the outer frame color of the pivot				
scale	display scale	Check to set whether to display the scale (if you check not to display the scale, the				
		mark set below will not be displayed either)				
	scale position	Set the position of the scale, including inside, outside, and center				
	scale color	Set the color of the scale				
	main scale	Set the number of divisions for the main scale				
	division					
	main scale	set the main scale length				
	length					
	subscale	Set the number of divisions for the subscale				
	division					
	subscale length	set the subscale length				
sign	no display	When checked, no numbers or percentages will be displayed on the instrument				
	display number	When checked, the number is displayed on the instrument				
	display	When checked, the percentage is displayed on the instrument				
	percentage					
	integer position	Set the integer digits of the display number (valid when marked as "Display				
		Number" or "Display Percentage")				
	decimal position	Set the decimal places for displaying numbers (valid when marked with "Display				
		Numbers" or "Display Percentage")				
	font	Set the font, color, and size of the displayed numbers (valid when marked as				
		"Display Numbers" or "Display Percentage")				

Security setting

		Dashboard	×
Basic Attril	range	Appearan Security se Location	^
	y contro nable	ol	
Whe	en	隠蔵 ~	
	Devic	本地设备 v Settin	
	Addre	PSB 🗸 0	
– User p	Enable	e Sta ON v Indirect	
	lide this	s component when the user has no permission scope	
V H			
	lide this	s component when the user has no permission scope	

Same to chapter 4-1-1 straight line security setting part.

Location

Same to chapter 4-1-1 straight line location part.

#### 4-3-5. Electric machinery

This control can be used to simulate the operation process of the motor. When the controlled coil reaches the specified state, the motor can display the corresponding state.

1. Click the icon in the menu bar "Parts/Industry/Motors" or 💷 in the control window's device bar, move the

cursor to the screen, click the left mouse button to place, click the right mouse button, or use the ESC key to cancel the placement. Modify the length and width of the border through boundary points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "Motor" or select "Motor" and right-click to select "attributes" for attribute settings.



			Ele	ctric machinery
asic Att	Appeara	Security L	ocation	
Contro	ID N	0		
Descrip	tion			
Read ad	ldress			
Devic	本地设备	i i		✓ Settin
Addre	PSB		~ 0	
			🗌 Ind	lirect
logic				
Posi	tive logi	c		O Negative logic
✓ Flas	h			
• On	stat <mark>u</mark> s fla	shes		○ Off status flashes
				Flicker frequ 0.1 🕸 🗸

control ID	It is used for system management control, and cannot be operated by users
description	Can be used to comment on the purpose of this control
read address	Set the coil address of the control motor and set whether there is an offset (i.e. indirectly
	specified)
device	Select the device port currently communicating with
setting	Click "Settings" to enter the address setting interface. This interface allows you to set and use
	system registers and user-defined tags. You can click the address tag library or project tree -
	library - address tag library below to set the tags used (see 5-2 Address Tag Library for the use

	of address							
			Addre	SS		×		
	Device	本地设备			~ Si	atio 0 No.		
	Address type	PSB	*			User defined label		
	Address	0				System register		
	Address format	[range : 0 - 9999]						
						Address Label		
			Det	ermine	Cancel	Application		
	Set the messecified)	e	ress of the mo	otor and se	t whe	ther the addres	s is offset (i.e. indirectly	
				•		•	as the indirectly specified	
	register value changes, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). Example: The							
		e	-		•		s is PSW100; When the	
	value of t	he PSW100 re	egister is 0, t	he register	that o	controls this co	mponent remains PSW0;	
	When the	value of the P	SW100 regist	ter is 1, the	regis	ter that controls	this component is PSW1	
	(and so on	ι)						
logic	Select pos	itive or negativ	ve logic when	displaying	moto	or status		
flash	Select wh	ether to blink	and whether	to blink in	a cer	tain state, such	as ON state flashing and	
	OFF state	flashing						
flicker frequency	Set the fre	equency of blin	king					

# ■ Appearance

9	🕑 Use pictu	res	
	Status	0	~
	Name	motor_03_a	
	categor	rysvg	
	Size	100 × 100	

change appearance	Set display appearance
use pictures	Set whether to use pictures.
	You can set the appearance of clicking in two states: (0, 1). After selecting the state in
	the upper right corner, click "Change Appearance" or click "More Pictures" to select
	custom images to change the appearance
border	Set border style and color

Security setting

		Electric machin	icity		
ic Atl Appeara S	ecurity Locatio	no			
Display control					
✓ Enable					
When	隐藏	~			
Devic	本地设备		~	Settin	
Addre	PSB	~ 0			
Enable S	ta ON 🗸 🗸	🗌 Indirect			
User permission	1				
Hide this c	omponent whe	en the user has no p	ermiss	sion scope	
User perm range	ission Perm	iission1	*		

Same to chapter 4-1-1 straight line security setting part.

#### Location

Same to chapter 4-1-1 straight line location part.

#### 4-3-6. Bar chart

This control is used to achieve the target object data value, represented by a bar graph, and is more direct. It is usually applied to analog quantities such as pressure changes, liquid level changes, and temperature changes, and can directly reflect the relationship between the current value and the full scale value:

Click the bar graph icon in the menu bar "Parts/Industry/Bar chart" or in the device bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel the placement. Modify the length and width of the border through boundary points.
 When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click on "Bar Chart" or select "Bar Chart" and right-click to select "Attributes" for attribute settings.

asic Attrib	ppearan	range \$	Scale a	and Securit	ty se Locati	ion	
Control	ID BC	0					
Descrip	tion						
Descrip							
Read ad Devic	dress	÷			~	Settin	
Read ad	dress 本地设备	-	~	0	~	Settin	

contro	ol ID	It is used for system management control, an	d cannot be operated by users
descri	ption	Can be used to comment on the purpose of the	nis control
read	device	Select the device port currently communication	ing with
address	setting	Click "Settings" to enter the address setting a	interface. This interface allows you to set and
		use system registers and user-defined tags. Y	You can click the address tag library or project
		tree - library - address tag library below to s	et the tags used (see 5-2 Address Tag Library
		for the use of address tag library and user-de	fined tags)
		Address	×
		Device 本地设备	✓ Statio n No. 0
		Address type PSW V	User defined label
		Address 0	System register
		数据类型 Word v Unsigned v	
		Address [range : 0 - 9999]	
		format	
			Address Label
		Determine	e Cancel Application
	address	Set the monitoring address of the bar grap	h and set whether to offset the address (i.e.
		indirectly specify)	
	data type	Byte-8Bit; Word-16Bit; DWord- 32Bit; I	DDWord -64Bit; BCD code; Hex format;
		Signed; Unigned; Floating number	
	indirect	Set the current address offset. The curren	t register address changes as the indirectly
	specify		x [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3).
			PSW0, if the indirectly specified address is
			register is 0, the register that controls this
			of the PSW100 register is 1, the register that
		controls this component is PSW1 (and so on)	)

■ Appearance

		Bar chart		×
Basic Attril Appearance ra	ange  Scale and Se	curity se Location		
		Appearance StraightBar Direction Show up Show down Show Left Show Right	A sector	
Style		1		
Bar chart style:	自定义	~		
✓ Border		~		
☑ Backgroun d		~		
Fill				
Fill color:	~			
Pattern filling				
Style:		Foregrou nd color:	~	

apj	pearance	Select the appearance of the bar graph, and you can choose between straight bars or				
		sectors				
str	aightbar	The style of a regular bar chart				
di	irection	Set the bar graph indication direction, including up, down, left, and right display				
a sector		Displayed as a fan, starting angle and coverage angle can be set				
proportion of	of inner and outer					
	rings					
		proportion: 1 50 100				
di	irection	Set the fan indication direction, clockwise or counterclockwise				
style	bar chart style	Select the bar chart style in the drop-down box				
	border	Set the border color of the bar chart				
	background	Set the background color of the bar chart				
fill	fill color	Choose a fill color				
	pattery filling	Set a fill style, and set the foreground color				
	gradual	Choose whether to gradient fill, set the gradient style, foreground color, and				
		transparency (you can set the transparency by sliding the slider. The closer the				
		slider is to the left, the lower the transparency value, and the more transparent the				
		foreground color is)				

✓ Gradual Style: From left to right ✓ Foregrou
Transparency: 39
Using a gradient from left to right as an example to set transparency (0-255)
ECO ECI
P292
transparency: 0 255

Range

	Bar chart	>
Basic Attril Appearan	range Scale and Security se Location	
range		
Maximum:	100 Register	
Minimum:	0 Register	
Target interval		
Target value:	50 Register	
Error range (±)	10 Register	
Target interval	×	
Alarm range		
Alarm upper limit:	90 Register	
Alarm lower limit:	10 Register	
Exceed the upper	limit	
Fill color:		
Exceeding the low	er limit	
	×	

	range	Set the display range of the bar graph
	max	Set the max value of the bar graph, which can be specified by setting a register
	min	Set the min value of the bar graph, which can be specified by setting a register
target	target value	Set the target value, and display the set color when the value is within the target
interval		value +/- allowable error
	error range	Used to determine the target range
	target interval	Set target interval color
	color	
alarm	alarm upper	Set the maximum alarm value of the bar graph, which can be specified by setting a
range	limit	register

	alarm lower	Set the minimum alarm value of the bar graph, which can be specified by setting a
	limit	register
	color	Set the lower alarm range liquid color
exceed the	fill color	Set the color of liquids exceeding the upper limit
upper limit		
exceed the	fill color	Set the color of liquids exceeding the lower limit
lower limit		

■ Scale and mark

				Bar chart				×
Basic A	ttril Appearan	range S	cale and Sec	urity se Location				
Vs	icale							
Sc	ale position:	④外	Or	1				
Ma	in graving	12		or scale	12	]		
Se	condary graving	5	Sut	gth:	5	1		
Scale	e style							
colo			Sca style	e mark		• •		
Sca widt	le mark h		- v					
Numb	1993 ( 19							
Integ	er bits:		Decimal places:	0				
Fo	微软雅黑		~	General	~			
Fo	微软雅黑	~	∨ Size		*			
Co	微软雅黑	- hereit	Size		> >			
Co		- hereit	v Size v		>			
Co Di	splay percent	- hereit	v Size v Size	12 General				
Co Di Fo	splay percent	age	~	12 General				

	scale	Set whether to display the scale and select a scale style
scale position		Set the position of the scale, including inside and outside
main	engraving	Set the number of divisions for the main scale
major	scale length	set the main scale length
secondary engraving		Set the number of divisions for the sub scale
subscale length		set the subscale length
sca	ale style	Set the color, style, and width of the scale
number	display	Choose whether to display numbers on the bar graph and set the font, size, and
		alignment for display
	display	Choose whether to display percentages on the bar graph and set the font, size, and
	percentage	alignment to display
axis	show axis	Set whether to display the axis line at the bottom of the scale

Security setting

Basic Attril Appearan range Scale and Security se Location Display control	
When 隐藏 V	
Devic 本地设备 v Settin Addre pSB v 0	
Enable Sta ON V Indirect	
User permission Hide this component when the user has no permission scope	
User permission Permission v range	

Same to chapter 4-1-1 straight line security setting part.

Location

Same to chapter 4-1-1 straight line location part.

#### 4-3-7. Buzzer

When the specified coil is triggered or the specified conditions are met, the buzzer emits a sound. This component is invisible and is not visible when downloaded to the HMI.

1. Click the buzzer icon in the menu bar "Parts/Industry/Buzzer" or in the device bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel the placement.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click "Buzzer" or select "Buzzer" and right-click to select "attributes" to set attributes.

		Sound		×
Basic AttribSec	urity se Location			
Contro	DID BUO			
Descri	ption			
Enabling	conditions Word	0 b	it	
Read add	Iress			
Devic ;	本地设备	~	Settin	
Addre	PSW	~ 0		
	Word V Unsigned	V Indirect		
type				
Trigger	conditions Y	0		
Ring mod	le			
			Jous sound	

cor	trol ID	It is used for system management control, and cannot be operated by users
description		Can be used to comment on the purpose of this control
enabling	g conditions	Set the enabling condition to "word" or "bit"
read enabling address condition word		Enabling conditions ● Word
	enabling condition is bit	Enabling conditions
	device	Select the device port currently communicating with
	setting	Click "Settings" to enter the address setting interface. This interface allows you to set and use system registers and user-defined tags. You can click the address tag library or project tree - library - address tag library below to set the tags used (see 5-2 Address Tag Library for the use of address tag library and user-defined tags)

					Address		×
		Device 本地设备			~	Statio 0	
		Address type	PSW		~		User defined label
		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	0			System register	
		数据类型	Word v	Unsigned	*		
		Address format	[range : 0 - 9999]				
			Address Label				
			Determine Cancel Application				Application
	address	Set the object address of the buzzer and whether it is offset (i.e. indirectly specified				set (i.e. indirectly specified)	
	data type	Byte-8Bit; Word-16Bit; DWord- 32Bit; DDWord -64Bit; BCD code; Hex; Signed; Unigned; Floating number					
	indirect	Set the current address offset. The current register address changes as the indire				ess changes as the indirectly	
	specify	specified re	egister value	changes, th	at is, Dx [	[Dy]=D [x+	Dy value] (x, y=0, 1, 2, 3).
		Example: The current register address is PSW0, if the indirectly specified address is					
		PSW100; When the value of the PSW100 register is 0, the register that controls this					
		component remains PSW0; When the value of the PSW100 register is 1, the register					
		that controls this component is PSW1 (and so on)					
trigger	condition	If the enabling condition is "Word", the setting that meets the conditions					
		">,<,=,!=,>=,<=a certain value" is valid; If the enabling condition is "bit", setting					
		"OFF" or "	ON" is valid				
ring mode	make a sound	When the c	conditions are	e met, only	one sound	l is made	
	continuous	Keep ringing	ng when cond	ditions are r	net		
	sound						

Security setting 

	Sound
E	Basic Attril Security se Location
- 1	Enable control
	Devic 本地设备 v Settin
	Addre pSB v 0
	Enable Sta ON V Indirect
enable	The bit limit can be set (the enabling state of the enabling control can be customized). Only when
	the enabling conditions are met can the component be used normally (as shown in the figure
	above: When PSB0 is in the ON state and the trigger conditions are met, the component can be
	used; if PSB0 is in the OFF state, even if the trigger condition is met, the component is still
	unavailable)

Location 

same to chapter 4-1-1 straight line location part. (It is not allowed to modify the size and move horizontally and vertically)

### 4-3-8. Backlight

This control is used to determine whether to display the backlight. When the backlight control coil is triggered, the screen backlight is turned on, which means exiting the screen saver black screen. If the screen saver is not entered or set to display the screen, this function is invalid. This component is invisible and is not visible when downloaded to the HMI.

1. Click the backlight icon in the menu bar "Parts/Industry/Backlight" or 💷 in the control window's device

bar, move the cursor to the screen, click the left mouse button, click the right mouse button, or use the ESC key to cancel placement.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click "Backlight" or select "Backlight" and right-click to select "attributes" to set attributes.

			Backlight		×
Basic AttribSe	curity se Lo	ocation			^
Cont	rol ID	BLO			
Desci	ription				
Enabling	g conditio				
	• w	ord	⊖ bi	t	
Read ad	dress				
Devic	本地设备	ŧ.	~	Settin	
Addre	PSW	~	0		
Data type	Word	✓ Unsignec ✓	Indirect		
965					
Trigger	conditio	ons v	0		
	condition	ons Y	0		

control ID	It is used for system management control, and cannot be operated by	users			
description	Can be used to comment on the purpose of this control				
enabling conditions	Set the enabling condition to "word" or "bit"				
enabling condition is word	Enabling conditions ● Word				

enabling condition is bit		Enabling conditions O Word				
		Read address				
		Devic 本地设备 v Settin				
		Addre pSB v 0				
		□ Indirect				
read	device	Select the device port currently communicating with				
address	setting	Click "Settings" to enter the address setting interface. This interface allows you to set				
		and use system registers and user-defined tags. You can click the address tag library				
		or project tree - library - address tag library below to set the tags used (see 5-2				
		Address Tag Library for the use of address tag library and user-defined tags)				
		Address				
		Device 本地设备 V Statio 0 n No.				
		Address PSB V User defined label				
		Address 0 System register				
		Address [range : 0 - 9999]				
		format				
		Address Label				
		Determine Cancel Application				
	address	Set the object address of the control backlight and whether it is offset (i.e. indirectly				
		specified)				
	data type	Byte-8Bit; Word-16Bit; DWord- 32Bit; DDWord -64Bit; BCD code; Hex format;				
		Signed; Unigned; Floating number				
indirect specify		Set the current address offset. The current register address changes as the indirectly				
		specified register value changes, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3).				
		Example: The current register address is PSW0, if the indirectly specified address is				
		PSW100; When the value of the PSW100 register is 0, the register that controls this				
		component remains PSW0; When the value of the PSW100 register is 1, the register				
		that controls this component is PSW1 (and so on)				
trigger	condition	If the enabling condition is "Word", the setting that meets the conditions				
		">,<,=,!=,>=,<=a certain value" is valid; If the enabling condition is "bit", setting				
	1	"OFF" or "ON" is valid				
backli	ght action	Set the backlight actions, including turning off and waking up				

Security setting

		klight	×
Basic Attril Security s	e Location		
Enable contro	1		
Devic	本地设备	✓ Settin	
Addre	PSB v 0		
Enable	Sta ON V	ndirect	

nable control	The bit limit can be set (the enabling state of the enabling control can be customized). Only when
	the enabling conditions are met can the component be used normally (as shown in the figure
	above: When PSB0 is in the ON state and the trigger conditions are met, the component can be
	used; if PSB0 is in the OFF state, even if the trigger condition is met, the component is still
	unavailable)

#### Location

Same to chapter 4-1-1 straight line location part (It is not allowed to modify the size and move horizontally and vertically)

#### 4-3-9. Fan

1. Click the fan icon in the menu bar "Parts/Industry/Fan" or 🥙 in the device bar of the control window,

move the cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel the placement. Modify the length and width of the border through boundary points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "Fan" or select "Fan" and right-click to select "attribute" for attribute settings.



	Fan	
asic AttritApp	earan Security se Location	
Contre	ol ID FA0	
Descri	iption	1
Action m	ode	
0	Keep rotating       Ontrolled by register	
Enabling	g conditions ● Word ○ bit	
Read ad		
Devic	本地设备 v Settin	
Addre	- 0	
Data type	Word V Unsigner V	
Trigger	conditions V 0	
Direction	of rotation	
۲	Forward O Reverse	
Rotation	al speed	
۲	Constant (%) 10 ~	
0	Controlled by register	

control ID	It is used for system management control, and cannot be operated by users					
description	Can be used to comment on the purpose of this control					
action mode	Set the action mode of the fan, including keep rotating and controlled by register					
keep rotating	Set the action mode of the fan to always rotate					
controlled by	bet the action mode of the fan to be controlled by the register					
register	Action mode					
enabling condition	Set the enabling condition of the fan to word or bit					
read address	Set the coil address of the control fan and set whether there is an offset (i.e., indirectly specified)					
device	Select the device port currently communicating with					
setting	Click "Settings" to enter the address setting interface. This interface allows you to set and use					
	system registers and user-defined tags. You can click the address tag library or project tree -					
	library - address tag library below to set the tags used (see 5-2 Address Tag Library for the					
	use of address tag library and user-defined tags)					

		Addre	ess	×	
	Device 本地设计 Address type 0 Address 0 数据类型 Word Address [range	¥ ✓ Unsigned ✓ : 0 - 9999]	v	Statio n No. User defined label System register Address Label	
	Set the monit specify)	oring address of	the fan and	set whether to	offset the address (i.e. indirectly
data type	Byte-8Bit; W	ord-16Bit; DWord	d- 32Bit; DE	Word -64Bit;	BCD code; Hex format; Signed;
	Unigned; F	loating number			
				-	changes as the indirectly specified
	•				(x, y=0, 1, 2, 3). Example: The
	-				ed address is PSW100; When the
		•			s this component remains PSW0;
			00 register is	1, the register	r that controls this component is
	PSW1 (and so	,			
		by Register" is se			
		-		•	nin conditions >,<,<=,>=,==, $!= a$
			-		ng "OFF" or "ON" is valid;
			of the fan,	including for	rward (clockwise) and reverse
		wise) directions			
-		-			onstant, or set a register to control
	-	-	•	is 10, flow at th	ne lowest speed of 10, when set to
	100, flow at th	ne highest speed of	f 100)		

Appearance

		✓ Use pictu	res	
		Status	0	~
		Name	fan_05_a	
		catego	<b>ry</b> svg	
		Size	100 × 100	
Cha	nge appearance		More	pictures

 change appearance
 Set display appearance

 use pictures
 Set whether to use pictures.

 You can set the appearance of clicking in three states (0, 1, 2). After selecting the state in the upper right corner, click "Change Appearance" or click "More Pictures" to select custom

	images to change the appearance
fill	Set the fill style (solid/gradient) and fill color
border	Set border style (solid/gradient) and border color

■ Security setting

		Fan			×
asic Attril Appearan	Security se Locatio	n			
Display contro	1				
When	隐藏	~			
Devic	本地设备		~	Settin	
Addre	PSB	~ 0			
Enable			t		
User permissio	20				
User permission		en the user has no	permiss	sion scope	

same to chapter 4-1-1 straight line security setting part.

Location

Same to chapter 4-1-1 straight line location part.

#### 4-3-10. Agitator

1. Click the agitator icon in the menu bar "Parts/Industrial/Agitator" or 📩 in the control window's device bar,

move the cursor to the screen, click the left mouse button to place, click the right mouse button, or press ESC to cancel placement. Modify the length and width of the border through boundary points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click "agitator" or select "agitator" and right-click to select "attributes" to set attributes.



				Agitator		×
	В	asic Att Appeara	Security Locatio	or		^
		Control ID	RA0			
	_		The second secon			
	_	Description			1	
		Read address		1		
	_	Devic 本地设 Addre PSB		✓ Setti	n	
	_	Addre PSB	~			
	_			Indirect		
		logic				
		Posit	tive logic	O Negative logi	c	
		Direction of ro	otation			
		Forw	vard			
		Rotation speed	d			- 1
	_	Cons	stant (%)	10 ~		
	_	⊖ Cont	trolled by registe	er		
						- 11
cor	ntrol ID	It is used for	or system man	agement control, and	l cannot be operated l	by users
des	cription	Can be used	d to comment	on the purpose of the	is control	
read	device	Select the d	levice port cui	rrently communicatir	ig with	
address	setting	Click "Setti	ings" to enter	the address setting	interface. This interf	ace allows you to set and
		use system	registers and	d user-defined tags.	You can click the a	ddress tag library or the
			-		-	sed (see 5-2 Address Tag
			-	ddress tag library be dress tag library and t	-	sed (see 5-2 Address Tag
			-		-	sed (see 5-2 Address Tag
			the use of add	dress tag library and	user-defined tags)	
		Library for Device	the use of add	dress tag library and	-	
		Library for Device 2 Address type	the use of add 本地设备 PSB	dress tag library and	Statio 0 n No.	d label
		Library for Device 2 Address 1 Address 2	the use of add 本地设备 PSB 0	Address	v Statio 0	d label
		Library for Device 2 Address 1 Address 2	the use of add 本地设备 PSB	Address	Statio 0 n No.	d label
		Library for Device 2 Address 1 Address 0 Address 0	the use of add 本地设备 PSB 0	Address	Statio 0 n No.	d label
		Library for Device 2 Address 1 Address 0 Address 0	the use of add 本地设备 PSB 0	Address	Statio 0 n No.	d label
		Library for Device 2 Address 1 Address 0 Address 0	the use of add 本地设备 PSB 0	Address	Statio 0 n No.	d label ster
		Library for Device 2 Address 1 Address 0 Address 0	the use of add 本地设备 PSB 0	Address	user-defined tags)    Statio	d label ster
		Library for Device 2 Address 1 Address 0 Address 0	the use of add 本地设备 PSB 0	Address	user-defined tags)	d label ster
	oddesse	Library for Device Address type Address format	the use of add 本地设备 PSB 0 [range : 0 - 9999	dress tag library and p Address	Address Labe Cancel Applic	d label ster el
	address	Library for Device 2 Address 1 Address 6 Address 6 Address 6 Format	the use of add 本地设备 PSB 0 [range:0-9999 address that	dress tag library and p Address	Address Labe Cancel Applic	d label ster
		Library for Device Address type Address format Set the coil (i.e. indirect	the use of add 本地设备 PSB 0 [range : 0 - 9999 address that tly specified)	dress tag library and p Address	Address Labe Cancel Applic	A label ster el ation whether there is an offset
	indirect	Library for Device 2 Address 1 Address 6 Address 6 Address 6 Format 2 Set the coil (i.e. indirect Set the curre	the use of add 本地设备 PSB 0 [range : 0 - 9999 [range : 0 - 9999 address that tly specified) rent address of	dress tag library and a Address	Address Labo Cancel Applic	d label ster el ation whether there is an offset as the indirectly specified
		Library for Device Address type Address format Set the coil (i.e. indirect Set the curregister value	the use of add 本地设备 PSB 0 [range:0-9999 [range:0-9999 address that tly specified]) rent address of ue changes, t	dress tag library and p Address	Address Labe Cancel Applic f the agitator, and set ister address changes x+Dy value] (x, y=0.	whether there is an offset as the indirectly specified 1, 2, 3). Example: The
	indirect	Library for Device 2 Address 1 Address 6 Address 6 Address 6 Address 6 Set the coil (i.e. indirect Set the curror register value current regi	the use of add 本地设备 PSB 0 [range:0-9999 [range:0-9999 address that tly specified) rent address of ue changes, t ister address	dress tag library and the Address	Address Labo Cancel Applic f the agitator, and set ister address changes x+Dy value] (x, y=0, rectly specified addre	whether there is an offset as the indirectly specified 1, 2, 3). Example: The ess is PSW100; When the
	indirect	Library for Device Address type Address format Set the coil (i.e. indirect Set the curror register value current regi value of the	the use of add 本地设备 PSB 0 [range : 0 - 9999 [range : 0 - 9999 [range : 0 - 9999 address that tly specified]) rent address of ue changes, t ister address i	dress tag library and the Address Address Determine Determine Controls the action of ffset. The current reg hat is, Dx [Dy]=D [ris PSW0, if the indigister is 0, the register is 0, the	Address Labe Cancel Applic f the agitator, and set ister address changes x+Dy value] (x, y=0, rectly specified addre	whether there is an offset as the indirectly specified 1, 2, 3). Example: The

logic	Select the agitator action state as positive logic or negative logic;					
Positive logic: Start action when the set coil is in the ON state; Negative logic: Start a						
	when the set coil is in the OFF state					
direction of rotation	Set the rotation direction of the mixer, including forward (clockwise) and reverse					
	(counterclockwise) directions					
rotation speed	Set the rotation speed of the agitator, which can be set as a constant, or set a register to					
	control the speed (when the speed set in the register is 10, flow at the lowest speed of 10,					
	when set to 100, flow at the highest speed of 100)					

# Appearance

	Agitator			×
Basic Att Appeara Security Location				^
1	✓ Use pictu	res		
ų,	Status	0	~	
	Name	agitator_04_a		
5xc	catego	rysvg		
	Size	90 × 180		
Bol Change appearance	Border		~	

change appearance	set the display appearance		
use pictures	Set whether to use pictures		
You can set the appearance of clicking in three states $(0, 1, 2)$ . After selecting the state in			
upper right corner, click "Change Appearance" or click "More Pictures" to select cu			
	images to change the appearance;		
border	Set border style and color		

Security setting

	Agitator	×
asic Att Appeara	Security Location	^
— D <mark>is</mark> play contro ☑ Enable When	pl 隐藏 V	
Devic Addre Enable	本地设备 v Settin PSB v 0 Sta ON v Indirect	
<ul> <li>User permissi</li> <li>✓ Hide this</li> <li>User per range</li> </ul>	component when the user has no permission scope	

same to chapter 4-1-1 straight line security setting part.

Location

Same to chapter 4-1-1 straight line location part.

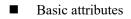
#### 4-3-11. Water pump

This control is used to simulate the operation process of the on-site water pump. When the target coil reaches the specified state, the water pump starts to operate.

1. Click the water pump icon in the menu bar "Parts/Industry/Water Pump" or *in the control window's* equipment bar, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel placement. Modify the length and width of the border through boundary points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "Water Pump" or select "Water Pump" and right-click to select "attributes" for attribute settings.





		Water pump	×
sic Att A	ppeara Security Location		^
Cont	rol ID WP0		
Desc	ription		
Read ad	ldress		
Devic	本地设备	<ul> <li>✓ Settin</li> </ul>	
Addre	PSB v C	5	
		] Indirect	
logic			
0	Positive logic	O Negative logic	
Directio	n		
(	Forward	○ Reverse	
Speed			
(	Constant (%)	10 ~	

con	control ID It is used for system management control, and cannot be operated by users							
dese	cription	Can be use	d to comment on	the purpose of this con	ntrol			
read	device	Select the c	levice port curren	tly communicating wi	th			
address	setting	Click "Sett	Click "Settings" to enter the address setting interface. This interface allows yo					
		use system	n registers and us	ser-defined tags. You	can click t	the address tag li	ibrary or the	
		project tree - library - address tag library below to set the tags used (see 5-2 Address Tag						
		Library for	the use of addres	s tag library and user-	defined tags	)		
				Address		x		
		Device	本地设备		✓ Stat n No			
		Address type	PSB	~	U U	ser defined label		
		Address	0		□ Sy	ystem register		
		Address format	[range : 0 - 9999]					
					Ad	dress Label		
				Determine	Cancel	Application		
	address	Set the co	ntrolled address	of the water pump,	and set wh	nether there is a	n offset (i.e.	
		indirectly s		1 1/			, ,	
	indirect	Set the cur	rent address offset	. The current register	address cha	nges as the indire	ctly specified	
	specify	register val	lue changes, that	is, Dx [Dy]=D [x+Dy	y value] (x,	y=0, 1, 2, 3). E	xample: The	
		current reg	ister address is P	SW0, if the indirectly	specified a	address is PSW10	0; When the	
		value of th	e PSW100 registe	er is 0, the register the	at controls th	nis component rer	nains PSW0;	
		When the	value of the PSV	V100 register is 1, th	e register th	nat controls this c	component is	
		PSW1 (and	l so on)					
1	ogic	Select the p	oump action state	to be positive logic or	negative log	gic		

	Positive logic: Start action when the set coil is in the ON state; Negative logic: Start action
	when the set coil is in the OFF state
direction	Set the rotation direction of the water pump, including forward direction (water flow from
	left to right) and reverse direction (water flow from right to left)
speed	Set the flow speed of water flow, which can be set as a constant, or set a register to control
	the speed (when the speed set in the register is 10, flow at the lowest speed of 10, when set
	to 100, flow at the highest speed of 100)

# Appearance

	V Use pictu	res		
0.0	Status	0	~	
	Name	pump_01_b		
Nº 4	catego	rysvg		
	Size	95 × 110		

change appearance	Set display appearance
use pictures	Set whether to use pictures;
	You can set the appearance of clicking in two states: (0, 1). After selecting the state in the
	upper right corner, click "Change Appearance" or click "More Pictures" to select custom
	images to change the appearance
border	Set border style and color

Security setting

	Water pump	×
asic Att Appeara	Security Location	^
Display contro Control Display control Display control Control Display control Contro	DI 隐藏 ~	
Devic Addre Enable	本地设备 v Settin PSB v 0 Sta <sup>ON</sup> v Indirect	
User permissio	on	
Hide this	component when the user has no permission scope	
User per range	mission Permission1 v	

same to chapter 4-1-1 straight line security setting part.

# Location

Same to chapter 4-1-1 straight line location part.

#### 4-3-12. Valve

This control is used to simulate the operation of valves in the field control system. The following valve states are in the closed and open flow states, respectively.

1. Click the icon in the menu bar "Parts/Industry/Valves" or 革 in the control window's device bar, move the

cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel the placement. Modify the length and width of the border through boundary points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "Valve" or select "Valve" and right-click to select "attributes" for attribute settings.



isic Att A	ppeara Security Location				
Cont	rol ID V0				
Desc	ription				
	ad / Write use different ad <mark>d</mark> res	s			
Read ad	idress 本地设备	~	Settin		
Addre	I CALL MARKAGE CONTRACTOR AND A CALL OF A CALL	· · · ·	Settin		
	Transfer and the second	lirect			
Write ad	ddress				
	本地设备	~	Settin		
Addre	PSB 🗸 0				
		lirect			
Action	Conduction Close	O On	/ off	On when pressec	
	Conduction O close	O OII	/01	O on when pressed	
logic	Positive logic	O Ne	gative logic		
Directio	n				
0	Forward	○ Rev	verse		
Speed					
(	Constant (%)	10	~		
	Controlled by register				

control ID	It is used for system management control, and cannot be operated by users		
description	Can be used to comment on the purpose of this control		
read/write use	You can check whether to use a different address for reading/writing (refer to 4-2-3		

different address	Numerical Input for the description of the reading/writing address)						
read address	Set the read address of the valve and set whether there is an offset (i.e. indirectly specified)						
write address	Set the write address of the valve and set whether there is an offset (i.e. indirectly specified)						
indirect specify	Set the current address offset. The current register address changes as the indirectly specified						
	register value changes, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). Example: The						
	current register address is PSW0, if the indirectly specified address is PSW100; When the						
	value of the PSW100 register is 0, the register that controls this component remains PSW						
	When the value of the PSW100 register is 1, the register that controls this component is						
	PSW1 (and so on)						
action	Select the control action of the valve						
ON	After triggering, the valve is always open						
OFF	After triggering, the valve is always close						
ON/OFF	When triggered for the first time, the valve is in the open state, and when triggered again, it is						
	in the closed state, which is reversed						
ON when pressed	When pressed, the valve is in an open state; When released, the valve is closed						
logic	Select whether the valve action state is positive logic or negative logic;						
	Positive logic: Start action when the set coil is in the ON state;						
	Negative logic: Start action when the set coil is in the OFF state						
direction	Set the flow direction of water flow, including forward direction (water flow from left to						
	right) and reverse direction (water flow from right to left)						
speed	Set the flow speed of water flow, which can be set as a constant, or set a register to control						
	the speed (when the speed set in the register is 10, flow at the lowest speed of 10, when set to						
	100, flow at the highest speed of 100)						

# ■ Appearance

	✓ Use pictu	res	
C.	Status	0	~
20	Name	valve_05_b	
	categor	ysvg	
	Size	110 × 85	

change appearance	Set display appearance	
use pictures	Set whether to use pictures	
status	There are two optional states, 0 and 1, to set the state of the control	
name	Display the name of this control	
category	Display the category of this control	
size	Displays the current size of the control	
border	Set border style and color	

Security setting

		Valve		×
Basic Att Appeara	Security Location			
<ul> <li>Operation con</li> <li>Confirm b</li> <li>Key delay</li> </ul>		time 1	1	
Display contro	1			
Enable When	隐藏 >			
Devic	本地设备	×	Settin	
Addre	PSB 🗸	0		
Enable	Sta <mark>ON V</mark>	Indirect		
Enable control				
Devic	本地设备	~	Settin	
Addre	PSB 🗸	0		
Enable	Sta ON 🗸	Indirect		
User permissio	n			
	rmission after operatio	'n		
A prompt	window pops up when	the user has no pe	ermission range	
🗌 Hide this	component when the u	iser has no permiss	ion scope	
User per	nission Permission1	~		

Same to chapter 4-2-10 indicator key security setting part.

#### Location

Same to chapter 4-1-1 straight line location part.

# 4-4. Alarm

# 4-4-1. Alarm entry

Click "Parts/Alarm/Alarm Entry" in the menu bar or click Alarm entry to add alarm objects and corresponding alarm information to the pop-up window, which can be imported/exported to the computer for alarm display.

		Alarm entry	1				×
Alarm group Group Group 0	[2]:Group0	Edit alari     name po		h			Â
Add Modify Insert Delete	Delete all Copy	Paste Import Expo	t				
Select Alarm No.	Emergency Tri	ager conditions	Aları	m content		Sound	-
Group 0.Gr. 0		IO ON		enture high		Disable	
Group 0:Gr. 1	Low PSB	IO ON	overv	oltage		Disable	
listorical event saving							
Storage location							
●H OU							
Export Control							
File							
File alarmEdit							
I Fixed file $\bigcirc$ Date	O Register						
Storage capacity							
65535 🔹 Count	~						
When the storage space is	nsufficient						
Stop saving O G	Overwrite old recor	rds					
CED to the day							
Data retention days							
Retention c1	Day						
Save							
Select	Project		^	Move up			
✓	No.						
Image: A state of the state		igger Date	_	Move down			
	Alarm Tr	inner Time					>
				Determine	Cancel	Applicati	-
				Determine	Cancel	Abbican	

■ Alarm group

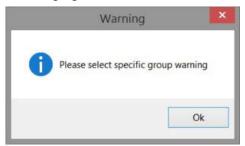
alarm group	Set the group of the alarm group, and select the corresponding group display in the alarm
	display
edit alarm group	Click to set the name of each alarm group
name	

Information

add	add alarm information
modify	Modify the selected alarm information, and the modify information interface is consistent
	with the add information interface
insert	Insert an alarm message below the selected alarm message
delete	Delete the selected alarm information
delete all	Delete all alarm information

сору	Tick the alarm information to be copied in the front box
paste	Paste the copied information, and the pasted alarm information will be displayed on the last
	line
import	Import an edited Excel file from your computer
export	Export the alarm information edited in the software as an Excel file to the designated location
	in the computer

Before clicking Add, you must first select an alarm group in the group, otherwise a prompt to select an alarm group will pop up, as shown in the following figure:



After clicking Add, you can add alarm signals and corresponding alarm information in the pop-up window, as shown in the following figure:

				Alarm	entry			
Alara group serial	0	N	ne 🗌		Emergency level	Low	~	
rigger ondition (	e) Bit	○ ¥ord	register					
ead address								
Devic	本地设备			v Settin				
Addre		v	0 Indirect					
Conditions	ON		V					
Alara cont	ent							
				overv	oltage			
				overv	oltage		Insert :	aonitoring
Sound Bnable		I	uzzer timeou		oltage		Insert :	monitoring
🗌 Enable	p-up vindos		Aurzer timeou				Insert :	monitoring

Alarm Group Serial	Display the current alarm group and cannot be modified
Number	
name	Custom alarm name
emergency level	Set the alarm urgency level of the current alarm information. You can select "Low, Normal,
	High, and Urgent" to increase the urgency level in turn
read address	Set the displayed address; You can also set whether there is an offset (i.e. indirectly

	specified)					
device	Device port currently communicating					
address	Set target coil number					
setting	Click "Settings" to enter the address setting interface. This interface allows you to set and					
	use system registers and user-defined tags. You can click the address tag library or the					
	project tree - library - address tag library below to set the tags used (see 5-2 Address Tag					
	Library for the use of address tag library and user-defined tags)					
	Address					
	Device 本地设备					
	Address type VSB V User defined label					
	Address 0 System register					
	Address [range : 0 - 9999] format					
	lomat					
	Address Label					
	Determine Cancel Application					
	Concer Application					
indirect specify	Set the current address offset. The current coil address changes with the indirectly specified					
	register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). Example: The current					
	coil address is PSB0, if the indirectly specified address is PSW100; When the value of the					
	PSW100 register is 0, the coil that controls this element remains PSB0; When the value of					
	the PSW100 register is 1, the coil that controls this element is PSB1 (and so on)					
condition	Set the trigger conditions for alarm information, and you can select bit registers and word					
	registers; When selecting a bit register, you can choose to set the trigger conditions to ON,					
	OFF, ON ->OFF, and OFF ->ON, which can be selected according to project needs. When					
	selecting a word register, you can choose to trigger when >, <, =, !=, >=, <= a certain value					
alarm content	Edit the text information or multilingual display of the alarm (refer to 5-1 for the description					
	of the multilingual library for specific use). You can select to insert the register address					
	display. After clicking "Insert Monitoring", edit the required information in the pop-up window and select it. The information of the set monitoring address will be displayed in the					
	window and select it. The information of the set monitoring address will be displayed in the					
	alarm content.					

		Inserted content _
		Category Monitoring address v
		Nome Monitor address setting
		value2 Variable value1
		Value3 name
		type Value V
		Devic 本地设备 v Settin Addre pSW v 0
		Data Word Vunsigner V
		Data format
		Integer 4 Decimal 0 1 Leading 0
		digits digits ccoshy o
		Determine Cancel Appl
		Add Modify Delete Delete all Select and Exit
		Add: Add the information to be monitored, which can monitor values, characters, and
		Chinese.
		Modify: After selecting the line to be modified, the line turns blue. Click modify to modify
		the set information.
		Delete: delete the selected row.
		Delete All: delete all content.
		Select and Exit: Select the monitoring content to be displayed, and click "Select and Exit".
		The software will automatically generate a {variable name} after the alarm content. When
		the alarm information is displayed, {} will not be displayed, but the content of the
		corresponding register set will be displayed.
		Alara content  Tavt O Multiling
		overvoltage{value2}
		Insert monitoring
sound	sound enable	When checked, the buzzer will sound when the alarm is triggered. If the selected touch
		screen model is TS5L series, the alarm sound can be customized. Refer to 5-4 Audio
		Resource Library for usage methods
	buzzer	Set the time for the buzzer to sound, in seconds, selectable from 1 to 30 seconds
	timeout	
ala	rm pop-up	When checked, the selected window will be displayed on the touch screen when the alarm is
	window	triggered
		🖉 Alarm pop-up vindow
		Pop up vir [20002]Local informa: ~
		Pop up cycle
		Pop up once     Des up once
		Pop up cycle Close the window after the alarm
		LI TETET THE TANKET TO VALUE TO BASE

pop up	Select the window to pop up, and it will pop up on the touch screen after the
window	alarm is triggered
pop up cycle	Popup once: only pop up once. After clicking Close, the window will not pop
	up again even if the alarm does not disappear
	Popup Cycle: After the alarm is triggered, the window will pop up. When the
	window is closed and the alarm signal does not end, it will pop up again at
	the set cycle. The default cycle is 1000 milliseconds, that is, 1 second (the
	pop up cycle unit can be customized in milliseconds/seconds/minutes)
close the	After checking, if the window has not been manually closed since it pops up,
window after	it will actively close the window when the alarm signal disappears
the alarm	

# Historical event saving

Storage location			
🖲 Н 🛛 🔾 U			
Export Control 10	Control address information		
File			
File alarmEdit			
● Fixed file ○ Date	⊖ Register		
Storage capacity			
65535 🗘 Count	~		
When the storage space is in	sufficient		
	verwrite old records		
✓ Data retention days			
Retention c1	Day		
Save			
Select	Project	^	Move up
~	No.		
	Alarm Trigger Date		Move down
~	Alarm Trigger Time	-	more down

Set whether to store the selected alarm information in the touch screen. When checked, the generated alarm information will be stored in the touch screen. You can use the alarm list to display historical alarm information.

		1 5
	storage location	To set the storage location, you can select HMI or USB flash disk, or use a register to
		specify the storage location. For example, if you set the register PSW0, then when
		PSW0=1, the storage location is HMI; When PSW=3, the storage location is a USB flash
		drive
		When simulating, the storage location of alarm information is:
		(1) Save to USB flash drive: software directory Temp/Run/storage/udisk/alarm
		(2) If you choose to save to the hmi: software directory Temp/Run/db/alarm, saving
		files in this way cannot be directly opened for viewing. To view, you need to export
		to a USB flash drive through the export control register, and then view the exported
		files in the path saved to the USB flash drive
	HMI export	Set the export control register (if set to PSW0, three consecutive addresses with PSW0 as
		the first address control different states), and click "Control Address Information" to
-		

	preview
	Prompt
	Command:PSW0 1.Export alarm data to U disk 2.Export alarm data to U disk and clear the d
	speed of progress:PSW1         1.The value of 0-100 indicates the progress,         result:PSW2         0. Data export         1. Data export succeeded
	2. The export device does not exist
	Note: This function takes effect only when the storage location is selected as HMI or specified as HMI by using "Register Specified Storage Location". "When inputting 1 or 2 to the command register, the database can be controlled to be exported to a USB flash drive, and the exported file format is xjdb. The xjdb to csv tool can
	be opened by double clicking on the software root directory Tool\XJDbTool\ XJDbTool.exe, which is set as the default opening method for xjdb. After opening, enter the path name of the csv, and click "Export" to convert the xjdb format file to a csv format file.
file	Set stored file information
file	Set the name of the stored file, with which the system will store data
fixed file name	The stored file name is fixed, that is, the name set in the file name (the file name supports up to 200 characters)
Date Specify File Name	The stored file name is named with a date, such as the file exported on May 29, 2021, with the file name 20210529
Dynamically specify file name	Set a register address, and the stored file will be named after the contents of the register. When selecting a dynamically specified file name, you need to select a string type register such as character input and Chinese input. (File names support up to 200 characters)
storage capacity	Set the total amount of collected data information Maximum storage capacity 65535 pieces
when the storage space is insufficient	Stop saving or overwriting old records when the storage space is insufficient
stop saving	When checked, stop saving data when the storage space is insufficient
overwrite old	When checked, when the storage space is insufficient, it will continue to save and overwrite
records	the old records
data retention days	The default time for storing files on the screen is 1 day. After the time expires, the files will be deleted. The maximum retention time for files can be set to 1000 days
save	Set the stored items and sorting, and select serial number, alarm trigger date, alarm trigger time, alarm information, confirmation time, alarm times, and alarm recovery time



Note: Whether you choose "Fixed File Name" or "Dynamically Specify File Name" for a saved file name, the following characters are not supported for file names: //: \*? " <> |-#; \$! @ & ().

# 4-4-2. Alarm display

Display historical alarm information in a table, allowing you to query records for a certain period of time.

Click alarm display icon in the menu bar "Parts/Alarm/Alarm Display" or in the device bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel the placement. Modify the length and width of the border through boundary points.
 When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click "Alarm Display" or select "Alarm Display" and right-click to select "attributes" for attribute settings.

Basic Attribu	Display	Appeara	nce Ala	irm quei	ry Secur	rity set L	ocation					
Control ID	AD0											
Description												
Alarm source	e											
Display group range	0	~	~ 25	54	~ 1	Alarm entr	у					
✓ Use title												
Use title	О м	ultilina										
and the second second	O M		Lis	t Data		Synchro	onize lano	uuage fo	ont style	25		
Tavt     Table title		title	Lis		eneral	Synchro	onize lano	juage fo	ont styl	25		
Table title	List New Rom	title	1.1	Ge			onize lang	guage fo	ont styl	25		

Control ID	It is used for system management control, and cannot be operated by users
description	Can be used to comment on the purpose of this control
alarm source	Set the source of the alarm and customize the alarm group range to be displayed (if the selection
	range is 0-0, only the alarm information selected for the 0th group will be displayed, and other
	groups will not be displayed)
use title	When checked, the table title is displayed at the top of the table
text	Edit title content
multiling	If you want the title to be displayed in multiple languages, check this option to directly launch an
	existing multilingual library or add a new multilingual library (see 5-1 Label Multilingual for
	specific usage of multilingual libraries).
font	Set the font, color, size, alignment, and row height of the table title/list title/list data. You can
	check to use the same font. After checking, the color, size, alignment, and line height of the three
	fonts should be consistent.

### Display

0			Alarm display	×
Basi	ic Attrib	isplay Appearance Alarm que	en Security set Location	
-	Alarm mode	Real time	O History	
1	Number of a Total I	Num	ber of es per page 10	
	Use	Auto-fit column width		
	Select	Project	Title Title Description	Column width
		No.	No:	56
		Frigger date	Trigger date	108
		Trigger time	Trigger time	111
	v ,	Alarm information	Alarm information	48
	-	Alarm times	Alarm times	104
411		logical order () Reverse chroi	nological	
	Date time for	Date YY/MM/DD v	Time HH:MM:SS	~
alarm	Date time for	Select whether the inform	Time HH:MM:SS ation displayed in the curre	ent table is real-time or historical.
alarm	Date time for	Select whether the inform When checked, the alarr	Time HH:MM:SS ation displayed in the curre n information displayed ir	n the table is real-time alarm informatio
alarm	Date time for	Select whether the inform When checked, the alarr	Time HH:MM:SS ation displayed in the curre n information displayed ir	
alarm	Date time for	Select whether the inform When checked, the alarr	Time HH:MM:SS ation displayed in the curre n information displayed ir nformation currently in the	n the table is real-time alarm informatio
alarm real	Date time for	Select whether the inform When checked, the alarr display, that is, only the in alarm information content	Time HH:MM:SS ation displayed in the curre n information displayed ir nformation currently in the t will not be displayed.	n the table is real-time alarm informatio
alarm real	Date time for mode time	Select whether the inform When checked, the alarr display, that is, only the in alarm information content When this option is select	Time HH:MM:SS ation displayed in the curre n information displayed ir nformation currently in the t will not be displayed. red, the table will not only d	n the table is real-time alarm informatio alarm state is displayed, and the complete lisplay real-time alarm information, but als
alarm real hist	a mode time tory	Select whether the inform When checked, the alarr display, that is, only the in alarm information content When this option is select display alarm information	Time HH:MM:SS ation displayed in the curre n information displayed ir nformation currently in the t will not be displayed. red, the table will not only d for the history of ended ala	n the table is real-time alarm informatio alarm state is displayed, and the complete lisplay real-time alarm information, but als
alarm real	a mode time tory total	Select whether the inform When checked, the alarr display, that is, only the in alarm information content When this option is select	Time HH:MM:SS ation displayed in the curre n information displayed ir nformation currently in the t will not be displayed. red, the table will not only d for the history of ended ala	n the table is real-time alarm informatio alarm state is displayed, and the complete lisplay real-time alarm information, but als
alarm real hist	a mode time tory total number	Select whether the inform When checked, the alarr display, that is, only the in alarm information content When this option is select display alarm information Set the total number of ala	Time HH:MM:SS ation displayed in the current in information displayed ir information currently in the twill not be displayed. red, the table will not only d for the history of ended ala arm messages displayed.	n the table is real-time alarm information alarm state is displayed, and the complete lisplay real-time alarm information, but als arms in the table.
alarm real hist iber ms 1	a mode time tory total number number of	Select whether the inform When checked, the alarr display, that is, only the in alarm information content When this option is select display alarm information Set the total number of alarms	Time HH:MM:SS ation displayed in the curre n information displayed in nformation currently in the t will not be displayed. ed, the table will not only d for the history of ended ala arm messages displayed. displayed on the current page	n the table is real-time alarm informatio alarm state is displayed, and the complete display real-time alarm information, but als arms in the table.
alarm real hist iber ms 1	a mode time tory total number	Select whether the inform When checked, the alarr display, that is, only the in alarm information content When this option is select display alarm information Set the total number of alarms When the number of page	Time HH:MM:SS ation displayed in the current in information displayed in information currently in the twill not be displayed. red, the table will not only d for the history of ended alar arm messages displayed. displayed on the current page es per page is set to be less	n the table is real-time alarm information alarm state is displayed, and the complete display real-time alarm information, but als arms in the table. ge. s than the total number of pages, buttons of
alarm real hist iber ms 1	a mode time tory total number number of	Select whether the inform When checked, the alarr display, that is, only the in alarm information content When this option is select display alarm information Set the total number of alarms When the number of page	Time HH:MM:SS ation displayed in the current in information displayed in information currently in the twill not be displayed. red, the table will not only d for the history of ended alar arm messages displayed. displayed on the current page es per page is set to be less	n the table is real-time alarm informatic alarm state is displayed, and the complete display real-time alarm information, but als arms in the table.

information After checking, click "..." below the setting bar (see the figure below) to enter use multilingual settings, or the project tree - Library - Label Multilingual for management (see 5-1 Label Multilingual for specific usage). The The Description C .....

Title Title Description	Settings
No.	
Trigger date	
Trigger time	
Alarm information	

displayed on the current page.

When checked, column widths cannot be customized, and the software will auto-fit

	column	automatica	Illy adjust to the most suitable size based on the project image.
	width	uutomutot	ing adjust to the most surmore size based on the project mage.
		l plaved info	rmation content, and you can select serial number, alarm trigger date,
	-		prmation, confirmation time (only available in history mode), alarm times,
			e (only available in history mode).
	project	-	splay items for each column of the table.
	project	No.	Displays the number of the table column.
		trigger	Date when the alarm was generated.
		date	Due when the dami was generated.
		trigger	The time when the alarm occurred.
		time	
		alarm	Preset content in alarm entry.
		info	
		confirm	The time at which the confirmation operation was performed. (This item
		time	is not available when the mode is selected as real-time)
		alarm	Current alarm times.
		times	
		recover	The time when the alarm disappears. (This item is not available when
		time	the mode is selected as real-time).
		If you nee	d to adjust the order of items, you can click the "Move Up, Move Down"
		button. If y	you need to restore the default sorting, you can click "Restore Default".
	title	Set the tit	e name for each column, which is consistent with the project name by
	description	default. Yo	ou can change it to a name that meets your own requirements as needed.
	column		lumn width for each column, which can only be modified if Auto-fit
	width		idth is not checked.
time sort			play mode and select whether the latest alarm is displayed before or after.
chronological order	-	-	ence of alarm time generation, the first After selecting "Display
	-		mation is displayed at the top and the Unrecovered Alarm
		0	alarm information is displayed at the Information at the Top", the
			That is, the latest alarm information is unrecovered alarm
			information will be displayed
reverse			nological order, the alarms generated first centrally at the top of the table ottom, and the alarms generated later are regardless of the time
chronological			that is, the latest alarm information is sequence.
	displayed a	-	
date time format	Set the form		
enable confirm			orm information confirmation. This option is only available if the alarm
	mode is sele	-	
mode			mation confirmation.
single click			omatic confirmation will be generated when an alarm message is clicked,
U			e will be generated.
double click			omatic confirmation will be generated when you double-click an alarm
			nation time will be generated.
long press	When chec	ked, an ala	rm message will be automatically confirmed when long pressed, and a
	confirmatio	n time will	be generated.

<ul> <li>control</li> <li>following figure. You can hide confirmed information, recovered information, or unrecovered information, or use them in combination (only available if the alarm mode is selected as History).</li> <li>Improvement representation in the selection of the s</li></ul>	information hiding	After checking, specify a register to control the display of alarm information, as shown in the
<ul> <li>History).</li> <li>✓ Enable Confirm</li> <li>Mode ● Single click ○ Double-click ○ Long press</li> <li>□ Information hiding control</li> <li>Bit0 (hide confirmed information); Bit1 (hide recovered information); Bit2 (hide unrecovered informatix</li> <li>The information hiding control is using the 0th, 1st, and 2nd bits of the binary system, and then input the corresponding decimal system in the set register for control.</li> <li>If the information control register is set to psw0</li> <li>Hide confirmed information: Binary: 0001; Decimal: 1, psw0 Enter 1 to hide confirmed information;</li> <li>Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered information;</li> <li>Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information;</li> <li>To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;</li> </ul>	control	following figure. You can hide confirmed information, recovered information, or unrecovered
<ul> <li>Enable Confirm         <ul> <li>Mode • Single click • Double-click • Long press</li> <li>Information hiding control</li> <li>Bit0 (hide confirmed information); Bit1 (hide recovered information); Bit2 (hide unrecovered informatic</li> </ul> </li> <li>The information hiding control is using the 0th, 1st, and 2nd bits of the binary system, and then input the corresponding decimal system in the set register for control. If the information control register is set to psw0         <ul> <li>Hide confirmed information: Binary: 0001; Decimal: 1, psw0 Enter 1 to hide confirmed information;</li> <li>Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered information;</li> <li>Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information;</li> <li>To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;</li> </ul> </li> </ul>		information, or use them in combination (only available if the alarm mode is selected as
Mode       • Single click       • Double-click       • Long press         Information hiding control       Bit0 (hide confirmed information); Bit1 (hide recovered information); Bit2 (hide unrecovered informatic         The information hiding control is using the 0th, 1st, and 2nd bits of the binary system, and then input the corresponding decimal system in the set register for control.         If the information control register is set to psw0         Hide confirmed information: Binary: 0001; Decimal: 1, psw0 Enter 1 to hide confirmed information;         Hide recovered information: binary: 0100; Decimal: 2, psw0 Enter 2 to hide recovered information;         Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information;         To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;		History).
<ul> <li>Information hiding control</li> <li>Bit0 (hide confirmed information); Bit1 (hide recovered information); Bit2 (hide unrecovered informatic</li> <li>The information hiding control is using the 0th, 1st, and 2nd bits of the binary system, and then input the corresponding decimal system in the set register for control.</li> <li>If the information control register is set to psw0</li> <li>Hide confirmed information: Binary: 0001; Decimal: 1, psw0 Enter 1 to hide confirmed information;</li> <li>Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered information;</li> <li>Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information;</li> <li>To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;</li> </ul>		Enable Confirm
<ul> <li>Bit0 (hide confirmed information); Bit1 (hide recovered information); Bit2 (hide unrecovered informatic</li> <li>The information hiding control is using the 0th, 1st, and 2nd bits of the binary system, and then input the corresponding decimal system in the set register for control.</li> <li>If the information control register is set to psw0</li> <li>Hide confirmed information: Binary: 0001; Decimal: 1, psw0 Enter 1 to hide confirmed information;</li> <li>Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered information;</li> <li>Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information;</li> <li>To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;</li> </ul>		Mode   Single click   Double-click   Long press
The information hiding control is using the 0th, 1st, and 2nd bits of the binary system, and then input the corresponding decimal system in the set register for control. If the information control register is set to psw0 Hide confirmed information: Binary: 0001; Decimal: 1, psw0 Enter 1 to hide confirmed information; Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered information; Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information; To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;		Information hiding control
<ul> <li>input the corresponding decimal system in the set register for control.</li> <li>If the information control register is set to psw0</li> <li>Hide confirmed information: Binary: 0001; Decimal: 1, psw0 Enter 1 to hide confirmed information;</li> <li>Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered information;</li> <li>Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information;</li> <li>To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;</li> </ul>		Bit0 (hide confirmed information); Bit1 (hide recovered information); Bit2 (hide unrecovered informatic
If the information control register is set to psw0 Hide confirmed information: Binary: 0001; Decimal: 1, psw0 Enter 1 to hide confirmed information; Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered information; Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information; To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;		The information hiding control is using the 0th, 1st, and 2nd bits of the binary system, and then
<ul> <li>Hide confirmed information: Binary: 0001; Decimal: 1, psw0 Enter 1 to hide confirmed information;</li> <li>Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered information;</li> <li>Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information;</li> <li>To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;</li> </ul>		input the corresponding decimal system in the set register for control.
<ul> <li>information;</li> <li>Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered information;</li> <li>Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information;</li> <li>To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;</li> </ul>		If the information control register is set to psw0
<ul> <li>Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered information;</li> <li>Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information;</li> <li>To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;</li> </ul>		Hide confirmed information: Binary: 0001; Decimal: 1, psw0 Enter 1 to hide confirmed
information; Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information; To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;		information;
Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered information; To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;		Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered
information; To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;		information;
To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;		Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered
		information;
The rest are hidden in the same way.		To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;
		The rest are hidden in the same way.

■ Appearance

			Alarm display	×
Bas	ic Attribe Display	Appearance Alarm o	query Security set Location	
T	able			
	Backgroi	~	Title descript	
	✓ Outer frame			
- 11	Line style	¥	Line color	
	Line width	~		
d	✓ Show grid			
	Line style	~	Line color	
	Line width	v		
- 1	When the alarm is tri	ggered		
	text	~	Background	
đ	✓ Alarm confirm			
	text	v	Backgrunn	
-1	Alarm recovery			
	text	~	Backgr	
ble	Set the color	of the table bor	rder and background.	
ground	Set the backg	round color of	the entire table.	
ckground	Set the backg	round color of	the table header row. If the header is not	checked, t

	effect.	
outer frame	Choose whe	ther to display the table outline.
	line style	Set the line style of the outer frame of the table. You can select straight lines,
		dashed lines, points, and point lines, as shown in the figure.
	line color	Set the line color for the table outline.
	line width	Set the line width of the outer frame.
show grid	Choose whe	ther to display the grid within the table.
	line style	Set the line style of the grid of the table. You can select straight lines, dashed lines,
		points, and point lines, as shown in the figure.
	line color	Set the line color for the table grid.
	line width	Set the line width of the grid.
when the alarm	Set the text	display color and background color of the corresponding alarm information content
is triggered	when the ala	rm is triggered.
	text	Set the text display color of the alarm message content.
	background	Select the background display color for the alarm message content.
alarm confirm	Set the text	display color and background color of the corresponding alarm message content
	after alarm c	confirmation.
	text	Set the text display color of the alarm message content.
	background	Select the background display color for the alarm message content.
alarm recovery	Set the text	display color and background color of the corresponding alarm information content
	after the alar	m is restored.
	text	Set the text display color of the alarm message content.
	background	Select the background display color for the alarm message content.

Display the alarm color when an alarm occurs. Display the confirmation color when the alarm has not been restored and has been confirmed. Display the restored color when the alarm is restored and confirmed. Alarm information clearing: The internal address of the button is SPSB120, which triggers the clearing of alarm information.

Alarm query

# (1) Export

sic Attribute:	Display	Appear	ance	Alarm query	Security	y setting	Location	
Picture	PSB0	Export conditio	ON->(	OFF ~	Export Format	PNG	~	
Use the quer	ry function							
the second								
Pictur	re	use picture	export	function. Mee	ets export	t condition	ns, export fo	ormat is PNG.
him ton	re	use picture	•	_	•	t condition	ns, export fo	ormat is PNG.

# 2 Query

directly check the

The information found will be displayed in the alarm display table. If you need to use this function, you can

Use the query function

in the alarm display table.

Basic Attribute:	Display	Appearance	Alarm query	Security setting	Location	
Picture	PSB0	Export conditio ON-	>OFF ~	Export Format	~	
Use the que	ry function	<ul> <li>Proposition constraints of the</li> </ul>		Concerned and Concerned		
Query method						
Query by	date (	Ouerv by time	perio Ouerv	by group Que	v by numb	uerv by level

There are 5 query methods: query by date, query by time period, query by group, query by number, and query by level. The user can choose any of these five query methods, or dynamically specify the query method through registers. The specific methods are as follows:

query control Set an address, and when set to this address, the query function will be triggered, and the query results will be displayed in the table.

### (1) query by date

Enter the date to query, and all alarms under this date will be filtered out and displayed in the table.

Query sett	ngs		
Query	control		
	PSB0		
Query d	ate		
	hursday , March 🗸	Register control	

You can also select "Register Control" to dynamically set the query address. As shown in the following figure, if you set a header address, such as PSW0, the query address will occupy a total of 3 addresses from PSW0 to PSW2, where PSW0 represents the year, PSW1 represents the month, and PSW2 represents the day, all of which are single word unsigned numbers. For example, PSW0=2021, PSW1=5, and PSW2=29, the alarm record information on May 29, 2021 will be queried.

Query control			
Query date			
hursday ,	March 🗸	✓ Register control	PSW0
F	PSW0:年(无符号	影力式输入,YYYY格式,	列如2004)
	PSW1 : N	Aonth (input in unsigned	d number format, MM fo
	DCM2 . P	au (input in the form of	unsigned number in DD

(2) Enter the start time and end time to query in the specified address, set the query control address, and

then display all the alarm information filtered out for this time period in the alarm table.

1	norman na	000000 100 000	200450			1
From	Thursday ,	March ∨	10	Ho 0	Minute	Second
То	Thursday ,	March ∨	11	Ho 0	Min26	Second

### Register control

Similarly, you can also use register control. After setting the first address, 12 register addresses including the first address will be occupied. The first 6 addresses represent the year, month, day, hour, minute, second of the start time, and the last 6 addresses represent the year, month, day, hour, minute, second of the end time. The format is consistent with that set manually.

rom Thursday , March 🗹 10	Hol0	Minute	Second
Thursday , March ~ 11	Ho(0	Min 26	Second
Register contro	PSW0		
DOLLO DOLLE D	t start time	e Year/Month	/Day Hor
PSW0 ~ PSW5 Represen			and the second

### (3) Query by group

Select an alarm group, which is the newly added alarm group in the alarm login. When the query control address is triggered, the information for the specified group will be displayed in the alarm display table.



After selecting register control, you need to set a register and select the alarm group number to query in this register. This number is the alarm group number set in the alarm login. After the query trigger bit is triggered, the information of the specified group will be displayed in the alarm display table

and the second se			0.01110
Group	$\sim$	Register conti	PSWO

### (4) Query by number

Select the alarm number. When the query control address is triggered, the information of the specified number will be displayed in the alarm display table.

5 252		
No.	0	Register control
	ich:	

After selecting register control, it is necessary to set a register in which to set the alarm number to be queried. After the query trigger bit is triggered, the information with the specified number will be displayed in the alarm display table

)	Register conti	PSW0
and a second sec	)	Register cont

# (5) Query by level

Select an alarm level that matches the level set in the alarm login. When the query control address is triggered, the specified level of information will be displayed in the alarm display table.

Level	Low	~	Register control
			n - Canada - Andre Albert - Andre and Andre an

After selecting register control, you need to set a register in which to set the level to be queried. Values of 0 to 3 indicate the alarm level: Low, Normal, High, and Urgent. After the query trigger bit is triggered, the specified group of information will be displayed in the alarm display table.

Level	Low	~	<ul> <li>Register conti</li> </ul>	PSW0	
			Register value(0~3	) represent alarm level low, no	ormal, hi

# (6) register control query

Use registers to dynamically specify the query method. 0 indicates query by date, 1 indicates query by time period, 2 indicates query by group, 3 indicates query by number, and 4 indicates query by level. Users can choose according to their needs.



Security setting

	Alarm display	
Basic Attribi Disp	play Appearance Alarm quer, Security sett Location	
Display contro	1	
✓ Enable		
When	隐藏 イ	
Devic	本地设备 v Settin	
Addre	PSB v 0	
Enable	Sta ON V Indirect	
Enable control	Ĩ	
✓ Enable		
Devic	本地设备 v Settin	
Addre	PSB 🗸 0	
Enable	Sta ON V Indirect	
User permissio	on	
Contract Contraction & Contraction	ermission after operation	
A prompt	t window pops up when the user has no permission range	
Hide this	component when the user has no permission scope	
User per	mission Permission1	

Same to chapter 4-2-10 indicator key security setting part.

Location

Same to chapter 4-1-1 straight line location part.

# 4-4-3. Alarm bar

1. Click 🎐 alarm bar icon in the menu bar or Parts/Alarm/Alarm Bar in the device bar in the control window,

move the cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel the placement. Modify the length and width of the border through boundary points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click the "Alarm Bar" or select the "Alarm Bar" and right-click to select "attributes" for attribute settings.

			Dynamic alarr	n bar	×	
	Basic Attr Displ	ay Security Locat	tion			
	Control ID	DAO			1	
	Description					
	Description					
	Alarm source				1	
	Display group range	0 ~	∼ 254 ∨	Alarm entry		
	Use					
	Select	Pro	ject	Title Title Description		
	V	No.	jeet	No.		
	<b>v</b>	Trigger date		Trigger date		
		Trigger time		Trigger time		
	✓ ✓	Alarm informatio	n	Alarm information Alarm times		
		Alarm umes		Alarm times		
	Move up	Mo	ve down	Restore default		
	Time sort					
	Time sort	Chronologic	al order O Rev	erse chronological order		
	Date time for	2010) S.	Para anti-			
	Date YY/M	V/DD Y	Time HH:MM	I:SS Y		
		37.5				
	Moving sp S	peed1	~			
control ID	It is used for	system manage	ement control s	and cannot be operated by	users	-
description	-	to comment on		1 1	45015	
-					f the colo	ation non as is 0.0
alarm source			-	bup from the alarm input (i		-
	-		for the selected	l group 0 will be displayed	i, and oth	er groups will not
	be displayed					
use			-	ble languages, check this o	-	-
multi-language	existing mult	tilingual library	y or add a new	multilingual library (see	5-1 Labe	el Multilingual for
	specific usag	e of multilingu	al libraries)			
project	Edit the displ	lay items for ea	ch column of th	he table		
No.	Display the s	equence numbe	er of the table c	olumn	If you r	need to adjust the
trigger date	Date when the	ie alarm was ge	enerated		order o	f items, you can
trigger time	Time when the	he alarm was ge	enerated		click t	the "Move Up,
alarm	Preset conter	nt in alarm entry	y		Move I	Down" button. If
information					you nee	ed to restore the
alarm times	Display the t	otal number of	times this alarr	n occurred	default	sorting, you can
					click "R	estore Default"
time sort	Set the inform	mation display	mode and selec	t whether the latest alarm	s display	ed before or after
chronological				eneration, the display gene		
order	-	-	-	l last, that is, the latest ala		
	at the end		1 )	, , , .		1 / -
reverse		he chronologic	al order the al	arm generated first is displ	aved at th	he bottom and the
	-	-			-	
chronological	-	-	played at the to	p, that is, the latest alarm	mormati	on is displayed in
order	front of the a	iarm bar				

date time	Set the date and time format
format	
moving speed	The higher the speed number, the faster the scrolling speed

When use multiple languages is checked, "..." will be displayed in the lower right corner of the title description. Clicking it will jump to the multi language library setting interface to set multiple languages.

Select	Project	Title Title Description	Setting
~	No.	No.	
~	Trigger date	Trigger date	
~	Trigger time	Trigger time	
~	Alarm information	Alarm information	
~	Alarm times	Alarm times	

# Display

ic Att Display Security Loc Outer frame				
Outer frame color	~			
Fill Fill color	~			
	•			
Font settings				
Font settings Fo 微软雅黑	v	General	~	

ou	ter frame	Set the outer frame color of the dynamic alarm bar
fill	fill color	Set the background color of the dynamic alarm bar
	transparency	You can complete the setting by sliding the slider (the closer the slider is to the left, the
		lower the transparency percentage, and the more transparent the component)
font setting		You can set the color, size, and alignment of the font (you can also check autofit size, which
		means that dragging the mouse changes the size of the component, and the text size changes
		accordingly)

Security setting

ic Att Display	Security Location				
Display contro	1				
Enable					
When	隐藏    >				
Devic	本地设备		~	Settin	
Addre	PSB v	0			
Enable	Sta ON 🗸		rect		
User permissic	n				
✓ Hide this	component when the	user has	no permiss	ion scope	
User peri range	mission Permission		~		
and an and the second					

Same to chapter 4-1-1 straight line security setting part.

# Location

Same to chapter 4-1-1 straight line location part.

# 4-5.Data processing

# 4-5-1. Data sampling

Click "Parts/Data Processing/Data Sampling" in the menu bar or click data sampling setting interface, where you can add the data objects to be collected, as well as information such as object types, sampling conditions, and whether to store them. You can import/export them to a computer for use in trend charts and report displays.

			Data s	ampling		×
Sampling Group 0[1	]:1	~	Name 1	New	Delete Edit s	ampling group nam
Add Modify Insert		te all Copy	Paste Import Export			
Sampling group Group 0:1 0	No.	Address SW0	Sampling Periodic	Cycle trigger address	Acquisition control	Clear address
Gloup of		CONTRACT OF CONTRACT.	Penduic	MK		

# ■ Sampling group

sampling group	Select the sampling group. To facilitate user management of data, we have set the
	classification of the group, and each group can add many collection methods
name	Set the name of the sampling group
new	Modify the name and click to add a sampling group
delete	After selecting a sampling group, click to delete the selected sampling group
edit sampling group	Batch management of established sampling group name
name	

Note: When creating a new sampling group for the first time, please enter a user-defined name in the "Name" field and click "New" to add a new sampling group. Otherwise, a message "Sampling Group Name cannot be blank" will be displayed.

Information

add	After selecting a sampling group, click Add to open the data sampling attribute setting
	box (see "Information Add" below for specific setting methods)
modify	Modify the selected sampling information
insert	Insert a new sampling information at the selected sampling information, optionally above
	or below

delete	Delete selected sampling information
delete all	Delete all sampling information for this group
copy	Copy selected sampling information
paste	Paste the copied information, and the copied information will be displayed on the last line
	of the current sampling group
import	Import excel file from your computer
export	Export all the sampling information edited in the software to the designated location on
	the computer as an Excel file

# Add information

After clicking "Add"/"Modify", the window shown below will pop up, where you can edit the sampling information.

		Data sampling	>
asic Attribu	desChannel setting		
No.	1	Descri	^
🗌 Acqui	isition control		
Collectio	on m Periodi	c acquisition Trigger acquisition O Fixed mode	
Samplin	ng  1	0.1 seconc v	
Regis	ster assignmen	ti	
✓ Sampl Read add	그는 영향에 가지 않는 것은 것이 없다.	s address of acquisition object	
Devic	本地设备	✓ Settin Channel	
Addre	PSW	✓ 0	
Data type	Word V Uns	ignec 🗸	
File	port Control	○ U disk	
• Fixed	d file name 🔿 I	Date specify the file $\bigcirc$ Dynamically specify the file name	
Storage	e capacity		
80000	Co	bun Y About0.20MB	
Mining	full treatment r	node	
• Loop	p cover Stop	when full collection	
Coll	lection full noti	fication	- 1
Clea	ar Data		
		The Part of T	
	a retention day	s limit Retention 7 🖨 Day	
Save	8		~
Select		Project Manager	>
		Determine Cancel Applic	

No.	The number of this sampling group is displayed and cannot be edited
description	Set the description of the sampling group for use only as a note for project editing
acquisition control	Acquisitic PSB0 Acquisitio OFF Y

	After checking, set a coil address and start collecting data only when the coil meets the collection				
	conditions (can be set	to ON/OFF)			
acquisition	select on or off				
condition	Acquisitio OFF	~			
	ON				
	on Trigger OFF	π			
collection		igger or fixed mode of data collection			
mode	periodic acquisition	Collect with a fixed cycle, and set the sampling time. The sampling units are			
		(0.1 seconds/second/minute)			
		Collection m     Periodic acquisition     Trigger acquisition     Fixed mode			
		Sampling 1 0.1 seconc V			
		Register assignment PSW0			
		Register control can be selected. After selecting the sampling unit, change the			
		register value to change the acquisition cycle.			
	trigger acquisition	Use address control for acquisition, and you can select a word address or a bit address.			
		Word address trigger acquisition: After selecting a word address, you can set			
		the conditions to "<", ">=", ">=", "!=" a fixed value to take effect.			
		If you do not need a fixed value, you can select register assignment to			
		dynamically specify the value.			
		Collection m Periodic acquisition Trigger acquisition Fixed mode			
		• Word O bit			
		Read add   PSW0   Cond    V   0   Register assignment			
		Bit address trigger acquisition: After selecting a bit address, you can set the			
		condition to "ON ->OFF", "OFF ->ON" to take effect.			
		○ Word ● bit			
		Read add PSB0 Cond ON->OFF V			
		ON->OFF			
		OFF->ON			
	fixed mode	Set a fixed time period for collection only			
	inted mode	Collection m <sup>O</sup> Periodic acquisition <sup>O</sup> Trigger acquisition <sup>®</sup> Fixed mode			
		Time from 16 🗣 Ho 33 🗣 Minute 16 🖨 Hou 34 🗣 Minute			
		Sampling frequency 🗧 0.1 secc 🗸 🔽 Register assignme pSW0			
		For example, if the time is from 8:00 to 12:00, the system will automatically			
		perform the acquisition from 8:00 to 12:00, with a minimum sampling period			
		of 0.1 seconds. You can also use registers to specify the sampling period.			
		When "Register Assignment" is selected, only the time period can be changed,			
		and the unit of sampling frequency can only be 0.1 seconds/second/minute,			
		which cannot be modified (for example, when the unit of sampling frequency			
		is set to seconds, and the register is checked to specify the address as PSW0,			
		when 10 is entered into PSW0, it means that the sampling period is now 10			
		seconds).			

Sampling Add the address of the data object that needs to be sampled. If the sampling address is continuous, you can directly set the first address on the current page. Click "Channel Settings" on the right to enter the channel setting interface. Click Add Channels, and the system will automatically list them in order based on the user-defined data type. Channel settings will be described in detail below. If the sampling address is not continuous, you can uncheck "sampling continuous address of acquisition object", Click "Channel" on the right to set the address in the channel, as shown in the following figure

_		Data sampling
Basic Attribute	Channel setting	
		New Inser Dele Mov Mov
-	Address Ty PSW0 Wo	number
1	PSW0 Wc	NOT TRADEDUCED TO A CONTRACT OF
ead	device	Device port currently communicating
address	address	Set Target Register Number
	data type	The default value is Word unsigned and cannot be modified. To modify th
		channel data type, click "Channel Settings" to change it
	setting	Click "Settings" to enter the address setting interface. This interface allow
	seemig	you to set and use system registers and user-defined tags. You can click th
		address tag library or project tree - library - address tag library below to se
		the tags used (see 5-2 Address Tag Library for the use of address tag librar
		and user-defined tags)
		Address
		Device 本地设备 Statio 0 n No.
		Address type Vser defined label
		Address 0 System register
		数据类型 Word Vunsigned V
		Address [range: 0 - 9999]
		format
		Address Label
		Determine Cancel Application
operation	now	add sampling channel
tems	new insert	Insert a new channel below the selected channel
tems	delete	delete the selected channel
	move up	Move the selected channel up
	move up	Move the selected channel down
	down	
channel	channel	Incremental by default and cannot be modified
	address	You can customize settings only if "Sampling continuous address of
setting	auuress	acquisition object" is not checked. If it is checked, the system wi
		automatically increment based on the first address and data type.
	type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit
	format	BCD-BCD format, Hex format, Signed number, Unigned number, Floating

			number					
		word	Based on t	he sele	ected data type	, the system will a	utomati	ically increment and
		number	cannot be modified					
		description	Custom de	scriptio	on text			
storage	set the mod	le of data sto	rage					
-	storage cap	acity	is "count"	al amo or "M	Coun v unt of collecte B". Regardless		selecte	. The selectable unit d, the software will
	loop cover					fter reaching the s llected data to store	-	acity, and the touch ata
	mining ful mode	ll treatment	Mining fu	Ill treat cover( ction (	tion reaches the ment mode ) Stop when ft PSB0 PSB0	e set storage capaci ull collection ModeON->OFF	ity, the s	storage is full
			collection notice	Set a the co		the acquisition rea	ches th	e set capacity, set on
			clear data	are m		ed data will be clea		en the set conditions ne conditions can be
save	storage loc is HMI; WI Save Storage loc • HMI	ation. For ex hen PSW=3, ation	ample, if y	ou set		W0, then when PS		gister to specify the the storage location
	<ul> <li>Fixed file</li> <li>Storage cap</li> <li>80000</li> <li>Mining full</li> <li>Loop co</li> <li>Collecti</li> <li>Clear Data res</li> <li>Save</li> </ul>	e name O Date Dacity Coun treatment mode over O Stop whe ion PSB0 ata PSB0 tention days limit	About0.20	MB n ->OFF	wically specify the			
	Select	Proj	ect			Move up		
							1	
						Move down		
		Colle	ect data			Default		

	_
	Storage location of sampling information during simulation:
	(1) Save to USB flash drive: Software directory Temp/Run/storage/udisk/sample
	(2) If you choose to save to the HMI: software directory Temp/Run/db/sample, the saved file in this
	saving method cannot be directly opened for viewing. To view, you need to export to a USB flash
	drive through the export control register, and then view the exported file in the path saved to the
	USB flash drive
export control	Set the register for HMI export control (if set to PSW0, three consecutive addresses with PSW0 as the
	first address control different states), and click "Control Address Information" to preview
	<ul> <li>Control address information</li> <li>☆令:PSW0</li> <li>1.Export sampling data to U disk</li> <li>2:Export sampling data to U disk and clear the 进度:PSW1</li> <li>The numerical value of 1~100 indicates the</li> <li>结果:PSW2</li> <li>0:Data being exporting</li> <li>1:Export succeeded</li> <li>2:导出设备不存在</li> <li>3:U disk insufficient storage</li> <li>4:路径文件名错误</li> <li>5:导出文件关股</li> </ul>
	Note:
	1. This function only takes effect when the storage location is selected as HMI or specified as HMI
	using "Register Specified Storage Location".
	2. When inputting 1 or 2 to the command register, the database can be controlled to be exported to a
	USB flash drive, and the exported file format is xjdb. The xjdb to csv convert tool can be opened by
	double clicking on the software root directory \Tool\XJDbTool\XJDbTool.exe, which is set as the
	default opening method for xjdb. After opening, enter the path name of the csv, and click "Export" to
	convert the xjdb format file to a csv format file.
file name	Set the name of the stored file, with which the system will store data
fixed file	The stored file name is fixed, that is, the name set in the file name (the file name supports up to 200
name	characters)
date specify	The stored file name is named with a date, such as the file exported on May 29, 2021, with the file
the file	name 20210529
dynamically	Set the register address, and the stored file will be named after the contents of the register. When
specify the	selecting a dynamically specified file name, you need to select a string type register such as character
file name	input and Chinese input. (File names support up to 200 characters)
storage	Stop saving or overwriting old records when the storage space is insufficient
capacity is	
not enough	
stop when full	When checked, stop saving data when the storage space is insufficient
collection	
loop cover	When checked, when the storage space is insufficient, it will continue to save and overwrite the old
	records
data retentive	The default time for storing files on the screen is 7 days. After that time, the files will be deleted. File

days limit	retention time can be set to a maximum of 1000 days
save content	Set the stored items and sorting. The saved content can be selected from serial number, date, time, and
	collected data. You can move the saved content up, down, and restore the default sorting operation.

Note: Whether you choose "Fixed File Name" or "Dynamically Specify File Name" for a saved file name, the following characters are not supported in the file name:  $\langle / : * ? " <> | - #; $ ! @ & ( ).$ 

Channel setting

Set the data source of the current sampling group. When the address of the selected collection object is continuous, the address column cannot be edited, and the system automatically increments based on the data type of the previous row of data. The address column can only be edited if "sampling continuous address of acquisition object" is not checked.

				Dat	a s	ampling						
asic Attribute	Channel setti	ng										
								New	Inser	Dele	Mov	Mov
Channel	Address	Туре		Format		word number	Nam	ne	De	s <mark>crip</mark> tio	n	
1	PSW0	Word		Unsigned		1	Chan	nel1				
2	PSW1	Word	-	Unsigned		1	Chan	nel2				
	PSW2	Word		Unsigned	2. <del>4</del> 4	1	Chan	inel3				

# 4-5-2. Trend map

Display the data collected during data sampling in the form of a curve, and query the data within a certain time range.

1. Click it rend chart icon in the menu bar or click "Parts/Data Processing/Trend Chart" in the device bar in the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel the placement. Modify the length and width of the border through boundary points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click on "Trend Chart" or select "Trend Chart" and right-click to select "Properties" to set attributes.

sic Attribute Display S		Trend chart co	nfiguration		×
sic Attribute Display S	Scale display Que	ry Security settin	Location		
Control ID TC0					^
Description					
Display mo  Real tim	ne 🔿 Histo	ry			
Data capac 100					
<ul> <li>Display points per</li> </ul>	10	•			
O Time period displa	1				
Data source					
Samplin	✓ No.	~	Data		
Information					
Acquisition M0 (on sta	ate) Stor	age mc Collecting f	full, Stop samplir	Clear acquis M0 i: ng	
Acquisition Cycle acqu		ervatio SD card	A A		
Channel selection					
Select Channel	Address	Data type	word	Description	
Select Channel	Address	Data type	number	Description	
Curve					
color		✓ curve style		~	
		✓ curve style		~	
color		Curve style		~	
color Line width		Curve style		~	, ``

control ID	It is used for system management control, and cannot be operated by users
description	Can be used to comment on the purpose of this control
display mode	Select whether the data displayed in the trend chart is real-time or historical data
data capacity	Set the maximum number of points displayed in the trend graph (the maximum data capacity of a
	single channel is 5000)
display	Set the number of data points on the current display page of the trend chart (the maximum data
points per	capacity of a single channel is 5000). When the number of points per screen is set to be less than
screen	the maximum number of points, a button or scroll bar is displayed below the curve to click or
	scroll to view the curve that is not displayed on the current page
time period	Set the time displayed on the current display page of the trend chart. The unit can be customized,
display per	with a minimum unit of 0.1 seconds.
screen	

	Display mo Real time History Data capac 100
	<ul> <li>Display points per</li> <li>Time period displa</li> <li>0.1 secc </li> </ul>
1.	
data source	Select the data group to display as a curve from the data sampling
	Samplin V No. V Data
information	Display some collection control information for the selected data group and cannot be edited. If you need to edit it, you can click "Data" in the data source row to enter the data sampling section for editing Information Acquisition M0 (on state) Acquisition Cycle acquisition 1s Preservatio SD card
channel selection	Select the data channels to display from the sampling group, and each channel is displayed as a separate curve. Uncheck those that do not need to be displayed  Channel selection  Channel Address Data type word number Description  Curve color  Curve color  Curve style  Curve style  Max 0 Register assignment Min 0 Register assignment
curve color	Set the curve color of the selected channel
curve style	Select the curve style of the selected channel, including polylines, points, and dotted lines
line width	Set the line width of the selected channel
data	Set the curve display maximum and minimum values for the selected channel. You can set fixed data or select register assignments

Display

			Trend chart configuration
Basic Attribute Disp	ay Scale di	splay Quer	ery Security settin Location
Trend chart background		V	cale area packground
X-axis grid equal fraction	1	•	Thi ck ne
Y-axis grid equal fraction	1		ss St v
Zoom (%)	PSW0	For	or example, PSW0 represents the scaling percentage ratio, for example, PSW0
✓ Page turnin	PSW0		

trend chart	Set the background color of	f the trend chart
background		
scale area	Set the background color of	f the scale area
background		
grid	Set whether to display the g	grid
X-axis grid	Set the number of grid divis	sions for the X axis
equal fraction		
Y-axis grid	Set the number of grid divis	sions for the Y axis
equal fraction		
grid style	Set the grid style, including	solid lines, dotted lines, point lines, and thick lines
color	Set grid color	
	When selecting the histori	cal mode, clicking a point on the trend chart will display the current
	value of the point, as shown	n below.
Numerical		nía do se do s
display *		05/12 13:12
Display the	曲线2 0.00~100.00	
coordinates of	33	
the selected	0 -	
the selected point	0	2/05/12 #13/14
	0 - 1 2022/05/12 2022/05/12 202 13:13:08 13:13:11 13 show items	Set the items to display. Such as date, time, channel, etc
	13:13:08 13:13:11 15	:13:14
	13:13:00         13:13:11         13           show items         13:13:11         13	Set the items to display. Such as date, time, channel, etc
	13:13:00     13:13:11     13       show items       content description	Set the items to display. Such as date, time, channel, etc Customizable display content
	13:13:06     13:13:11     13       show items       content description       select	Set the items to display. Such as date, time, channel, etc Customizable display content If checked, it can be displayed; if unchecked, it will not be displayed
	13:13:06     13:13:11     13       show items         content description        select        background color	Set the items to display. Such as date, time, channel, etc Customizable display content If checked, it can be displayed; if unchecked, it will not be displayed Set the background color of the information window
	13:13:06     13:13:11     13       show items     content description       select     background color       font color	Set the items to display. Such as date, time, channel, etc Customizable display content If checked, it can be displayed; if unchecked, it will not be displayed Set the background color of the information window Set the font color
	13:13:06     13:13:11     13       show items     content description       select     background color       font color	Set the items to display. Such as date, time, channel, etc Customizable display content If checked, it can be displayed; if unchecked, it will not be displayed Set the background color of the information window Set the font color When selecting a point, in order to visually display the point
	13:13:06     13:13:11     13       show items     content description       select     background color       font color	Set the items to display. Such as date, time, channel, etc Customizable display content If checked, it can be displayed; if unchecked, it will not be displayed Set the background color of the information window Set the font color When selecting a point, in order to visually display the point information, the screen will automatically make an auxiliary line
	13:13:06     13:13:11     13       show items     content description       select     background color       font color     data line color	Set the items to display. Such as date, time, channel, etc Customizable display content If checked, it can be displayed; if unchecked, it will not be displayed Set the background color of the information window Set the font color When selecting a point, in order to visually display the point information, the screen will automatically make an auxiliary line perpendicular to the X axis for the selected point. This setting is used
point	13:13:06     13:13:11     13       show items     content description       select     background color       font color     data line color	Set the items to display. Such as date, time, channel, etc Customizable display content If checked, it can be displayed; if unchecked, it will not be displayed Set the background color of the information window Set the font color When selecting a point, in order to visually display the point information, the screen will automatically make an auxiliary line perpendicular to the X axis for the selected point. This setting is used to set the color of the auxiliary line curve. After checking, set the register address to represent the scaling
point	13:13:06       13:13:11       13         show items       content description         select       background color         font color       data line color         Select whether to scale the	Set the items to display. Such as date, time, channel, etc Customizable display content If checked, it can be displayed; if unchecked, it will not be displayed Set the background color of the information window Set the font color When selecting a point, in order to visually display the point information, the screen will automatically make an auxiliary line perpendicular to the X axis for the selected point. This setting is used to set the color of the auxiliary line curve. After checking, set the register address to represent the scaling
point	13:13:06       13:13:11       13         show items       content description         select       background color         background color       font color         data line color       data line color         Select whether to scale the ratio with the register value         Image: Com (%)       PSW0	Set the items to display. Such as date, time, channel, etc Customizable display content If checked, it can be displayed; if unchecked, it will not be displayed Set the background color of the information window Set the font color When selecting a point, in order to visually display the point information, the screen will automatically make an auxiliary line perpendicular to the X axis for the selected point. This setting is used to set the color of the auxiliary line curve. After checking, set the register address to represent the scaling
point	13:13:06       13:13:11       13         show items       content description         select       background color         background color       font color         data line color       data line color         Select whether to scale the ratio with the register value         Image Topology       PSW0         Image Topology       PSW0	Set the items to display. Such as date, time, channel, etc Customizable display content If checked, it can be displayed; if unchecked, it will not be displayed Set the background color of the information window Set the font color When selecting a point, in order to visually display the point information, the screen will automatically make an auxiliary line perpendicular to the X axis for the selected point. This setting is used to set the color of the auxiliary line curve. After checking, set the register address to represent the scaling For example, PSW0 represents the scaling percentage ratio, for example, PSWC
point	13:13:06       13:13:11       13         show items       content description         select       background color         background color       font color         data line color       data line color         Select whether to scale the ratio with the register value         Image Topology       PSW0         Image Topology       PSW0	Set the items to display. Such as date, time, channel, etc Customizable display content If checked, it can be displayed; if unchecked, it will not be displayed Set the background color of the information window Set the font color When selecting a point, in order to visually display the point information, the screen will automatically make an auxiliary line perpendicular to the X axis for the selected point. This setting is used to set the color of the auxiliary line curve. After checking, set the register address to represent the scaling

# ■ Scale display

Basic Attribute	Display Scale display	Query	Security settin Location		
Scale displa	iy				
Axis / scale	colu	~			
Major se	cale equa3	÷ 1	Main engravin 10		
Minor s	cale equ 1		Sub engraving <sup>6</sup>	٢	
Use tim	escale				
✓ Display	dateYY/MM/DD	~ 🗸 D	isplay tim HH:MM:SS	~	
	灾雅黶	~	General 🗸		
Siz 12	*				
Minor s	O No display 🖲 🛙		Sub engraving <sup>6</sup>	* •	
			Display percent		
Integer d Scale rai	ligits 🔅 Decimal		max min 🔘 Show a	II channel ranges	
	Max value )	Re	egister control		
	Min valu	Re	egister control		
Fo 微望	灾雅黑	~	General V		
Siz 12	~				

X scale	axis/scale color	Set the display color for the X axis and scale
	major scale	Set the number of segments for the X-axis major divisions
	segment	
	main scale length	Set the display length of the major divisions
	sub scale	When checked, the sub scale will be displayed on the control, where the number of
	segment	sub scale segments is set
	sub scale length	Set the display length of the sub scale
use time scale		When checked, it will be displayed in the control with a time scale
display date		When checked, the date will be displayed on the time scale
dis	splay time	When checked, the time will be displayed on the time scale
	font	Set the font for scale display
	size	Set the size of the scale display text
Y scale	axis/scale color	Set the display color for the Y axis and scale
	major scale	Set the number of segments for the Y-axis major divisions
	segment	
	main scale length	Set the display length of the major divisions

	sub scale	When checked, the sub scale will be displayed on the control, where the number of			
	segment	sub scale segments is set			
	sub scale length	Set the display length of the sub scale			
so	cale style	Choose whether to display scale marks, which is the style of display. You can choose			
		to display numbers or percentages, or not to display them			
ir	nteger bit	After selecting the display flag, you can set the integer digits displayed as needed			
de	ecimal bit	Set the number of decimal places to display numbers as needed			
sc	ale range	Set the maximum and minimum values for scale display			
		(1) Use a custom range that can be set as a constant or specified through a register			
		(2) Use the maximum and minimum values in the channel			
		(3) Show all channel ranges			
	font	Set the font for scale display			
	size	Set the size of the scale display text			

- Query
- (1) Export

Basic Attributes	Display	Scale display	Query	Security setti	ings	Location
Picture	PSB0	Export conditio ON-	>OFF ~	Export Format	PNG	~

Select to use picture export function. Meets export conditions, export format is PNG.

# 2 Query

After checking Use the query function, you can use the query function to filter data based on conditions and

display it in the current trend graph.

There are three ways to query: query by date, query by time period, and query by channel. You can also use register control to query.

(1) Query by Date: Enter the date to query. After the query control bit is turned on, the filtered results will be automatically displayed.

	T	rend chart configuration	
Basic Attribute Display	Scale display Query	Security settin Location	
Pictur PSB0	Export conditi ON->OFF ~	Export Format	
Use the query fur			
Query method			
Query by dat	e O Query by time	perio Press channel	
O Register con	trol query		
Query settings			
Query control			
	PSBO		
Query control Query date	PSBO		

You can also select "register control query" to dynamically set the query address. As shown in the following

figure, if you set a header address, such as PSW0, the query address will occupy a total of 3 addresses from PSW0 to PSW2, where PSW0 represents the year, PSW1 represents the month, and PSW2 represents the day, all of which are single word unsigned numbers. For example, PSW=2021, PSW2=5, and PSW3=29, the data collection record information on May 29, 2021 will be queried.

Friday , March 🗸	<ul> <li>Register control</li> </ul>	PSW0	
For example: P	SW0: year (unsigned numb	per input. YYYY for	mat. t
	SW0: year (unsigned number i		
	SW0: year (unsigned numl 1onth (unsigned number i		

(2) Query by time period: Enter the start time and end time to query. After the query trigger bit is turned on, the filtered results will be automatically displayed.

Query method Query by dat	te (	Query by t	ime per	rio Press ch	annel	
O Register con	trol quer	/				
Query settings						
Query control						
	PSB0					
Query time per	iod					
From _	Friday	March ∨	10	Hor 34	Minute	Secc
То	Friday	March ~	11	Ho 34	Min 6	Secc
	[	Register c	ontrol		-10	

Similarly, you can also use register control. After setting the first address, 12 register addresses, including the first address, will be occupied. The first 6 addresses represent the year, month, day, hour, minute, and second of the start time, and the last 6 addresses represent the year, month, day, hour, minute, and second of the end time. The format is consistent with that manual setting.



(3) Query by channel: Select or dynamically specify the number of channels to query the records of corresponding channels.

Query by date	○ Query	by time perio	Press channel
Register control	query		
Query settings			
Query control			
F	PSB0		
Query channel			
Channel	~	Register o	ontrol

(4) Register control query: Determine the query method based on different register values. When the value is 0, query by date. When the register value is 1, query by time period. When the register value is 2, query by channel.

O Query	by date	○ Que	ry by time perio Press channel
Registe	er control c	PSW0	Register value 0: by date 1: by time period 2: by channel
uery settin	gs		
Query co	ontrol		
	PSB	0	
Query reg	jister		
-	PSW	0	

Security setting

	Trend chart config	iration ×
Basic Attribute Disp	lay Scale display Query Security setting Location	n
Display contro		
When	隐藏・	
Devic	本地设备 v Settir	
Addre	PSB V 0	
Enable	Sta ON 🗸 🗌 Indirect	
User permissio	n	
Cancel pe	rmission after operation	
A prompt	window pops up when the user has no permission	n range
🗌 Hide this	component when the user has no permission sco	pe
Use <mark>r p</mark> en range	nission Permission1 v	

Same to chapter 4-2-10 indicator key security setting part.

### Location

Same to chapter 4-1-1 straight line location part.

# 4-5-3. XY line chart

By collecting data from two consecutive sets of registers on the site, one or more consecutive sets of coordinate points are formed, and graphs are drawn and displayed in the form of points, lines, or dotted lines, which is beneficial for the on-site engineer to analyze the accuracy of the data.

1. Click icon in the menu bar or click "Parts/Data Processing/XY Line Chart" in control window device bar, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or press ESC to cancel the placement. Modify the length and width of the border through boundary points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click the "XY Line Chart" or select the "XY Line Chart", right-click, and select "Attributes" to set attributes.

Basic Attrib Data Disp	lay Security se Loca	tion	ľ
Control ID X0			
Description			
Periodic		○ Trigger type	
Sampling pe1	Second	~	
Control settings			
Control settings	PSB0 Trig	gger co ON 🗸 🗸	
Contraction of the second s		gger co ON ∽ gger co Rising € ∽	

Ī	cont	rol ID	It is used for system management control and cannot be operated by users.
description Can be used to comment on the purpose of this cont		ription	Can be used to comment on the purpose of this control.
	sampling	periodic	Set the sampling period and collect it regularly according to the cycle time. The cycle time
	mode		defaults to 1 second, and can be adjusted as needed (collection unit: 0.1
			second/second/minute).
		trigger	Set a bit register and select the rising or falling edge as the trigger condition. When the
		type	address reaches the trigger condition, a piece of information is collected.

		○ Periodic ● Trigger type       Trigger address       Devic       本地设备       Addre       PSB       Indirect
	device	The device port that is currently communicating.
	address	Set the target coil number.
	setting	Click "Settings" to enter the address setting interface, where you can set the use of system registers and user-defined tags. You can click the address tag library or the project tree - library - address tag library below to set the used tags (see 5-2 Address Tag Library for the use of address tag library and user-defined tags).
		Address
		Device 本地设备 Statio 0 n No.
		Address type VSB V User defined label
		Address 0 System register
		Address [range : 0 - 9999] Address Label Determine Cancel Application
	indirect	Set the current address offset. The current coil address changes with the indirectly specified
	specify	register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). Example: The current
		coil address is PSB0, if the indirectly specified address is PSW100; When the value of the
		PSW100 register is 0, the coil that controls this element remains PSB0; When the value of
		the PSW100 register is 1, the coil that controls this element is PSB1 (and so on).
control	suspend	Set a bit register and select the trigger condition to be ON or OFF. When the address
settings	control	reaches the trigger condition, acquisition will be suspended.
	clear	Set a bit register and select the rising or falling edge as the trigger condition. When the
	control	address reaches the trigger condition, the collected information will be cleared.
point	sampling	Set the maximum number of points for curve sampling (the maximum number of points is
setting	points	1024), which can be checked as register control. After selecting register control, the value in
		the register will prevail.

Data

		-			XY line c	har	ť	_				
Basic	Attri Data	Display S	ecurity se Loc	ation		1 di		_		_		
	umber o 3											
	XY axis data		m the same	dat	a area							
	Channel	X address	Data type		Data format		Y address	Data type		Data format		
•	1	PSW0	Word	*	Unsigned	~	PSW1	Word	~	Unsigned	~	
	2	PSW0	Word		Unsigned	~	PSW1	Word	~	Unsigned	~	
	3	PSW0	Word	~	Unsigned	~	PSW1	Word	~	Unsigned	~	
											-	
-0	hannel setting	IS	Occupi	ed F	SW0-PSW1	9	XY a	axis coordin	ate	point addres	ss cc	
	curve styl	$\sim$	~						PSV			
								PSW4 Y2:		R 50		
	Line colc	~	Line w	idth	· •	-	Line styl	e	~			
	pper and low X axis	er limits o	range									
L.	Jppe 100		Register cor	ntrol	Lowe		0	Register co	ontro	d		
	Y axis	. î					. Î.					
1	Jppe 100	)	Register cor	ntrol	Lowe		0	Register co	ontro	d		
R	eference line											
M	Number o <sup>0</sup>		*	_								
	Reference line		Curve color									
number of channel	Set the m	umber o	of channe	els	(the max	im	um num	ber of ch	anı	nels is 16	), ai	nd each channel
	correspon	ds to a	curve (b	ус	licking _	•	, the nu	umber of	ch	annels be	low	will increase or
	decrease a	accordin	gly).									
XY axis data	If X and	Y are	selected	fro	om the s	am	e data a	area, assu	ımi	ng the se	et a	ddress is n, the
comes from the	coordinate	es of da	ta point 1	ar	e (n, n+1)	), ċ	lata poin	t 2 is (n+2	2, 1	n+3), and	data	point 3 is (n+4,
same area	n+5)											
	If X and Y	Y are no	ot selected	d fr	om the sa	amo	e data are	ea, assum	ing	g that the a	addr	ess set for the X
	axis is a a	nd the a	ddress se	et fo	or the Y a	xis	is b, the	coordina	tes	of data po	oint	1 are (a, b), data
	point 2 is	(a+1, b+	+1), and $c$	lata	point 3 i	s (a	a+2, b+2)	)				
	X address											
	Y address	Set th	e object o	of t	he Y axis	(c	an be set	when X	Υa	ixis comes	s fro	m the same data
		area is	s not chec	eke	d).							
	data type		-	-		oll	ection of	oject. You	ı c	an choose	e fro	om 8-bit, 16-bit,
			, or 64-bi									
	data							·		•	can	select decimal,
	format						-	ed numb				
channel setting	Each char							e, line col	or,	width, and	d lin	e type.
upper and lower	Display ra	ange of 2	X and Y a	axis	data obje	ects	8.					

limits of range	X axis	upper limit: Set the maximum value of X-axis data, which can be specified by			
		register.			
		lower limit: Set the minimum value of X-axis data, which can be specified by			
		register.			
	Y axis	upper limit: Set the maximum value of Y-axis data, which can be specified by			
		register.			
		lower limit: Set the minimum value of Y-axis data, which can be specified by			
		register.			
reference line	Select wh	Select whether to set a reference curve, and set coordinate points and curve colors. The			
	coordinate	points can be dynamically specified by the register.			

# Display

line

ne chart bac S	
Crid display	cale area bacl
Grid display	
cale display	
] X-scale	
Scale color	
Main scale	✓ Sub scale
scale equal fraction	scale equal fraction
Scale length 10	Scale length 10
Scale mark	
<ul> <li>No display</li> <li>Display numb</li> </ul>	per 🔘 Display percentage
Integer di <sup>5</sup>	Decimal C2
Font Arial	*
Color	Size 12 v
Y-axis scale	
Scale color	
Main scale	Sub scale
scale equal fi <sup>3</sup>	scale equal fraction
Scale length 10	Scale length10
Scale mark	
O No display O Display num	ber 🔘 Display percentage
Integer di 5	Decimal Di2
Font Arial	~
Color	Size 12 v

color	
scale area background	Set the background color of the scale area.
color	

Į	grid display	Set whether the	grid is displayed.
grid	X axis grid equal	Sets the number	r of grid divisions for the X axis.
display	Yaxis grid equal	Sets the number	r of grid divisions for the Y axis.
	line style	Set the line style	e, including solid line, dotted line, dot line, thick line, and so on.
	line color	Set the grid cold	or.
		Line chart bac Grid display	
		X-axis grid eq	
		Line style	Line color
scale	X scale	Scale Color	Sets the display color for the X axis and scale.
display		main scale	Set the X axis main scale segments
		equal fraction	
		main scale	Set the main scale display length
		length	often checking display whereas an the control set the will colle
		fraction	after checking, display sub scale on the control, set the sub scale segments
			Set the sub scale display length
		length	bet the sub-scale display length
	scale mark		to display scale marks, which is the display style. You can choose to
			s, percentages, or not.
		integer bit	After selecting the display flag, you can set the integer digits
			displayed as needed.
		decimal bit	Set the number of decimal places to display numbers as needed.
		font	Set the font for the scale display.
		size	Set the size of the scale display text.
		color	Set the color of the scale display text.
	Y scale	scale color	Set the display color for the Y axis and scale.
			Set the Y axis main scale segments
		equal fraction	
		main scale	Set the main scale display length
		length	
		-	after checking, display sub scale on the control, set the sub scale
		fraction	segments
			Set the sub scale display length
		length	

Security setting

				XY line char	t	
Basic Attril	Data	Display	Security se Location			
<ul> <li>Display contro</li> <li>✓ Enable</li> <li>When</li> </ul>		隐藏	•			
	Devic Addre Enable		\$	↓ Indirect	Settin	
V H	ermissio lide this Jser peri	compon	ent when the use	r has no permiss	sion scope	

Same to chapter 4-1-1 straight line security setting part.

### Location

Same to chapter 4-1-1 straight line location part.

# 4-5-4. XY trend chart

1. Click the III XY trend chart display icon in the control window device bar or "Parts/Data Processing/XY Trend Chart" in the menu, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel the placement. Modify the length and width of the border through boundary points.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click on the "XY Trend Chart" or select the "XY Trend Chart", right-click, and select "Attributes" to set attributes.

趋势图					?	
基本属性	数据	显示	安全设置	位置		
控件ID	XVTO					
描述						
采集方式						
<ul> <li>周期采算</li> </ul>	<b>采样問期</b>	1 🖨	0.110 ~			
○ 触发采集	E	S1	* Inclusion and			
点数设置						
1111000.000.000						
采样点数	2 10		] 使用寄存器			
			]使用書存譜			
采样点数	方式	Island	] 使用寄存器 運新取样 ()	)循环覆盖		
采样点数	方式	Island		) 循环覆盖		
采样点数 采集处理 ④	方式	Island		) 循环觀盖		
采样点数 采集处理 ⑥ 范围上下限 X轴	方式	Island		)循环要盖		
采样点数 采集处理 ② 范国上下限 X铀 上限 [1	。 野方式 )停止取样	Island	2重新取样 C			
采样点数 采集处理 ② 范国上下限 X铀 上限 [1	。 封方式 ) 停止取样 00	Island	運新取样 C			
采样点数 采集处理 ③ 范围上下模 X轴 上限 [1 Y轴	。 封方式 ) 停止取样 00	Island	運新取样 C			

СС	ontrol ID	It is used for system management control, and cannot be operated by users		
de	escription	Can be used to comment on the purpose of this control		
Refresh	Periodic	Set the sampling period and collect it regularly according to the cycle time. The cycle		
mode	acquisition	time defaults to 0.1 seconds, which can be adjusted as needed (collection unit: 0.1		
		seconds/second/minute)		
	Trigger	Set a register and select the trigger condition. When the address reaches the trigger		
	acquisition	condition, a message is collected.		
		Word address trigger acquisition: After selecting a word address, you can set the		
		conditions to "<", ">", "<=", ">=", "==", "!=" a fixed value to take effect. If you do not		
		need a fixed value, you can select register assignment to dynamically specify the value.		
		○ 周期采集		
		● 触发采集 ○ 位 ● 字		
		设备本地设备 ~ 设置		
		地址 PSW 0 0 数据类型 Word V Unsigned V 回接指定		
		anger void v onsigned v □ Ingerte		
		Bit address trigger acquisition: After selecting a bit address, you can set the condition to		
		the rising edge or falling edge to take effect.		
		<ul> <li>● 触发采集</li> <li>● 位</li> <li>○ 字</li> <li>设 备 本地设备</li> <li>✓ 设置</li> </ul>		
		地址 PS8 V 0 0		
		启用条件 上升沿 ~		
	device	Device port currently communicating		
	address	Set target coil number		
	setting	Click "Settings" to enter the address setting interface. This interface allows you to set and		
		use system registers and user-defined tags. You can click the address tag library or		
		project tree - library - address tag library below to set the tags used (see 5-2 Address Tag		
		Library for the use of address tag library and user-defined tags)		

		地址     ? ×       设备     本地设备     」 站号 0       地址类型     PSB     □ 用户自定义标签       地址     0     □ 系统寄存器       地址格式     DDDD [范围: 0 - 9999]     □       地址标签库        确定     取消     应用
	indirect specify	Set the current address offset. The current coil address changes with the indirectly specified register value, that is, $Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3)$ . Example: The current coil address is PSB0, if the indirectly specified address is PSW100; When the value of the PSW100 register is 0, the coil that controls this element remains PSB0; When the value of the PSW100 register is 1, the coil that controls this element is PSB1 (and so on)
point setting	sampling points	Set the maximum number of points for curve sampling, which can be checked as register control. After selecting register control, the value in the register will prevail
	Acquisition and processing method	Set the collection status when the sampling points are fully collected, stop sampling, clear the data, and resample or cycle over
	Upper and lower limits of range	Set the upper and lower limits of the XY axis, which can be specified through registers

Data

								?	>
基本属	胜		数据		显示	安全设置	位置		
通	道数	1		-	新增通道	删除通道			
通道	XĦ	地址	数据类	型	数据格式	Y轴地址	数据类型	数据	格式
1	PS	W0	Word	• I	Insigned	PSW0	Word 💌	Unsign	ned
< 曲线 线条		<b>N</b>	<b>~</b>		<u>ज</u>	样式		_ ~	>
	顺色				<b>V</b>		-		
参考线	-	2256	110025	-	新増	删除			
		dth 2-	颜色		曲线模式		坐标点		
序号		μщ <sub>2</sub>		-	447.5.35	1072			
序号 1 2		щs			折线 折线	•			
1		ш <u>х</u>				_			

channel numbers	Each channel corresponds to a curve. You can edit the channel by clicking Add Channel and
	Delete Channel
X address	Set the data type and format of the X-axis address
Y address	Set the data type and format of the Y-axis address
data type	Set the data type of the collection object. You can select 8-bit, 16-bit, 32-bit, or 64-bit data
	types
data format	Set the data format of the collection object, and you can select decimal, hexadecimal, floating
	point, and unsigned numbers
curve style	After selecting a channel, you can set the display style of the curve, the thickness, style, and
	color of the curve line
reference line	Click on the add/delete button to add/delete reference lines. The coordinate value of the
	reference line cannot be a decimal
description	User defined description content
curve color	Set the color of the reference line
curve mode	Two display modes for lines or points
Coordinate point	Set the coordinate points of the reference line

Display

國本属性	数据	显示	安全设置	位置	
背景颜色					
趋势图背最色		~	刻度区背景的	<u>a</u>	~
棚格显示					
X轴栅格等分	数 5	-	Y轴栅格等分	数 5	\$
粗细 —			样式 -		
颜色		~			
X轴刻度		26.54			
刻度颜色		~			
主刻度	12		☑ 副刻度 —	íŝ.	141
轴等分数			轴等分数		-
刻度长度	10		刻度长度	5	۲
封度标记 -	-		2		
○ 不显示		显示数字	○ 显示百:	-	122
整数位	100	*	小数位	0	
字体	微软雅黑		~	常規	~
颜色		~	大小	12	~
Y轴刻度					
刻度颜色		$\sim$			
主刻度			☑ 副刻度	10	
轴等分数	5		結等分数	1	٤
刻度长度	10		刻度长度	5	
刻度振记	-		1.22		
○ 不显示		显示数字	○ 显示百:		100
整数位	4	÷	小数位	0	
字体	微软推黑		Ŷ	常規	~
颜色		~	大小	12	~

trend o	chart background	Set the background	l color of the trend chart					
	color							
scale	area background	Set the background	Set the background color of the scale area					
	color							
£	grid display	Set whether to disp	play a grid					
grid	X-axis grid	Set the number of g	grid divisions on the X-axis					
display	equifraction							
	Y-axis grid	Set the number of g	grid divisions on the Y-axis					
	equifraction							
	thickness	Set the thickness of	f grid lines					
	style	Set the style of grid lines, including solid lines, dashed lines, dotted lines, thick lines,						
		etc						
	color	Set the color of gri	d lines					
scale	X/Y axis scale	scale color	Set the display color of the X/Y axis and scale					
display		main scale	Set X/Y axis main scale segments					
		equifraction						
		main scale length	Set main scale display length					
		sub scale	After checking, display sub scale on the control, set the sub scale					
		equifraction	segments					
		sub scale length	Set sub scale display length					
	scale mark	Choose whether to	o display the scale mark, which is the displayed style. You can					
		choose to display n	numbers, percentages, or not					

	integer bit	After selecting the display flag, you can set the number of integer
		digits displayed as needed
	decimal bit	Set the decimal places for displaying numbers as needed
	font	Set the font for scale display
	size	Set the size of the scale display text
	color	Set the color of the scale display text
Y scale	scale color	Set the Y axis scale color
	main scale	Set the Y axis scale segments
	equifraction	
	main scale length	Set the main scale display length
	sub scale	After checking, display sub scale on the control, set the sub scale
	equifraction	segments
	sub scale length	Set sub scale display length

#### Security setting

/趋势图					?	×
基本雇性	数据	显示	安全设置	位置		
显示控制						
☑ 启用验证	2					
验证失财	时隐藏	~				
设	备 本地设备			~	设置	
地	址 PSB		~ 0	0		
启用状	态 ON v	•		印接指定		
用户权限						
🗌 当用户无	权限范围时, 隐	藏该元件				
所需用户	权限范围 无		~			
	10					

Same to chapter 4-1-1 straight line security setting part.

#### Location

Same to chapter 4-1-1 straight line location part.

### 4-5-5. Report form

Display the records stored in data sampling in a table format, allowing for querying data within a certain time range.

1. Click the icon in the control window, or click Parts/Data Processing/Report form in the menu, move the cursor to the screen, click the left mouse button to place, click the right mouse button or use the ESC key to cancel the placement. Modify the length and width of the border through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click on "Report form" or select "Report form" and right-click to select "attributes" for attribute settings.

### Basic attributes

Control ID RFD Description Sampling Group 0 V No. 0 V Data list selection Selec Cha Address Data Data Integer Decimal Encoding word Alignmer Display Color V 2 PSW1 Word Unsign 4 0 / / Center V 3 PSW2 Word Unsign 4 0 / / Center V 3 PSW2 Word Unsign 4 0 / / Center V 3 PSW2 Word Unsign 4 0 / / Center V 3 PSW2 Word Unsign 4 0 / / Center V 0 Display serial number Number of digits Color V Display serial number Number of digits Color V Display tim HH:MM:SS Color Data capacity Max lines 100 Lines per 10 C						Report f	orm			
Description         Sampling Group 0       No.         Ist selection         Selec Chai Address Data type       Data Integer Decimal Encoding word Alignmer Color         V       1         PSW0       Word         Unsign       4       0       /         V       2       PSW1       Word       Unsign       4       0       /         V       2       PSW2       Word       Unsign       4       0       /       /       Center         V       3       PSW2       Word       Unsign       4       0       /       /       Center       Integer digf         Integer digf       Decimal d0       Integer digf       Image: Color       Image: Color       Image: Color       Image: Color         V       Display serial number       Number of digits       Color       Image: Color	Basic Attributes	Display	Appe	arance	Query	Security set	tings Loo	cation		
Sampling Group 0       No.       0       Data         list selection       Selec Chai Address Data type       Data Integer Decimal Encoding word number Alignmer Color         Image: PSW0 Word Unsign       0       7       7         Image: PSW0 Word Unsign       4       0       7       7         Image: PSW0 Word Unsign       4       0       7       7       Center         Image: PSW0 Word Unsign       4       0       7       7       Center       Image: PSW0         Channel settings       Integer did       Decimal d       Image: PSW0       Image: PSW0       Image: PSW0       Image: PSW0         Integer did       Decimal d       Image: PSW0       Image:	Control ID	RFO								
Ist selection         Selec Chai Address Data Integer Origits format mumber Alignme Display number Color         Image: PSW0 Word Unsign 4       0       /       /       Center         Image: PSW2 Word Unsign 4       0       /       /       Center         Image: PSW2 Word Unsign 4       0       /       /       Center         Image: PSW2 Word Unsign 4       0       /       /       Center         Integer dic4       Decimal d0       Image: PSW2       Image: PSW2       PSW2       PSW2         Channel settings       Integer dic4       Decimal d0       Image: PSW2       Ima	Descriptio	n								
Ist selection         Selec Chai Address Data Integer Origits format mumber Alignme Display number Color         Image: PSW0 Word Unsign 4       0       /       /       Center         Image: PSW2 Word Unsign 4       0       /       /       Center         Image: PSW2 Word Unsign 4       0       /       /       Center         Image: PSW2 Word Unsign 4       0       /       /       Center         Integer dic4       Decimal d0       Image: PSW2       Image: PSW2       PSW2       PSW2         Channel settings       Integer dic4       Decimal d0       Image: PSW2       Ima	-				5		_			
Selec Chai Address Data type       Data format       Integer digits       Decimal digits       Encoding format       word number       Alignmer Color         Image: PSW0       Word       Unsign       4       0       /       /       Center         Image: PSW0       Word       Unsign       4       0       /       /       Center         Image: PSW1       Word       Unsign       4       0       /       /       Center         Image: PSW2       Word       Unsign       4       0       /       /       Center         Image: PSW2       Word       Unsign       4       0       /       /       Center         Integer       Display       Becimal d0       Image: PSW2       Image: PSW2       Image: PSW2       Image: PSW2         Integer       Color       Image: PSW2       Color       Image: PSW2       Image: PSW2       Image: PSW2       Image: PSW2         Integer digt       Decimal d0       Image: PSW2       Image: PSW2       Image: PSW2       Image: PSW2       Image: PSW2       Image: PSW2         Integer digt       Decimal d0       Image: PSW2       Image: PSW2       Image: PSW2       Image: PSW2       Image: PSW2       Image: PSW2	Sampling G	Group 0	~	No.	0		~	Data		
Selec Chai Address type       format       digits       format       number       Address       color         ✓       1       PSW0       Word       Unsign       4       0       /       /       Center         ✓       2       PSW1       Word       Unsign       4       0       /       /       Center         ✓       3       PSW2       Word       Unsign       4       0       /       /       Center         ✓       3       PSW2       Word       Unsign       4       0       /       /       Center         ✓       3       PSW2       Word       Unsign       4       0       /       /       Center       Image: Settings         Integer dig4        Decimal d0         Leading 0         Alignment Center        Color          /       /       Center          ✓       Display serial number       Number of digits       Color <td>list selectio</td> <td>on</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	list selectio	on								
Image: Second settings   Integer dit <sup>4</sup> Decimal d <sup>0</sup> Alignment Center   Color     Image: Second settings     Integer dit <sup>4</sup> Display serial number   Number of digits   Image: Second settings     Color     Image: Second settings     Integer dit <sup>4</sup> Display serial number   Number of digits     Color     Image: Second settings     Image: Second	Selec Ch	a Address							Alignmer	
Image: Second settings     Channel settings     Integer diç4     Decimal d0     Color     Image: Center     Color     Image: Center     Color     Color </td <td>A CONTRACTOR OF THE OWNER OWNER</td> <td></td> <td>and the second se</td> <td>And a state of the second</td> <td></td> <td></td> <td>1</td> <td>1</td> <td></td> <td></td>	A CONTRACTOR OF THE OWNER		and the second se	And a state of the second			1	1		
Channel settings Integer dic4 Decimal d0 CLeading 0 Alignment Center Color Display serial number Number of digits Color Time Display date Y/MM/DD COlor Display date Y/MM/DD Color Data capacity Max lines 100 CLines per 10 C Used for system management controls, user cannot operate on Can be used to annotate the purpose of this control			and the second s					1000		
Integer die   Alignment Center   Color     Display serial number   Number of digits   Color     Time   Display date   Display date   V/MM/DD   Color     Display tim   HH:MM:SS   Color     Data capacity   Max lines   100   Lines per   10   Used for system management controls, user cannot operate   on   Can be used to annotate the purpose of this control	Land C		mora	onoigini			1	1	contor	
Time Display date Y/MM/DD Color Display tim HH:MM:SS Color Data capacity Max lines 100 Lines per 10 D Used for system management controls, user cannot operate on Can be used to annotate the purpose of this control	Display	serial num				~				
✓ Display date       Y/MM/DD       ✓ Color         ✓ Display tim       HH:MM:SS       ✓ Color         Data capacity       ✓       ✓         Max lines       100       ✓       Lines per 10         D       Used for system management controls, user cannot operate         on       Can be used to annotate the purpose of this control	Numbe	r of digits	•	Co	lor		~			
✓ Display tim       HH:MM:SS       Color         Data capacity       Max lines       100       €         D       Used for system management controls, user cannot operate         on       Can be used to annotate the purpose of this control	Time									
Data capacity       Image: Max lines       Image: Lines per       Image: Lines per       Image: Lines       Image: Lines </td <td>🗹 Display</td> <td>y date Y/N</td> <td>IM/DD</td> <td></td> <td>~ c</td> <td>olor 🗖</td> <td></td> <td><b>·</b></td> <td></td> <td></td>	🗹 Display	y date Y/N	IM/DD		~ c	olor 🗖		<b>·</b>		
Max lines       100       Lines per       10         D       Used for system management controls, user cannot operate         on       Can be used to annotate the purpose of this control	🗹 Display	y tim HH:	MM:SS		~ c	olor		~		
D       Used for system management controls, user cannot operate         on       Can be used to annotate the purpose of this control	Data capac	ity								
on Can be used to annotate the purpose of this control	Max line:	s 100		Lines pe	r 10					
	ID	Used fo	r systen	n manage	ement co	ontrols,	user car	not operat	e	
roup Select the data to be displayed from the data sampling and display it by	ion	Can be	used to	annotate	the pur	pose of	this con	trol		
	group	Select t	he data	to be di	splayed	from th	ne data	sampling a	and disp	lay it by

sampling group	Select the data to be displayed from the data sampling and display it by group. If you
	need to modify the sampling data, you can click on "Data" on the right to enter the data
	sampling page for modification.
list selection	Select the channels that need to be displayed from the sampling group. The default is to
	select all. If there are any channels that do not need to be displayed, you can uncheck
	them. Each channel occupies one column of data display.
channel settings	Set the integer and decimal places displayed for each channel, whether to lead with 0,
	alignment, and text color.
display serial number	Choose whether to display the sequence number column. If you choose to display it, the
	automatically incremented sequence number will be displayed in the first column of the
	table.
number of digits	Set the number of digits displayed in the sequence number column, with a default of 3
	digits.
color	Set the color for displaying text in the sequence number column.
time	Choose whether to display the time column.

display date S		Set the date display format.					
	color	t the color of the date display text.					
dis	play time	Set the time display format.					
	color	Set the color of the time display text.					
data	max lines	Set the maximum number of rows displayed in the table (up to 5000 rows).					
capacity	lines per page	Set the number of data rows on the current display page of the table. When the collected					
		rows exceed the set number of rows per screen, there is a moving bar below the trend					
		chart to control the page turning of the trend chart.					

# Display

		Query	a	al eccentral	
asic Attributes Display	Appearance	Query	Security setting	ps Location	
<ul> <li>Display part Title</li> </ul>					
Text     O Multil	na				
En l					
Fo 微软雅黑	~	General	*		
Co v	Size	12	~		
Ali Middle Center V			E.	Ŷ	
Middle_Center V		Row H1	-	*	
display list					
	hathar in m	1.000			
Show column head	nether in fi	ultilind Auto	column wid	th	
		0.000		22.0	
Show Items	Ti	tle bar descrip		Column spacing	Move up
Show Items No.	Ti	tle bar descrip		Column spacing	Move up
Show Items No. Time	Ti No Tir	tle bar descrip ). me		Column spacing 59 58	Move up
Show Items No. Time Date	Ti No Tir Da	tle bar descrip S ne Ite		Column spacing 59 58 59	Move up
Show Items No. Time	Ti No Tir Da Ch	tle bar descrip ). me		Column spacing 59 58	Move up
Show Items No. Time Date Channel1	Ti No Tir Da Ch Ch	tle bar descrip ) ne ite annel1		Column spacing 59 58 59 58	
Show Items No. Time Date Channel1 Channel2	Ti No Tir Da Ch Ch	tle bar descrip ne ite iannel1 iannel2		Column spacing 59 58 59 58 58 58	
Show Items No. Time Date Channel1 Channel2	Ti No Tir Da Ch Ch	tle bar descrip ne ite iannel1 iannel2		Column spacing 59 58 59 58 58 58	
Show Items No. Time Date Channel1 Channel2	Ti No Tir Da Ch Ch	tle bar descrip ne ite iannel1 iannel2		Column spacing 59 58 59 58 58 58	
Show Items No. Time Date Channel1 Channel2	Ti No Tir Da Ch Ch	tle bar descrip ne ite iannel1 iannel2		Column spacing 59 58 59 58 58 58	Move
Show Items No. Time Date Channel1 Channel2	Ti No Tir Da Ch Ch	tle bar descrip ne ite iannel1 iannel2		Column spacing 59 58 59 58 58 58	Move
Show Items No. Time Date Channel1 Channel2 Channel3 Title bar font	Ti No Tir Da Ch Ch Ch	tle bar descrip ne te annel1 annel2 annel3	tion	Column spacing 59 58 59 58 58 58	Move
No. Time Date Channel1 Channel2 Channel3 Title bar font Fo 微软推黑	Ti No Da Ch Ch	tle bar descrip ne te aannel1 aannel2 aannel3 V Gener	tion	Column spacing 59 58 59 58 58 58	Move
Show Items No. Time Date Channel1 Channel2 Channel3 Title bar font	Ti No Da Ch Ch	tle bar descrip ne te annel1 annel2 annel3	tion	Column spacing 59 58 59 58 58 58	Move
Show Items No. Time Date Channel1 Channel2 Channel3 Title bar font Fo 微软雅黑 Co	Ti Na Da Ch Ch Ch	tle bar descrip me te annel1 annel2 annel3 V Gener ze 12	al v	Column spacing 59 58 59 58 58 58	Move
Show Items No. Time Date Channel1 Channel2 Channel3 Title bar font Fo 微软推黑 Co	Ti Na Da Ch Ch Ch	tle bar descrip me te annel1 annel2 annel3 V Gener ze 12	tion al v	Column spacing 59 58 58 58 58 58 58	Move

dis	play part title	Set the title of the control is displayed in the first row of the table or can be set to				
		nultiple languages (refer to 5-1 for details of multiple languages).				
	font	Set the font for component titles.				
	size	Set the size of the component title text.				
	color	Set the color of component title text.				
display	show column head	After checking, the title of each column can be displayed.				
list	whether in	When checked, multiple languages will be used for the title line.				
	multiling					
	auto column width	After checking, the table will automatically adjust the column width based on the				
		content of each column.				

ti	tle bar font	Set the font, size, and color of the title bar.
	list font	Set the font, size, and color of text in the list except for the title.
list	chronological	According to the order of collection time, the first collected information is
sequence	order	displayed below the table, and the later collected information is displayed above
		the table, that is, the latest collection information is displayed at the bottom.
	Time reversal	According to the reverse order of collection time, the first collected information is
		displayed on the top of the table, and the second collected information is displayed
		below the table, that is, the latest collection information is displayed at the top.

### ■ Appearance

						Report form		
	Ba	sic Attributes	Display	Appearance	Query	Security settings	Location	
		Appearance	style					
		🔿 Use Librar	y Styles					
		☑ Oute Line style Line width Grid	ound color er frame 1 separator		Title descri Line color separator Line color	ption	>	
		Line width	1	~				
use	e library style	Select a	table sty	le from the	e gallery.			
	yle selection					rance from th	ne gallery.	
	style color	-		arance colo				
custor	mize appearance	-	-	pearance st	-			
table	background colo			ackground				
	title background	Set the l	oackgrou	and color of	f the title r	ow.		
	color							
	outer frame			display the				
	line style					choose lines,	dotted lines	s, dashed lines, etc
	line color	Set the o	color of t	the border l	ines.			
	line width	Set the	width of	the line.				
grid	grid	Set the o	display s	tyle of the	grid.			
	row separator	When c	hecked,	a horizonta	l border w	ill be display	ed.	
	column separato	r When c	hecked,	a vertical b	order will	be displayed.		

	line style	Set the form of	f box and line, y	ou can choo	se lines, dotted li	nes, dashed lines, e	etc.
	line color	Set the color o	f the border line	s.			
	line width	Set the width o	of the line.				
	Query						
1	Export						
Rep	port form						×
3	Basic Attributes	Display A	ppearance	Query	Security settings	Location	
	Picture PSE	Export	ON->OFF	Export	PNG ~		
Sele 2	ect the Picture	to use export p	victure function.		rt conditions, exp Report form	ort format is PNG.	
	Basic Attrib	ites Display	Appearance			ocation	
	Pictur		port ON->OFF		PNG V		
	Query r	ne query function	1				
	() Q	uery by date eqister control q		ime period			
	Query	ettings					
	Que	ery control	BO				
	Que	y date					
		Tuesday ,	April ~	Register	control		

After checking, you can use the query function to filter data based on conditions and display it in a table. There are two ways to query: by date, by time period, or by register control.

(1) Query by Date: Enter the date you want to query, and after the query control bit is connected, the filtered results will be automatically displayed.

You can also choose "register control" to dynamically set the query address. As shown in the following figure, setting a first address, such as PSW0, will occupy a total of three addresses from PSW0 to PSW2. PSW0 represents year, PSW1 represents month, and PSW2 represents day, all of which are single word unsigned numbers. For example, PSW=2021, PSW2=5, and PSW3=29, the data collection record information on May 29, 2021 will be queried.

Query date		
Tuesday , April 🗸	Register contro	PSW0
PSW0:年(无	符号数方式输入,YYYY格式,例	如2004)
PSW1	L : Month (input in unsigned	number format, MM for
PSW2	2 : Day (input in the form of	unsigned number in DD f

(2) Query by time period: Enter the start and end times to query, and after the query trigger bit is connected, the filtered results will be automatically displayed.

Basic Attributes	Display	Appearar	nce	Query	Security set	ttings	Location
✓ Pictur	PSB0 E	xport ON-	>OFF	Export	PNG	~	
✓ Use the q	uery function	on					
Query meth	hod						
O Query	y by date	Que	ry by tin	ne period			
100 100 mil	ter control	query					
Query setti	ngs control						
Query setti Query c	ngs control P	auery PSB0					
Query setti Query c	ngs control						
Query setti Query c Query tin	ngs control P	PSBO	15	Hol 38	3 Mir	nute	Second

Similarly, register control can also be used. After setting the first address, 12 register addresses, including the first address, will be occupied. The first 6 addresses represent the year, month, day, hour, minute, and second of the start time, and the last 6 addresses represent the year, month, day, hour, minute, and second of the end time. The format is consistent with manual settings.

om	Tuesday ,		April V	15	Hor38	Minute	Second
	Tuesday ,	,	April 🗸	14	Hol18	Min1	Second
			🖌 Regi	ster contr	c PSV	VO	

PSW6 ~ PSW11 Represent end time Year/Month,

(3) Register controlled query method: Determine the query method based on different register values. When the value is 0, query by date; when the register value is 1, query by time period.

Security setting

Basic Attributes	Display	Appearance	Query	Securi	ity settings	Location
Display con						
When	隐藏	×				
Devi	c 本地设备	又		~	Settin	
Add	re pSB	~	0			
Enat	ole Sta ON	~	Indirect			
User permis	ssion					
Hide t	nis compor	nent when the u	ser has no	permiss	ion scope	

Same to chapter 4-1-1 straight line security setting part.

### Location

Same to chapter 4-1-1 straight line location part.

### 4-5-6. Pie chart

Proportion of data displayed in block format

Example: If the first address is a and the number is set to n, then the addresses displayed for each section are a, a+1, a+2... a+(n-1). The proportion of each sector is the current sector's value/the sum of the values of each sector.

1. Click the "Parts/Data Processing/Pie Chart" in menu bar or the " pie chart icon in the device bar of the

control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button or use the ESC key to cancel the placement. Modify the length and width of the border through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click on the "pie chart" or select the "pie chart" and right-click to select "attributes" for attribute settings.

#### **Basic** attributes

asic Attric Display Security se Location	
Control ID PC0	
Description	
et a las alderes	
First data address	
Devic 本地设备 v Settin	
Addre psw v 0	
Data Word V Unsigned V	
type	

control ID	Used for system management controls, user cannot operate
description	Can be used to annotate the purpose of this control
first data address	Set the first address for displaying section data
device	The device port currently communicating with
address	Set target register number
data type	Byte-8Bit; Word-16Bit; DWord-32Bit; DDWord-64Bit; BCD format; Hex; Signed
	number; Unigned number; Floating number
setting	Click "Settings" to enter the address setting interface. This interface allows you to set the
	use of system registers and user-defined labels. You can click on the address label library
	or the project tree - library - address label library below to set the labels used (refer to 5-2
	Address Label Library for the use of address label library and user-defined labels)

				Address	×	
	Device	本地设备		•	Statio 0 n No.	
	Address type	PSW		~	User defined label	
	Address	0			System register	
	数据类型	Word ~	Unsigned	~		
	Address format	[range : 0 - 99	199]			
					Address Label	
	a			Determine	ancel Application	
indirect specify	Set the c	urrent add	ress offset	t, where the cur	rent register address changes with th	ne
	indirectly	specified r	egister val	lue, i.e. Dx[Dy]=	D[x+Dy numerical value] (x, y=0, 1,	2,
	3). Exar	nple: The c	urrent regi	ister address is PS	W0, if the indirectly specified address	is
	PSW100;	When the	value of	the PSW100 regi	ster is 0, the register that controls th	is
	componer	nt remains I	PSW0; Wh	nen the value of th	e PSW100 register is 1, the register th	at
	controls th	nis compon	ent is PSW	/1 (and so on)		
data number	Set the nu	mber of blo	ocks (conse	ecutive addresses a	after the first address)	

Display

		Pie Char	t	
asic Attril Displa	By Security se Location			
	1	Direction Clockw	ise 🔿	Anti-clo
4	2	Start angle	0	
	3	End angle	360	
Channe 通道 Font Col		Backgr	oun	×
Border Setti	ngs		oun	
Border co	la	~		
Sign				
	a nime	and an and a set	O Disalour	
O No di		ay number Decimal 0		ercentage

direction Set the display direction of the address in the section, clockwise or counterclockwise

clo	ckwise	Arrange the display in the order of clock rotation
counte	rclockwise	Display in reverse order of clock rotation
star	rt angle	Set the starting angle for the pie chart display, with a default of 0 degrees and a clock
		direction of 12 o'clock (0 o'clock)
ene	d angle	Set the ending angle for the pie chart display, default to 360 degrees, clock 12 o'clock (0
		o'clock) direction, default to full circle display
circle	circle	Set center size
center	center	
	radius	Set the radius of the circle, which can be set through the scroll bar or by entering a number
	interior	Set the display color inside the center of the circle
	color	
	outer frame	Set the display color of the center outline
	color	
channel	channel	Select each channel and set the font and background color for each channel
	font color	Set the font color of the selected channel
	background	Set the background color of the selected channel
	color	
border	border	Set the color of the pie chart border
settings	color	
sign	sign	Set the data style displayed on the section, which can be displayed as a percentage,
		numerical value, or not displayed
	decimal	Set the decimal places for displaying numbers or percentages, which cannot be set when the
		marker is selected not to be displayed
	font	Set the displayed data font, which cannot be set when the tag is selected not to be displayed
	size	Set the text size for displaying data

Security setting

	Chart	f			
		tion	curity se Loo	Display S	Basic Attril
				y control	
		~	隐藏	en	Whe
Settin	~		5地设备	Devic 2	
		~	SB	Addre p	
	Indirect	/	a ON	Enable S	
				permission	User p
sion scope	has no permiss	hen the us	mponent	lide this co	VH
	~	mission1	crion D	User perm	
sion scope	has no permiss		mponent	permission lide this co	✓ +

Same to chapter 4-1-1 straight line security setting part.

### Location

Same to chapter 4-1-1 straight line location part.

### 4-5-7. Data table

1. Click the " " table icon in the control window or Parts/Data Processing/Data Tables in the menu, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or use the ESC key to cancel the placement. Modify the length and width of the border through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components, or double-click the drawn "Data Table" or select "Data Table" and right-click to select "attributes" for attribute settings.

Basic attributes

ic Attribi Display Appearance Security set Location Control ID DTB0 Description  ✓ Use consecutive addresses Data address Devic 本地设备		1				7	
Description Use consecutive addresses Data address Devic 本地设备	sic Attrik	Display	Appearance	A Security set	Location		
✓ Use consecutive addresses       Data address       Devic 本地设备       Addre       PSW       O       Data       Word       ✓ Unsignec	Contro	DTID DTI	80				
✓ Use consecutive addresses       Data address       Devic 本地设备       Addre       PSW       O       Data       Word       ✓ Unsignec	Descri	ption					
Data address Devic 本地设备 v Settin Addre pSW v 0 Data Word v Unsignec v	2-2012/10/00						-
Devic 本地设备 V Settin Addre PSW V 0 Data Word V Unsignec V T t	✓ Use	e consecuti	ve addresses	8			
Addre PSW 0 Data Word VUnsignec Tt							
Data Word v Unsignec v					✓ Set	tin	
Data content		a second s		1			
	Data	Word V	Unsignec V	;t			
	-	a na seconda de la compañía de la co					
		· · · · · · · · · · · · · · · · · · ·	T dit .			٨٩٩	Delata
			1-1-201000				
Title Data type Data Number ditabl Integer Decimal incodi		tle	Data type	Data	Number	ditable Intege	er Decimal Encodi
	10						
	10						
	٢						•
Conta capacity Data capacity 白行教 5 Lines per 5	< Data ca	1 10					>

control ID	Used for system management controls, user cannot operate
description	Can be used to annotate the purpose of this control
use consecutive	When checked, the address order will be automatically calculated based on the first
addresses	address (please refer to the notes below for the use of consecutive addresses without
	checking)
data address	Set the first address of the data (only appears when continuous addresses are checked)
data content	Set the data title, data type, and data format to be displayed in the table
add/delete	add or delete the data
edit all	After checking, all the data items to be edited can be checked with one click, and the data
	can be modified in the data table
titles in	When checked, the title can be in multiple languages. After checking, the title name of
multi-language	each column can be set to display in multiple languages. Click "
	multilingual settings (refer to 5-1 label multilingual for specific usage)

Title						Add	1 L	Dele	te
The	Data typ	e	Data		Number	ditabl	Integer	Decimal	incodi
	Word		Unsig	•	1	~	4	0	-
	Word	•	Unsig	•	1	~	4	0	12
	Word	-	Unsig	•	1	~	4	0	-
			•	gits	s, decima	l place	s, leadir	ng 0, and	l colur
	width of the data of	After selection, you can set t width of the data column for th	After selection, you can set the i width of the data column for the data	Word       •       Unsig         Word       •       Unsig         After selection, you can set the integer diwidth of the data column for the data	Word       •       Unsiq       •         Word       •       Unsiq       •         After selection, you can set the integer digits       width of the data column for the data	Word       Unsig       1         Word       Unsig       1         After selection, you can set the integer digits, decima width of the data column for the data	Word       Unsig       1         Word       Unsig       1         Word       Unsig       1         After selection, you can set the integer digits, decimal place width of the data column for the data	Word       Unsig       1       4         Word       Unsig       1       4         After selection, you can set the integer digits, decimal places, leadin width of the data column for the data       4	Word       Vord       Unsiq       1       I       4       0         Word       Unsiq       1       I       4       0         After selection, you can set the integer digits, decimal places, leading 0, and



(1) When the title is checked to display multiple languages, " will be displayed in the title

description. Clicking on it will lead to the multi language library setting interface for setting multiple languages.

✓ Titles in	✓ Ed	it all				Add	ł	Dele	te
Title 📕	Data typ	e	Data		Number	ditable	Integer	Decimal	Incod
	Word	•	Unsig	٠	1	~		0	
	Word	•	Unsig	•	1	~	4	0	1
	Word		Unsig	-	1	~	4	0	

(2) When continuous addresses are not used, the display is shown in the following figure:

		1		
Use co	nsecutive ad	aresses		
Data capad	ity			
		Number		
	Contract of Contra	Number	-	

The way to set data is as follows:

(1) Place the mouse over the table, and when the mouse changes from an arrow to a hand shape, click on a cell in the table to set the address

40		Title	
序荷	静态列		
1			
2			
3		alta	
4			
5			

2 Set the address

Fill type: address monitoring, monitoring numerical values and characters.

元格设置		7	x x	单元格设置					?	×
填充类型	地址监控			填充类型	地址监控	~				
地址类型	数値 ~			地址类型	字符 🗸					
设备	本地设备	~ 设置	÷	设备	本地设备			~	设置	
地址	PSW ~ 0	0		地 址	PSW	~	0	0		
数据类型数据类型	Word Vunsigned V	服接指定		寄存器数 款据类型	1	1	□ 自定义	《数据类型		
整数位数	1 1 小数位数 0 1	□前导 0 □可编辑		编码方式	UTF_8 ~ 🗌	可编辑				
		确定	取消					确定	取	消

Fill type: text monitoring

自元格设置						?	×
填充类型	文本		~	-			
	0	多语言库					

Set the description of three controls including data input, character input, and Chinese input.

(3) When the data type is string, characters or Chinese can be displayed.

To display characters, the encoding format must be set to ASCII, UTF\_8 or UTF\_16.

To display Chinese, the encoding format needs to be set to GB2312.

		String		Jnsigned	-	1	1
				J			
		1					
<							>
数据设置		/					
编码格式	UTF_8	~	寄存諸	器数 1		*	
	ASCII			-			
列宽	UTF_8						
数据容量	UTF_16 GB2312						

Display

asic Attrib	Display Appearan	c Secu	irity set Loca	ation	
✓ Title					
Tevt	O Multiling				
			Title		
Colum	✓ Titles in multilin	ngual			
Display	Show contents		Title na		Column width
	序号		序号		57
~			静态	51	57
~	名称 5 ✓ Use Multilingualis	sm	BThan		57
✓ Number of	5		Static Colum		

title	text	Set the name of the data table header
	multiling	After checking, the header content can be set to multiple languages
colu	ımn	Show column titles after checking
titles in m	ultilingual	After checking, the title of each column can be set to display in multiple languages
display	number	After checking, an automatically incremented sequence number column will be displayed
		in the first column of the table
display	y name	After checking, the custom name of each row will be displayed, which can be edited in
		the static column name table below, or whether to use multiple languages can be set
table/l	ist title	Set the font, color, size, alignment, and line height for the title display
list	data	Set the color, size, alignment, and row height of the data style font
synchroniz	e language	You can check to use the same font. After checking, the color, size, alignment, and line
fo	nt	height of the three fonts remain consistent

### ■ Appearance

			Data Table
	Basic Attrib	isplay Appearan	ceSecurity sel Location
	⊖ Gallery ap	pearance	
	Customize     Backgreeneereeeneereeneereeneereeneereeneereeneereeneereeneereeneereeneereeeneereeneereeeneereeeneereeeneereeeneereeeneereeeneereeeeereeeeee	e appearance oud	
		Background colo Title Background	
		Settings rder preset 田	
		Outer frame Thi ck ne ss	~ ~
		St	- ·
allery earance	style selection	Click and selec	t a table style from the gallery earance
			Style selection
stomize earance	background	background color	Set Table Background Color
		title color	set title background color
	border	border preset	Select a border style based on the preview image
	settings	outer frame	Choose border thickness, style, and color
		grid	Choose the thickness, style, and color of the grid

■ Security setting

Basic Attrib Dis	play Appearance Security	set Location	
Display contro	01		
✓ Enable			
When	隐藏 ~		
Devic	本地设备	✓ Settin	
Addre	- / / / 22 / 2 / / /		
Enable	Sta ON V	Indirect	
User permissio	on		
Hide this	component when the user	has no permission scope	
User per	mission Permission1	~	
range	Initial Initia		
1.570			

display control	Use bit control to display the component, and hide the control when the condition is not met
enable	When checked, display control will be enabled
When validation	Set the display of the control when validation fails
fails	
address	Set the target coil for positioning control
enable state	Set the ON state to be valid or the OFF state to be valid;
	Example: If the device is checked as shown in the above figure, the bit control is PSB0, and if
	verification fails, it is hidden. If the enabled state is ON, the component is displayed normally
	when PSB0 is ON, and if PSB0 is OFF, the component is hidden and not displayed.
user permission	Set controlled permission levels. After setting the required user's permission range, the
	following three functions can be checked as needed:
	(1) After the operation is completed, the usage permission will be cancelled: if this option is
	not checked, the corresponding level password needs to be entered every time the component
	is operated. After checking, only one entry is required.
	(2) When the user has no permission range, a prompt window will pop up.
	(3) When the user does not have permission range, hide the component.

# Please refer to chapter 4-2-3 value input for permission function.

### Location

Same to chapter 4-1-1 straight line location part.

# 4-6. Recipe

# 4-6-1. Recipe edit

click "parts/recipe/recipe edit in the menu or click recipe edit icon in tool bar to enter recipe edit interface.

					Recipe man	agen	nent					
	grouf Recipe dat	ta										
Recipe group	0	¥	Name	Recipe_0		Ad	ld recip	Dele	te re	cipe		
recipe	elist Recipe_0		Add Inser Recipe	Delete Delete	Perine data	100						
		1	No.	Element name	Data	type	9	Data forma	t	number	Integer	Decimal
			0	0	Wor			Unsigned		1	4	0
			1	1	Wor	d		Unsigned	•	1	4	0
			2	2	Wor		1	Unsigned		1	4	0
					Wor							
				- 16-11.		iu.		Unsigned		7.4	4	
						U		Chalqhee		1		

Recipe group

•						
Select the	recipe group that needs	to be edited, a	nd all	added recipe	grou	ps can be selected
through th	e drop-down menu					
Set the nat	me of the recipe group					
After ente	ring the name, click on	"Add Recipe" to	o add a	a new recipe	group	)
Click to delete the selected recipe group						
Display all added recipe group numbers and names in the list below						
Add recip	e elements					
Insert a ne	w recipe element below	the selected red	cipe el	lement		
Delete sel	ected recipe elements					
Delete all	elements in this group					
Copy the s	selected recipe element					
Pasting th	e copied data at the sel	ected location,	a new	v piece of da	ta nai	med xxxx_copyed
will be ad	ded					
No.	Element name	Data type		Data forma	at	
0	0	Word		Unsigned	-	
1	1	Word	•	Unsigned		
2	1_Copyed	Word	•	Unsigned	•	
Automatic	ally display the length o	of the currently	added	recipe and ca	annot	be edited
Each grou	p of recipe data has a s	eparate data vol	lume.	As shown in	the a	bove figure, if the
data amou	int is set to 100, it mean	ns that up to 10	0 sets	(0-99) of da	ta car	1 be set within the
	through th Set the nam After enter Click to do Display al Add recipe Insert a new Delete sele Delete all Copy the sele Pasting th will be add No. 0 1 2 Automatic Each grou	through the drop-down menu Set the name of the recipe group After entering the name, click on a Click to delete the selected recipe Display all added recipe group nu Add recipe elements Insert a new recipe element below Delete selected recipe elements Delete all elements in this group Copy the selected recipe element Pasting the copied data at the sel will be added No. Element name 0 0 1 1 2 1_Copyed Automatically display the length o Each group of recipe data has a s	through the drop-down menuSet the name of the recipe groupAfter entering the name, click on "Add Recipe" toClick to delete the selected recipe groupDisplay all added recipe group numbers and nameAdd recipe elementsDisplay all added recipe group numbers and nameAdd recipe elementsInsert a new recipe element below the selected reDelete selected recipe elementsDelete all elements in this groupCopy the selected recipe elementPasting the copied data at the selected location,will be addedNo.Element nameData type00Quoted WordAutomatically display the length of the currentlyEach group of recipe data has a separate data vol	through the drop-down menu Set the name of the recipe group After entering the name, click on "Add Recipe" to add a Click to delete the selected recipe group Display all added recipe group numbers and names in th Add recipe elements Insert a new recipe element below the selected recipe elements Delete selected recipe elements Delete all elements in this group Copy the selected recipe element Pasting the copied data at the selected location, a new will be added No. Element name Data type 0 0 0 Word • 1 1 1 Word • 2 1_Copyed Word • Automatically display the length of the currently added Each group of recipe data has a separate data volume.	through the drop-down menu Set the name of the recipe group After entering the name, click on "Add Recipe" to add a new recipe Click to delete the selected recipe group Display all added recipe group numbers and names in the list below Add recipe elements Insert a new recipe element below the selected recipe element Delete selected recipe elements Delete all elements in this group Copy the selected recipe element Pasting the copied data at the selected location, a new piece of da will be added No. Element name Data type Data formation 0 0 Word - Unsigned 1 1 1 Word - Unsigned Automatically display the length of the currently added recipe and ca Each group of recipe data has a separate data volume. As shown in	Set the name of the recipe group         After entering the name, click on "Add Recipe" to add a new recipe group         Click to delete the selected recipe group         Display all added recipe group numbers and names in the list below         Add recipe elements         Insert a new recipe element below the selected recipe element         Delete selected recipe elements         Delete all elements in this group         Copy the selected recipe element         Pasting the copied data at the selected location, a new piece of data narwill be added         No.       Element name       Data type         Data format       0       0         Word       Unsigned       1

		recipe group 0. If it exceeds this, a pop-up prompt will appear in the following figure.
		recipe group 0. If it exceeds this, a pop-up prompt will appear in the following ligure.
		Prompt
		Current recipe has reached upper limit of data
recipe	element list	Show all added elements
element	No.	Recipe element number, cannot be modified
	element	Set element names, such as water, length, etc
	name	
	data type	Set the recipe element data type, which can be selected from 8-bit, 16-bit, 32-bit, or 64-bit
		types
	data format	Set the data format for recipe elements
	number	only when selecting Word_String DOWord_String DOWord_String DOWord_String-1 character Word_String-2 characters DWord_String-4 characters DDWord_String-8 characters
	words	Display the address length occupied by this element, with 16 bits being 1, 32 bits being 2,
		and 64 bits being 4
	integer	Set the integer digits of data
	decimal	Set the number of decimal places for data

Recipe data

			Recip	e manager	nent				×
Recipe group Recipe data									
all recipe group list	Search		P	Add Insert	Delete Delete a	u			
配方0_Recipe_0 配方1_Recipe_1		Use external ad Number index		O Nan	ne Index				
	序号	名称	0	1	1_Copyed	元素3	元素4	元素5	元素
	0	data0	0	0	0	0	0	0	0
	1	data1	0	0	0	0	0	0	0
	2	data2	0	0	0	0	0	0	0
	3	data3	0	0	0	0	0	0	0
	4	data4	0	0	0	0	0	0	0
	<								
									>

search	Enter a name to search for recipe data
add	Add recipe data below the selected location
insert	Insert a new piece of data at the selected data
delete	Delete selected recipe data
delete all	Delete all recipe data for this group
use external address	Recipe index function, which can be indexed by recipe number or name

### 4-6-2. Recipe table

Used to display the recipe data set in recipe edit, which can be edited in this table.

Click "Parts/Recipe/Recipe Table" icon in the menu bar or " icon in the device bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or use the ESC key to cancel the placement. Modify the length and width of the border through the boundary point.
 When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click on the "Recipe Table" or select "Recipe Table" and right-click to select "attributes" for attribute settings.

Basic attributes

		Recipe table									
	E	Basic A	ttril Display Ap	opearan	Query See	curity se Lo	cation				
		Cor	ntrol ID RL0								
			Contraction Contract								
		Des	scription								
		Data	a source								
			cipe Recipe_0		Destructed	1.					
		gro	hup Recipe_0	~	Recipe Ed	nt					
			Full display		Editable	e					
		ielec	Element name	ditable	Data type	number	Integer	Decimal			
			0		Word	1	4	0			
			1		Word	1	4	0			
			1_Copyed		Word	1	4	0			
			元素3		Word	1	4	0			
		14	元素4		Word	1	4	0			
			元素5		Word	1	4	0			
			元素6 元素7		Word Word	1	4	0			
		H	元素8	H	Word	1	4	0			
		Dat	ta capacity Total rows Lines per page	5		-					
cont	rol ID	Us	ed for systen	n mana	gement c	ontrols,	user ca	nnot operat	e		
desc	ription	Ca	n be used to	annota	te the pur	pose of	this cor	ntrol			
ta	recipe	Sel	lect the recip	e grou	p that nee	eds to b	e displa	yed, or clic	ck on the	recipe edite	or to add
urce	group		dify the reci		-		-			-	
	Sroup		nen the reci		-	acted t	ha tahl	a halow d	icplays of	l tha alom	onts of
					up is sei	ecteu, t	ne tabi		ispiays all	i ule elem	ients of
		sel	ected recipe	group							

full di	isplay	After checking, all the recipe items to be displayed can be checked with one click. Only
		when checked under the "Selection" column will the data of each group of the element be
		displayed. If you do not want to display the data of a certain element, simply uncheck it
edita	able	After checking, all the recipe items to be edited can be checked with one click, and the
		data can be modified in the recipe table. Only after checking the "Editable" column and
		downloading it to the screen or simulating it can the data of a certain element be edited. If
		a certain element is not checked, it cannot be modified
data	total rows	Set the maximum number of rows displayed in the table
capacity	lines per	Set the number of rows displayed on each page to be less than or equal to the maximum
	page	number of rows per page

# Display

Recipe_0			R.	tecipe table		
Text       Multiling         Recipe_0         lisplay list       Show row       Show         Use       Display       Show row       Show         Move up       外号       60       Move up         水号       60       Move dow         空気線       名称       60       Move dow         空気線       名称       60       Move dow         Present       60       Move dow       Default         erial Number Style       Style1 (1/2/3)       v       Move dow         Title       List title       List Data       Synchronize language font         O       Size       12       V         Middle_Center       Size       12       V	ic Attri 🛛	Display Appearan	Query	Security se Locat	tion	
Text       Multiling         Recipe_0         lisplay list       Show row       Show         Use       Display       Show row       Show         Move up       外号       60       Move up         水号       60       Move dow         空気線       名称       60       Move dow         空気線       名称       60       Move dow         Present       60       Move dow       Default         erial Number Style       Style1 (1/2/3)       v       Move dow         Title       List title       List Data       Synchronize language font         O       Size       12       V         Middle_Center       Size       12       V	Title dis	play				
lisplay list Use	Tevt					
Use Display Show row Show Show Items Title Title Description Column Move up 序号 60 名称 名称 60 Move down Default Title Style Style (1/2/3) Title Style Style (1/2/3) Title List title List Data Synchronize language font Column header Size 12 Ni Middle_Center Style Row h50				Recipe_0		
Show Items       Title Title Description       Column       Move up         第号       60       60       60         名称       60       Move down       Default         erial Number Style       Default       Default         Style       Style 1 (1/2/3)       ✓         Title       description       ✓         Column       ✓       General       ✓         Able title       List title       List Data       Synchronize language font         ◎       ✓       Size 12       ✓         Middle_Center       Row h 50       ♥	display lis	st				
学習 60 名称 名称 60 Move down Default Title description Column header か Default Style List title List Data Synchronize language font の 微紋雅風 ~ General ~ Size 12 ~ Ni Middle_Center ~ Row h 50 章	Use	<ul> <li>Display</li> </ul>		Show row	Show	
名称 名称 60 Move down Default erial Number Style Style Style1 (1/2/3) Title description Column header い ble title List title List Data Synchronize language font の 微紋雅服 、 General 、 Size 12 、 Middle_Center 、 Row h50 、	SI	how Items	Title		Column	Move up
Move down Default Default Style Style1 (1/2/3) Title description Column header Suble title List title List Data Synchronize language font O 微软推展    General Size 12 Row h 50					T.C.S.	1
Default erial Number Style Style Style1 (1/2/3)  Title description Column header  Able title List title List Data Synchronize language font		名称		名称	60	
Title description Column header able title List title List Data Synchronize language font の 微欲雅熙   General Size 12 Ni Middle_Center   Row h50						
description Column header able title List title List Data Synchronize language font の 微软雅麗  く General  く Size 12  く Ni Middle_Center  く Row h50  章	Style St	tyle1 (1/2/3)		~		
Column header able title List Data Synchronize language font の 微软雅風   General O   Size 12 Ii Middle_Center   Row h50	Title					
header		ion		~		
o 微软雅熙    General ○ Middle_Center    Row h50   €	header			~		
o Size 12 ✓ Ni Middle_Center ✓ Row h50 ♦	Table title	List title	Lis	t Data	nchronize land	quage font
di Middle_Center ♥ Row h50 €	Fo 微软	推照	~	General	~	
	Co	~	Size	12	-	
Determine Cance	Ali Middl	le_Center 😪		Row H50		
Determine Cance						
Determine Cance						

title	title display	To display the title, you need to check the title display option before you can set the
display		relevant settings for the title
	text	Set the name of the recipe table header
	multiling	After checking, the header content can be set to multiple languages
display list	use	After checking, the title of each column can be set to display in multiple languages

multilanguage	
display no.	After checking, an automatically incremented sequence number column will be
	displayed in the first column of the table
show row title	After checking, the column titles and element names for each row will be displayed,
	and you can also edit the title names in the table below
show column	After checking, the column title (i.e. element name) of the list name will be
title	displayed, or you can edit the title name in the table below
operations	After selecting a row in the table, you can click "Move Up" or "Move Down" to
	move the selected row up or down. You can click on the default and restore the
	default settings with one click

When the list displays multiple languages, "..." will be displayed in the bottom right corner of the title description. Clicking on it will lead to the multi language library setting interface to set up multiple languages.

Use	✓ Display	✓ Show row	~	Show
Sho	w Items	Title Title Descriptio	on	Column
	序号	序号		60
	名称	名称		60

serial number style	Set the style of the sequence number column, 1/2/3 or the group1/group2/group3
title background color	Set the background color of the title
column title	Set the background color of column title
background color	
font	Set the font, color, size, alignment, and row height for table titles/list titles/list data. You
	can check to use the same font. After checking, the three fonts, color, size, alignment, and
	row height, all remain consistent.

Appearance

asic Attri Display Appearanc Query Security's Location Gallery Appearance Customize appearance Backgroud Backgroud color V Different colors	ofodd
Backgroud	ofodd
Background color	ofodd
Border Settings	
Border preset 🖽 🔛 🖬 🖬 💷	
Outer frame	
Thi	
ck v	
ss	
St v	
Grid	
Select Focus	
Text-color V	
Row background color	
Cell	

gallery appearance	style se	election	Click and select a table style from the gallery <ul> <li>Gallery Appearance</li> </ul> Style selection
customize appearance	background setting	background color	set the background color of the table
background		different color of odd	After selection, you can set the odd and even rows to display different colors  Customize appearance Backgroud Odd line color Odd line color V Different colors of odd Even line color
	border setting	border preset	Select a border style based on the preview image
		outer frame	Set the thickness, style, and color of the outer frame
		grid	Set the thickness, style, and color of the grid
	select focus	select focus	Set the display style
		text color	Set the text color displayed
		row	Set the selected row background color
		background	
		color	
		cell	Set the background color of the selected cells

# Query

# 1 Export

Recipe table							
Basic Attribu	Display	Appearance	Query	Securit	<mark>y setti</mark> Lo	ocation	
Picture	PSB0	Export	ON->OFF	~	Export	PNG	~

Select the **Picture** to use picture export function. Meets export conditions, export format is PNG.

# 2 Query

	Recipe table
Basic Attri Display	Appearan Query Security se Location
Pictur PSB0	Export conditi ON->OFF v Export Format PNG v
Enable query fur	iction
Query method	
Query by	Query by data
Query settings	
Query Control	PSBO
Quan kannord	Use register

Select Enable query function to use query function. Filter data based on conditions and display it in the current recipe table.

There are two ways to query: by keyword and by data, and you can also use register control to query.

 Query by keyword: Enter the keyword to be queried, and after the query control bit is connected, the filtered results will be automatically displayed; You can also choose to use registers to dynamically specify keywords for queries.

Query by	O Query b	oy data
Query settings		
Query Control	PSB0	
Quantikasuard		Use register

(2) Query by data: Enter the data to be queried, and after the query control bit is turned on, all recipes containing this data will be automatically displayed. Alternatively, you can choose to use registers to dynamically specify the query data.

Query method	
○ Query by	Query by data
Query settings	
Query Control	PSB0

Security setting

2	L.	É a la companya		
isic Attri Displa	y Appeara	n Query	Security se Locatio	on
Display contro				
Enable				
When	-			
THEI	隐藏	~		
Devic	本地设备		~	Settin
Addre	PSB	~	0	
Enable	Sta ON	~	indirect	
User permissio	'n			
terrest of the second second				
Hide this	component	when the u	user has no permiss	ion scope
User per	mission	ermission1	~	
range	-			

Same to chapter 4-1-1 straight line security setting part.

### Location

Same to chapter 4-1-1 straight line location part.

### 4-6-3. Recipe transfer

Use this button to upload and download recipes.

1. Click "Parts/Recipe/Recipe Transfer" icon in the menu bar or the "icon in the device bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or use the ESC key to cancel the placement. Modify the length and width of the border through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click on "Recipe Transfer" or select "Recipe Transfer" and right-click to select "attributes" for attribute settings.

Basic attributes

			Recipe Tr	unarci	
Bas <mark>ic Attrib</mark>	out Appearance	e Security	sett Locat	ion	
Contr	ol ID RT0				
		12			
Actio	n Press	~			
transmi	ssion mode				1
🔘 Regi	ster control				
Recip	Recine ()	~	Recipe	Register	
	e Recipe_0	×	Recipe	Register	
source Number of	e Recipe_0	<b>v</b>	Recipe	Register	
source Number of words	e Recipe_0	~	Recipe	Register     Settin	
source Number of words PLC add	e Recipe_0 of 9 Iress		Recipe		
sourc Number o words PLC add Devic	e Recipe_0 of 9 Iress 本地设备 PSW				

Used for system management controls, user cannot operate
Can be used to annotate the purpose of this control
Select the button action mode, and you can choose to transmit when pressed or released
Set the transmission direction of the recipe, which can be downloaded from the HMI to
the PLC or uploaded from the PLC to the HMI
Transfer the recipe data in the HMI to the PLC address, which is set in the address
below
Read the data from the PLC address to the HMI and replace the existing recipe data
Using register controlled transmission method, transmitting through rising/falling edge
triggering
transmission mode
O Download recipe to O Upload Recipe from PLC
Register control     Download recipe to
Upload Recipe from
Select the recipe group that needs to be transferred, or click on the [recipe] button to
modify the recipe data
After checking this option, the value in the register can be used to control which recipe
group to export (if the value in the register is 0, it means that the upload and download
data transmission of recipe group 0 is being carried out; if the value in the register is 1,
it means that the upload and download data transmission of recipe group 1 is being
carried out)
Display the length of the recipe that needs to be transferred and cannot be changed
Set the PLC initial address for transmission or upload, and calculate the occupied

	address le	ngth based	on the word n	umbers set abov	ve	
device	The devic	e port curre	ently commun	icating with		
address	Set Target	t Register N	umber			
data type	Byte-8Bit	; Word-16E	Bit; DWord-	32Bit; DDWord	l -64Bit; BCD; He	x; Signed number;
	Unigned 1	umber; I	Floating numb	ber		
setting	Click "Se	ttings" to e	nter the addre	ess setting inter	face. This interface	e allows you to set
	the use of	f system reg	gisters and us	er-defined label	s. You can click o	n the address label
	library or	the project	t tree - library	y - address labe	l library below to	set the labels used
	(refer to 5	-2 Address	Label Librar	y for the use of	address label librai	ry and user-defined
	labels)					
			Ad	dress	×	
	Device	本地设备		Ŷ	Statio 0	
	Address type	PSW	×		User defined label	
	Address	0	1		System register	
	数据类型	Word ~	Unsigned V			
	Address	[range : 0 - 99				
	format					
	-					-
					Address Label	
			01	Determine Ca	ncel Application	
	<u>.</u>		), it			
indirect specify	Set the c	urrent addr	ess offset, w	where the current	nt register address	changes with the
	indirectly	specified re	egister value,	i.e. Dx [Dy]=D	[x+Dy numerical v	value] (x, y=0, 1, 2,
	-	-	•			y specified address
				•		er that controls this
	componer	nt remains F	SW0; When	the value of the	PSW100 register is	s 1, the register that
	-		ent is PSW1 (			
recipe transfer	Set the f	lag bit for	transmission	completion, a	nd automatically	set it to ON after
completion	transmiss	ion is comp	leted			

Appearance

e and a straight to be			
sic Attribu Appearance Security sett	Location		
	Use pictu	res	
	Status	0	¥
OFF	Name	button_05_a	
2	catego	<b>y</b> svg	
	Size	80 × 42	
Change appearance		More pi	icture
✓ Fill	-		
State 0	Font applied to	each	
	Font applied to	each	
State 0 · ·	Font applied to	• each	
	Font applied to	each	
	Font applied to	each	
		each	
-	Font applied to OFF	each	
-		each	
-		each	
Tevt     Multiling		each	
Tevt     Multiling     Font	OFF		
Tevt     Multiling	OFF		

use pictures	You can check whether to use images. If checked, you can set the appearance of the recipe
	transmission in two states: (0, 1). After selecting the state in the upper right corner, click
	"Change Appearance" or "More pictures" to select custom images to change the appearance
fill	Can set fill styles (solid/gradient) and fill colors
state	You can set the text prompt content for recipe transmission in two states (0, 1), and whether to
	use multiple languages (please refer to the description of libraries in chapter 4-7 for specific
	use of multiple language libraries). Check the drop-down list to set the font corresponding to
	the corresponding status of the recipe transmission, or click on the "Font applied to each state"
	button to set the font for all states
font	The font, size, color, and display position of the font in the control can be set

Security setting

		Recipe Transfer
	E	Basic Attribu Appearance Security setti Location
		Operation confirmation delay
		Confirm before Waiting time
		C Key delay
		Display control
		✓ Enable
		When 隐藏 ~
		Devic 本地设备 v Settin
		Addre pSB v 0
		Enable Sta ON V Indirect
		Enable control
		✓ Enable
		Devic 本地设备 v Settin
		Addre pSB v 1
		Enable Sta ON V Indirect
		User permission
		Hide this component when the user has no permission scope
		User permission None 🗸
		range
1		
	operation	You can set the delay time (s). If this option is checked, a pop-up window will appear when
	confirmation	operating the component, saying "Are you sure to execute this operation?" If you do not click
	delay	"ok" or "cancel" within the set waiting time, the pop-up window will disappear and the
		operation will fail; If you click 'OK' within the waiting time, the operation is successful, but clicking 'Cancel' is invalid.
-	key delay	Long press the set delay time before the operation takes effect
-	display control	Use bit control to display the component. When the conditions are not met, the control is
	and play control	hidden and defaults to hidden, which cannot be modified
-	enable	When checked, display control will be enabled
-	When validation	Set the display of the control when validation fails
	fails	
•	address	set the target coil for bit control
	enable state	Set the ON state to be valid or the OFF state to be valid.
		Example: If the device is checked as shown in the above figure, the bit control is PSB0, and if
		verification fails, it is hidden. If the enabled state is ON, the component is displayed normally
		when PSB0 is ON, and if PSB0 is OFF, the component is hidden and not displayed.
	enable control	Can be set with bit restrictions (customizable enable control enabled state), and only when the
		enable conditions are met can the component be used normally (as shown in the figure above:
		when PSB1 is in the ON state and the trigger conditions are met, this component can be used
		if PSB1 is in the OFF state, even if the trigger condition is met, this component is still
		unavailable)

user permission	Set controlled permission levels.
	To set the permissions for this component, you need to enter the password for the set
	permission level before the component can be used normally. When there is no permission for
	this component, it will be hidden

### Location

Same to chapter 4-1-1 straight line location part.

# 4-6-4. Recipe transfer application

1. Create the recipe data table to be transferred in "Recipe Edit" (for the convenience of explaining the function,

the following data is for example)

### 1> Establish Recipe 0- Bread recipe 0

			Re	cipe managem	ent					
Recipe group Reci	ipe data									
Recipe group	~	Name	Bread recipe 0	Add	recij	pe Dele	te re	cipe		
recipe list 配方0 Bread rec	ine ()	Add Inser	t Delete Delete all	Copy Paste						
BC/31 Recipe_1		Recipe	5 Rec volu	ipe data ume Data type		Data forma	at	number	Integer	Decima
BC/31 Recipe_1			volu			1	at •	number 1	Integer 4	Decima 0
BC/JI Recipe_I		No.	Volu Element name	Data type	•	Data forma	200	number 1 1	Contraction of the second	100000000000000000000000000000000000000
BC/JI Recipe_I		No. 0	volu Element name flour	Data type Word		Data forma Unsigned	•	number 1 1 1	4	0
配方1 Recipe_1		No. 0 1	Element name flour water	Data type Word Word		Data forma Unsigned Unsigned	•	number 1 1 1 1	4	0

			Recip	e manageme	ent		
Recipe grout Recipe data							
all recipe group list	Search		م	Add Insert [	Delete Delete	all	
配方0 Bread recipe 0 配方1 Recipe_1		Use external a	address				
	序号	名称	flour	water	sugar	butter	egg
	0	数据0	10	11	12	13	14.6
	1	数据1	20	21	22	23	24.6
	2	数据2	30	31	32	33	34.6
	3	数据3	40	41	42	43	44.6
	4	数据4	50	51	52	53	54.6
	5	数据5	60	61	62	63	64.6
	6	数据6	70	71	72	73	74.6
	7	数据7	80	81	82	83	84.6
	8	数据8	90	91	92	93	94.6
	9	数据9	100	101	102	103	104.6

2> Build Recipe 1-Bread recipe 1

		Re	cipe manager	nent					
Recipe group Recipe data									
Recipe 1	Name Br	ead recipe 1	Ad	d recip	Dele	te recip			
group	1								
recipe list	Add Insert I		Copy Paste						
配方0 Bread recipe 0 配方1 Bread recipe 1	- The set of the set of the		10550 Maintain						
BD/JI BIEGUIEGPEI	Recipe 5		ume 100		*				
	No.	Element name	Data type		Data forma	t n	umber	Integer	Decima
	0	flour	Word			•	1	4	0
	1	water	Word	•	Unsigned	•	1	4	0
	2	sugar	Word	•	Unsigned	•	1	4	0
	3	butter	Word		Unsigned	•	1	4	0
	4	egg	DWord	1949	Float		1	4	4
		-	Recipe						
all <mark>recipe group list</mark>	Search	Use external ac	٩		Insert Dele		ete all		
all recipe group list 配方0 Bread recipe 0		Use external ac 名称	٩	Add I	en		ete all	butter	egg
all recipe group list 配方0 Bread recipe 0	Search		ddress	Add I	Insert Dele	te Del	ete all	butter 103	NAME OF TAXABLE PARTY OF TAXABLE PARTY.
all recipe group list 配方0 Bread recipe 0	Search	名称	ddress	Add I wa	Insert Dele	sugar	ete all		104.1044
all recipe group list 配方0 Bread recipe 0	Search 序号 0	名称 数据0	ddress flour 100	Add I wa	insert Dele ater	sugar	ete all	103	104.1044 204.2044
all recipe group list 配方0 Bread recipe 0	Search 序号 0 1	名称 数据0 数据1	ddress flour 100 200	Add I wa	ater 01	sugar 102 202	ete all	103 203	104.1044 204.2044 304.3044
all recipe group list 配方0 Bread recipe 0	Search 序号 0 1 2	名称 数据0 数据1 数据2	flour 100 200 300	wa Add 1 wa 1 2 3 4	insert Dele	sugar 102 202 302	ete all	103 203 303	104.1044 204.2044 304.3044 404.4044
all recipe group list 配方0 Bread recipe 0	Search 序号 0 1 2 3	名称 数据0 数据1 数据2 数据3	flour 100 200 300 400	wa Add 1 2 3 4 5	ater 01 01 01	sugar 102 202 302 402	ete all	103           203           303           403	104.1044 204.2044 304.3044 404.4044 504.5044
all recipe group list 配方0 Bread recipe 0	Search 序号 0 1 2 3 4	名称 数据0 数据1 数据2 数据3 数据4	flour 100 200 300 400 500	wa Add 1 2 3 4 5 6	ater 01 01 01 01 01	sugar 102 202 302 402 502	ete all	103           203           303           403           503	104.1044 204.2044 304.3044 404.4044 504.5044 604.6044
all recipe group list 配方0 Bread recipe 0	Search 序号 0 1 2 3 4 5	名称 数据0 数据1 数据2 数据3 数据4 数据5	flour 100 200 300 400 500 600	Wa Add 1 2 3 4 5 5 6 7	ater 01 01 01 01 01 01 01	sugar 102 202 302 402 502 602	ete all	103           203           303           403           503           603	egg 104.1044 204.2044 304.3044 404.4044 504.5044 604.6044 704.7044 804.8044
配方0 Bread recipe 0	Search 序号 0 1 2 3 4 5 6	名称 数据0 数据1 数据2 数据3 数据4 数据5 数据6	flour 100 200 300 400 500 600 700	Add 1 Add 1 1 2 3 3 4 5 6 6 7 7 8	ater 01 01 01 01 01 01 01 01	sugar 102 202 302 402 502 602 702	ete all	103           203           303           403           503           603           703	104.1044 204.2044 304.3044 404.4044 504.5044 604.6044 704.7044

2. Set data transfer function

1> Establish recipe transfer settings (the function of transferring recipe data can be achieved through function keys/recipe transfer).

•		1 1	•	. 1	
recine	transfer-down	load.	recine	to 1	PL ( `
recipe	dufficient dowin	louu	recipe	10	

asic Attrib	utAppe	earance Securit	v sett L	ocation			
Contro Descri		RTO					
Actio	n Pre	ss v					
	ster col		Upload F	Recipe fro	m PLC	PFW0	ĺ

Function key - recipe download

aux IIala			Function	i key	
ew Help	Function Appear	ance Security set	Location	1	
opy Cut Paste Delete		FBO			
[00001]Page1	Description				
本点可 @ L 企 c	Action Pres	ss Status	¥		
	Start				
	Functions			Op	tional functions
	下戰配	方 To PSW0			设置线圈
			A	dd	设置数据
					四则运算
	Download red	tipe		×	数据传输
Basic Attributes Security settings			1		画面切换
配方源 Bread recipe 0	<ul> <li>Recipe</li> </ul>	Specified	PFW	/0	调用窗口
Recipe download address					关闭窗口
Devic 本地设备	(9	<ul> <li>Settin</li> </ul>			导入CSV
Addre pSW	~ 0				导出CSV
Data Word ∨ Unsigned type	Indirect				上传配方
					下载配方
Recipe transfer comple	tion flag				函数调用
Vecipe transfer comple	PSB0			- 1	画面打印
	Deter	mine Cancel	1 North	lication	

Recipe upload is the same as recipe download, simply change the "Download Recipe to PLC"/"Download Recipe" to "Upload Recipe from PLC"/"Upload Recipe". The recipe transfer function is consistent with the recipe transfer function achieved by the function keys. Below is an example of recipe transfer

2> Place corresponding controls based on the set parameters.

	Recipe Transfer
Basic Attribut Apr	bearance Security sett Location
Control ID	RTO
Description	
Action Pr	ess 🗸
transmission r	node
Download	recipe to O Upload Recipe from PLC
O Register co	ontrol
Recipe source	each coipe 0 Recipe Register PFW
PLC address	
Devic 本地设	と Settin √
Addre psw	~ 0

Note:

The address set by the PLC is shown in the following figure, starting from the first address and progressing sequentially according to the element data type address

		Re	cipe managen	nent			
Recipe grou <mark>r</mark> Recipe data							
Recipe group 0	∽ Nar	me Bread recipe 0	Ad	d recij	Dele	te re	cipe
recipe list 配方0 Bread recipe 0 配方1 Bread recipe 1	Add In Reci	pe <sub>5</sub> Re	Copy Paste				
	PLC hea	ad address PSW0 Element name	Data type		Data form	at	numbe
	0	PSW0 flour	Word		Unsigned		
	1	PSW1 water	Word	*	Unsigned	*	1
	2	PSW2 sugar	Word	•	Unsigned	•	1
	3	PSW3 butter	Word	•	Unsigned		1
	4	PSW4 egg	DWord		Float		1

The data type of the PLC address should be consistent with the element data type set in the recipe table, such as

egg element

4	egg	DWord	•	Float	•

The data type is Dword-Float, then when setting PLC address, it needs to set to this type.

	Devic	本地设备				~	Settin
The second second	Addre	PFW		/ 4			-
Rew 0000	Data	DWord 🗸	Float	1	India		
	type			10	Indire	ect	

#### 3. Put the recipe table on the screen

asic At	tril Display Ap	opearan	Query Sec	urity s Lo	cation								
Cont	trol ID RLO												
Desc	cription						2						
							9						
	source		0										
Reci	<ul> <li>Bread recipe</li> </ul>	0 4	Recipe Ed	it			RLD		and the second sec				
grou	ip Bread recipe	0 4	_				ELO SPSB100	Bread	recipe 0				
grou F	ull display		Editable	6				Bread 名称	recipe 0 fiour	water	sugar	butter	equ
grou F ielec	ip Bread recipe		_	6	Integer	Decimal	SPSB106			water	sugar	butter	eg
grou F ielec	ull display		Editable	6	Integer 4	Decimal 0	SPSB106			water	sugar	butter	e9
grou F ielec	ull display Element name	ditable	Editable	6	Integer 4 4	Decimal 0 0	SPSB106			water	sugar	butter	e9
grou F ielec	ip Bread recipe ull display Element name flour	ditable	Editable	number	4	0	SPSB106			water	sugar	butter	e9
grou F	Element name water	ditable	Editable Data type Word Word	number	4	0	SPSB106			water.	sugar	butter	e8i

4. Put a recipe index register SPSW256.

		535		535		535		535
1. 1. 1. 1	4 4 4 4		1		1		1	
TI I	999		fH	de	x r	eg	iste	er

- 5. Take offline simulation as an example:
- 1> Recipe download

As shown in the following figure, change the register data of the specified recipe group to 0 and the index register to 3. Click the recipe download button. At this moment, download data 3 from recipe table 0 to PLC. After the download is completed, the recipe transfer completion flag will light up. To restore it, you need to manually set it to OFF.

	Bread recipe 0					
序号	名称	flour	water	sugar	butter	egg
0	数据0	10	11	12	13	14.6
1	数据1	20	21	22	23	24.6
2	数据2	30	31	32	33	34.6
3	数据3	40	41	42	43	44.6
4	数据4	50	51	52	53	54.6
	0 1 2 3	序号         名称           0         数据0           1         数据1           2         数据2           3         数据3	序号         名称         flour           0         数据0         10           1         数据1         20           2         数据2         30           3         数据3         40	序号         名称         flour         water           0         数据0         10         11           1         数据1         20         21           2         数据2         30         31           3         数据3         40         41	序号         名称         flour         water         sugar           0         数据0         10         11         12           1         数据1         20         21         22           2         数据2         30         31         32           3         数据3         40         41         42	序号         名称         flour         water         sugar         butter           0         数据0         10         11         12         13           1         数据1         20         21         22         23           2         数据2         30         31         32         33           3         数据3         40         41         42         43

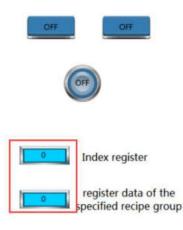
As shown in the following figure, change the register data of the specified recipe group to 1 and the index register to 0. Click the recipe download button. At this point, download the data 0 from recipe table 1 to the

PLC. After the download is completed, the recipe transmission completion flag will light up. To restore it, you need to manually set it to OFF.



#### 2> Recipe upload

As shown in the following figure, change the register data of the specified recipe group to 0 and the index register to 0. Click the upload recipe button. At this point, upload the data from the PLC to the data 0 in the recipe table 0. After the upload is completed, the recipe transfer completion flag will light up. To restore, you need to manually set it to OFF.



		L	Bread recipe 0			
序号	名称	flour	water	sugar	butter	egg
0	数据0	10	11	12	13	14.0
1	数据1	20	21	22	23	24.6
2	数据2	30	31	32	33	34.6
3	数据3	40	41	42	43	44.6
4	数据4	50	51	52	53	54.6

#### 4-6-5. Event button

1. Click on the "Parts/Recipe/Event Button" icon in the menu bar or the " icon in the device bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or use the ESC key to cancel the placement. Modify the length and width of the border through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click the "Event Button" or select the "Event Button" and right-click to select "attributes" for attribute settings.

Basic attributes

asic AttribiAppearance See	curity set Location	
Control ID RE0		
Description		
Function type		Key action
20.3		Insert a row above the sele v

control ID		Used for system management controls, user cannot operate				
description		Can be used to annotate the purpose of this control				
function type		The recipe operation is checked by default and cannot be unchecked				
key action	Insert a row	After selecting a row of recipe data in the recipe table, click this control to insert a row				
	above the	of data with empty name, empty data (the data type of the selected row element is				
	selected row	string), or 0 (the data type of the selected row element is Byte, Word, DWord,				
		DDWord) above the row				
	Insert a row	After selecting a row of recipe data in the recipe table, click this control to insert a row				
	below the	of data with empty name, empty data (the data type of the selected row element is				
	selected row	string), or 0 (the data type of the selected row element is Byte, Word, DWord,				
		DDWord) below the row				
	delete	After selecting a row of recipe data in the recipe table, click this control to delete the				
	selected row	entire row in which it belongs				
	copy	After selecting a row of recipe data in the recipe table, click this control to add a blank				
selected row		row of recipe data with the same name as the row below it				

		Use pictu		
	_	Status	0	~
OFF	_	Name	keyboard_01	L_a
1000 A		catego	rysvg	
		Size	80 × 42	
		I I	1144	
Change appear	ance	1	M	lore picture:
✓ Fill		÷	÷	
	• 🗹 Di	isplay text For	nt applied to e	ach
ate 0		isplay text For	nt applied to e	ach
tate 0		isplay text For	nt applied to e	ach
tate 0		isplay text For	nt applied to e	ach
tate 0		isplay text For	nt applied to e	ach
tate 0		isplay text For OFF	nt applied to e	ach
tate 0			nt applied to e	ach
tate 0			nt applied to e	ach
ate 0 D Tevt O Multiline			nt applied to e	ach
ate 0 D Tevt O Multiling		OFF	nt applied to e	ach
ate 0			nt applied to e	ach

appearance	You can check whether to use images. If checked, you can set the appearance of the event button in
	two states (0, 1). After selecting the state in the upper right corner, click "Change appearance" or
	click "More pictures" to select custom images to change the appearance
fill	Can set fill styles (solid/gradient) and fill colors
state	The text prompt content of the event button can be set in two states $(0, 1)$ , and whether to use
	multiple languages can be set (for specific use of multiple language libraries, please refer to chapter
	5-1 labels for multiple languages). Tick the drop-down list to set the font corresponding to the
	corresponding state of the event button, or click the "Font applied to each state" button behind to
	set the font for all states
font	Can set font, font style, color, size, and font display position in the control

		Event button	
B	asic Attrib Appea	earance Security set Location	
	Operation con	nfirmation delay	
	Confirm b	before	
	Key delay	y Delay time	
	Display contro	ol	
	✓ Enable		
	When	隐藏 ~	
	Devic	本地设备 v Settin	
	Addre	PSB V 0	
	Enable	e Sta ON 🗸 🗌 Indirect	
	Enable control		
	✓ Enable		
	Devic	本地设备 v Settin	
	Addre	PSB V 1	
	Enable	e Sta ON 🗸 🗌 Indirect	
1	User permissio	ion	
	Cancel pe	ermission after operation	
	A prompt	ot window pops up when the user has no permission range	
	Hide this	s component when the user has no permission scope	
	User perr	rmission None	
	osci pen		
operation	You can set	t the delay time (s). If this option is checked, a pop-up window will ap	pear when
confirmation	operating the	e component, saying "Are you sure to execute this operation?" If you d	o not click
delay	"confirm" or	or "cancel" within the set delay time, the pop-up window will disappe	ar and the
	operation will	ill fail. If you click 'OK' within the waiting time, the operation is succ	essful, but
	clicking 'Can	ncel' is invalid	
key delay	Long press th	the set delay time before the operation takes effect	
display control	Use bit cont	trol to display the component. When the conditions are not met, the	control is
	hidden and d	defaults to hidden, which cannot be modified	
enable	When checke	xed, display control will be enabled	
When validation	Set the displa	lay of the control when validation fails	
fails			
address	-	et coil for positioning control	
enable state		state to be valid or the OFF state to be valid.	
	-	the device is checked as shown in the above figure, the bit control is PS	
		fails, it will be hidden. If the enabled state is ON, the component will be	e displayed
	-	the PSB0 state is OFF, the component will be hidden and not displayed	
enable control		with bit restrictions (customizable enabled state), and only when	
		are met can the component be used normally (as shown in the figure ab	
		the ON state and the trigger conditions are met, this component can	
		the OFF state, even if the trigger condition is met, this compone	ent 1s still
	unavailable)	)	

user permission	Set controlled permission levels
	After setting the required user's permission range, the following three functions can be checked
	according to the needs.
	(1) After the operation is completed, the usage permission will be cancelled: if this option is
	not checked, the corresponding level password needs to be entered every time the component
	is operated. After checking, only one successful input is required.
	(2) When the user has no permission range, a prompt window will pop up.
	(3) When the user does not have permission range, hide the component.



# The function of permission please refer to chapter 4-2-3 value input.

Location

Same to chapter 4-1-1 straight line location part.

# 4-7. Operation record

### 4-7-1. Operation record setting

This control can record the user's usage steps and content of other operable controls, and display them through the "Operation Record Display". This function can be used to assist in analyzing operational processes and problem points.

	3	
Click on the menu bar 'Parts/Operation Record/Operation Record' or click	Operation record	in the toolbar to enter
the operation record configuration interface. After checking the enable	operation rec	ord, the display is as
follows:		

		Operation	record s	etting	×	
	Enable operation logging				^	
	Screen	Part	elect	Description	1	
	User screen1:[00001]					
	System picture2000					
	Given System picture2000					
	System picture2000					
	Given System picture2000					
	Give System picture2000					
	Given System picture2000					
	Given System picture 2000					
	System picture2000					
	Given System picture2000					
	System picture2001					
	System picture2001					
	System form25001:[				×	
	Control address					
	Enable control	Enabli metho	- 1.H-F-	~		
	Clear control	Clear	by ON-	OFF v		
	Save setting					
	. ен О∪					
	Export Control					
	File     Operation          ● Fixed file        ○ Date       Storage capacity       10000          ♥ Count        ♥	O Regist	er			
	Data retention days	Overwrite	e old recor	ds		
	<		Dete	rmine Cancel	Application	
select	Select to indicate that if	the contro	ol is ope	rated, the operation	n record will b	e displayed on th
			-	- CORCE -		
	"Operation Record Displa		can clic	k me " = " sign to	expand the cor	irois in the scree
	and set whether to check	them.				
	C.				2	
	Screen	Part		Screen	Part	
	User screen1:[00001]			User screen1:[000	01]	
	System picture2000			窗口1:[00001]Pag	ge1 Recipe Tr	a
	System picture2000			窗口1:[00001]Pag		
	System picture2000					
				窗口1:[00001]Pag	Salarity Provident State	
	System picture2000			窗口1:[00001]Pag		u
	System picture2000			System picture20	00	
	System picture2000		Ģ	System picture20	00	
	1-		1.3			

When checking User Screen 1, it represents checking all the controls in User Screen 1, and unchecking is the same; When you only want to monitor the operation of a certain control in screen 1, simply select the control you want to monitor.

	Set the mainten for IDAI and the set of DOWO there are attended to the						
control address	Set the register for HMI export control (if set to PSW0, three consecutive addresses with						
	PSW0 as the first address will control different states), which can be viewed by clicking on the						
	blue font "Control Address Information" in the bottom right corner						
	Prompt						
	Command:PSW0						
	1. Export operation records to USB flash disk						
	2. Export operation record to USB flash disk						
	speed of progress:PSW1						
	1.The value of 0-100 indicates the progress,						
	result:PSW2						
	0. Data export						
	1. Data export succeeded						
	2. The export device does not exist						
	Note: 1. This function only takes effect when the storage location is selected as HMI or when						
	"register specified storage location" is specified as HMI.						
	2. When inputting 4 and 6 to the command register, the database can be controlled to be						
	exported to a USB drive, and the exported file format is xjdb. The xjdb to CSV tool can be						
	opened by double clicking on the software root directory \Tool\XJDbTool\XJDbTool.exe,						
	which is set as the default opening method for xjdb. After opening, enter the path name of the						
	CSV and click "Export" to convert the xjdb format file to a CSV format file.						
save setting	Set the storage address, which can be specified by selecting HMI, USB flash drive, or register						
	When simulating, the storage location displayed for the operation record is:						
	(1) Save to USB drive: Software directory: Temp/Run/storage/udisk/history						
	(2) If you choose to save to the hmi: software directory Temp/Run/db/history, the saved						
	file cannot be directly opened for viewing. To view it, you need to export to a USB drive						
	and then view the exported file in the path saved to the USB drive						
file	Set the file name for storage, and the system will store data with this name						
fixed file	The stored file name is fixed, which is the name set in the file name (the file name can support						
fixed file	up to 200 characters)						
date	The stored file name is named with a date, for example, the file exported on May 29, 2021 is						
	named 20210529						
register	Set the register address, and the stored files will be named based on the contents of the register.						
	When selecting dynamically specified file name, it is necessary to select a string type register						
	such as character input and Chinese input. (File names can support up to 200 characters)						
storage capacity	Set the total amount of collected data information stored;						
	Maximum storage capacity 65535 pieces						
insufficient HMI	Set the status to stop saving or overwriting old records when storage space is insufficient						
space							
stop saving	After checking, stop saving data when storage space is insufficient						
records							
overwrite old	After checking, when the storage space is insufficient, it will continue to save and overwrite						

records the old records

Note: Whether you choose "fixed file name" or "dynamically specified file name" for the saved file name, the following characters are not supported in the file name:  $1/2 \approx 2 = 4$ ;  $1 \approx 2 = 4$ ;  $1 \approx 2 \approx 2$ 

### 4-7-2. Operation record display

1. Click on "Parts/Operation Record/Operation Record Display" icon in the menu bar or the "- Operation

Record Display "icon in the device bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button or use the ESC key to cancel the placement. Modify the length and width of the border through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click on "Operation Record Display" or select "Operation Record Display" and right-click to select "attributes" for attribute settings.

Basic attributes

		0	peration record	display	
Basic Attri	Displa	y Query	Security sel Locati	on	
Contr	O IID	RO			
	-	-			1
Descr	ption				
Operat record	ion setting	Operation			
Display	list				
Use	F	<ul> <li>Adaptive colu</li> </ul>	umn spacing		
Se	ect	Project	Title Tit	le Description	Column spacing
		序号		序号	35
	/	日期		日期	82
	/	时间		时间	62
	/	控件ID		控件ID	56
		控件描述	±.	的描述	56
	/	地址		地址	220
	/	动作		动作	55
		用户名		用户名	56
	/	窗口		窗口	56
		操作信息	挡	幹信息	139
Mov	e up	Move down	Restore default		
Order		i di ka			
Time		Chronologica		Tim	onological order
Forma	t I	Date YY/MM/D	D ~	e HH:MM	:SS ¥
ID Used	for syste	em managem	ent controls, use	r cannot operat	e
ion Can	be used t	to annotate the	e purpose of this	control	
ecord Click	on "On	eration Recor	d Settings" to se	t the relevant c	ontent of the ope
	Jan op				or ope
5					
If the	list dis	played in the	operation record	t is in multiple	e languages, chec

multi-language	using multiple languages is checked a multi language setting table will be	displayed on the				
muni-ranguage	using multiple languages is checked, a multi language setting table will be displayed on the right side of the title description. Clicking on it will lead to the multi language library setting					
	interface for setting multiple languages. The use of multiple languages can be					
		e lound in labers				
	chapter 5-1. Multiple languages	-:114				
adaptive column	After checking, the column width cannot be customized, and the software will automatically					
space	adjust it to the most suitable size based on the project screen					
select	Only when checked can it be displayed in the list					
No.	Display the sequence number of table columns					
date	Date generated during control operation					
time	Time generated during control operation					
control ID	The ID number of the control					
control	Description content of the control					
description		If you need to				
address	The address of the control, which can display whether it is an internal or	adjust the order				
	external address	of items, you				
action	Set Word, Set ON, Set OFF, Toggle (bit reverse), Write Const Value, Write	can click the				
	String, Return To Prev Window, Go To Next Window, Upload recipe, "Move Up,					
	Download recipe, Press, Release	Move Down"				
user name	Do you have user privileges to log in at this time? If not logged in, it will not	button below. It				
	be displayed	you want to				
window	The window number where the control is manipulated	restore the				
operate	Bit Set ON	default sorting,				
infomation	Bit Set OFF	you can click				
	Write (Initial value) ->(Input value)	"Restore				
	Bit Set ON->OFF	Default				
	Bit Set OFF->ON	Sorting"				
	Write newVal					
	Write (Initial string) ->(Input string)					
	Window (Current page) ->(Jump to page)					
	Upload (recipe name)					
	download (recipe name)					
order	Set the information display mode and select whether the latest operation rec	cord is displayed				
01001	before or after	iora in antprayor				
chronological	According to the order in which the operation record time is generated, the fin	rst generated one				
order	is displayed at the top, and the later generated one is displayed at the bottom,	•				
oradi	operation record is displayed at the bottom of the table	that is, the lates				
reverse	Contrary to the chronological order, the first generated operation record is	displayed at the				
reverse	bottom, and the later generated operation record is displayed at the top, the					
chronological order		nat is, the lates				
	operation record information is displayed at the top of the table					
time date format	set the date and time format					

When using multiple languages is checked, "..." will be displayed in the bottom right corner of the title description. Clicking on it will lead to the multi language library setting interface to set multiple languages.

Display 

		Opera	ation record	d display	. 🚬
Basic Attrib D	visplay Query	Secu	urity set Loc	ation	
• Tevt	O Multiling				
Table title Fo 微软推黑	List title	List	Data General	CHARGE CONTRACTOR	ronize language font styles
Co	· ·	Size		~	
Ali Middle_C	enter 🗸	200	Row	30	
Table Background I Outer fra Thi	ame	∼ Style		le descri;	ption
Co lor	~				

use title	text	Set the name of the operation record display header
	multiling	After checking, the header content can be set to multiple languages (refer to 5-1
		for details on using multiple languages)
synchronize la	nguage font styles	If unchecked, the title font and list font can be set separately
		If checked, the two fonts, colors, sizes, and alignment remain consistent
f	cont	Font, color, size, and alignment can be set
table	background	Set the background color of the table
	color	
	title background	Set the background color of the table title
	color	
	outer frame	The thickness, style, and color of the outer frame can be set, and will only be
		displayed when checked
	grid	The thickness, style, and color of the grid can be set, and will only be displayed
		when checked



When "synchronize language font styles" is checked, all fonts display the title font.

Query

(1) Export

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D' I	Query	6	and the second	
lasic Attribute	Display	Query	Security setting	Location	

Select **Picture** to use the picture export function. Meets export conditions, export format is PNG.

2 Query

Basic Attribute	Display	Query	Security setting	Location	1	
Picture	PSB0	Export conditio	ON->OFF ~	Export Format	PNG	~
Enable ope	eration recor	d query				
Query	by date		O Query by time	e		
○ Registe	er					
- Query contro	ol					
PSBO						
Query date						
0	121121121121					
Friday	, Decer 🗸	Register	r			

The information found will be displayed in the operation record display table. If you need to use this function, check the "Enable operation record query" function.

There are two query methods: query by date and query by time period. These two query methods can be freely selected by users or dynamically specified through registers, as follows:

query control Set an address, and when set to that address, the query function will be triggered, and the query results will be displayed in the table

(1) Query by Date

Entering the date to be queried will filter out all operation record information under this date and display it in the table.

~	PSB0	
uery	date	
	Tuesday, April	🖌 🖂 Register

You can also choose "Register" to dynamically set the query address. As shown in the following figure, setting a first address, such as PSW0, will occupy a total of three addresses from PSW0 to PSW2. PSW0 represents year, PSW1 represents month, and PSW2 represents day, all of which are single word unsigned numbers. For example, PSW0=2021, PSW1=5, and PSW2=29, the operation record information for May 29, 2021 will be queried.



#### (2) Query by time period

Enter the start and end times to be queried in the specified address, set the query control address, and display all information filtered out during this time period in the table.

From	Tuesday ,	April	~	11	Hou 44	Minute	Second
То	Tuesday ,	April	~	11	Hour 44	Min 32	Second

Similarly, register control can also be used. After setting the first address, 12 register addresses, including the first address, will be occupied. The first 6 addresses represent the year, month, day, hour, minute, and second of the start time, and the last 6 addresses represent the year, month, day, hour, minute, and second of the end time. The format is consistent with manual settings.

T.T. OR	Tuesday ,	April	~ 11	Hour 44	Minute	Second
To	Tuesday ,	April	~ 11	Hou 44	Mint 32	Second
		R	egister	PSW		
		Ŀ			5	
		Exam	ple: PSW	0~PSW5: from	time year, 1	nonth, day

(3) Register Control Query Method

Use registers to dynamically specify the query method. A register value of 0 indicates querying by date, and a value of 1 indicates querying by time period. Users can choose according to their own needs.

■ Security setting

Basic Attrib	Display	Query Security	set Location		
<ul> <li>Display cor</li> <li>Enable</li> <li>When</li> <li>Dev</li> <li>Add</li> <li>Enal</li> </ul>	隐藏 ic 本地设备	<b>v</b> 0	v Indirect	Settin	
	his compon permission	ent when the user	has no permiss ♥	sion scope	

Same to chapter 4-1-1 straight line security setting part.

Location

Same to chapter 4-1-1 straight line location part.

# 4-8. Hire purchase

1. Function enter

Click Menu bar-Tool-Hire purchase or click Hire purchase in the tool bar.

2. Function introduction

Implement installment payment for equipment and perform lock and encryption processing on the equipment. The installment configuration is completely user-defined, including the number of installment periods, the expiration date of each installment, and the password for each installment. Configuration information needs to be maintained by customers themselves, and this feature has the advantages of free configuration and high security.

4-8-1. Static installment payment

			Hire purcha	se		
En	able static inst	allment				
En	nter administra	tor Adminis passwo		æ		
Add		elete Delete all				
	Period	Start time	End time	Description	Pa	assword
	Period 1	4/18/2023 2:45 PM	4/19/2023 2:45	M	12	2345678
	Period 2	4/19/2023 2:45 PM	4/20/2023 2:45 1	PM	1.	2345678
En En	nable dynamic	nstallment				
	hable dynamic i Installment Kev	nstallment	Ø			Generate
		installment	Dynamic super password			Generate dynamic

- Check "Enable static installment ", add the number of installment periods, set the start time, end time, description, and password.
- Enter administrator password to cancel installment payment: If this option is checked in the project, set the administrator password and download it. In any installment payment pop-up window that pops up, enter the custom administrator password, which will cancel subsequent installment payments and close the window to enter the project operation page. Passwords support letters (case sensitive) and numbers, with a password length limit of 10 characters.

	Batch add		×
Start date	2023/04/20 14:45		
Interval time	$0  \textcircled{M}_{o} \stackrel{M}{1}  \textcircled{D}_{a}$		M in
Add Periods	1 P e		
	Confirm	Cancel	

- Add: Click "Add" and add an installment payment setting in order at the bottom of the table. You can set the start and end dates, time, and password yourself.
- Batch Add: Click "Batch Add" to set multiple installment payments (up to 60 installments). Set the start time, date, interval time, and number of batch copies independently. Click OK and it will be displayed below. You can set the start and end date, time, and password by yourself.
- The time supports selection and input, and the description can be edited. The default password is 12345678. The password supports letters (case sensitive) and numbers, and the length of the password is 20 characters, which can be modified. The maximum number of sessions is 60, and the end time of the previous session defaults to the start time of the following session. All start and end times can be modified.
- Delete: Click a row in the installment payment table, select it with the cursor, and then click "Delete"

to delete the installment payment

■ Delete All: Click 'Delete All' to clear all installment payment settings.

#### HMI display:

清输入分期密码或超级管理员密码:					
				-	
密码:					
第3期: 2022-7-6 14:44:0 2022-7-6 1	4:46:0		-		
	确认				
	Virtu	al Ke	yboa	rd	
	Exc	1	2	3	4

When the start time of installment payment is reached, a pop-up window will pop up in the upper right corner of the HMI. At this time, only the installment payment password can be entered, and the rest of the screen is not clickable; Enter the current password in the pop-up window to use it normally until the start date of the next installment. If the password is entered incorrectly, it will prompt for an incorrect password input, and you must re-enter the correct password to use it properly.

# ð

The difference between an administrator password and a regular installment password is:

1. The administrator password means that regardless of the installment payment period, simply entering the "administrator password" will cancel the installment payment function. The regular installment password is only used to confirm the current installment payment, and subsequent installments will still pop up at the set start time.

2. Password settings for both: The password can have up to 10 digits and supports letters (uppercase and lowercase) and numbers.

4-8-2. Dynamic installment payment

Enable dynamic installment

			Hire purchase		
Er	nable static inst	allment			
ē Er	ter administra	tor Administr password		æ	
Add	Batch add De	elete Delete all			
	Period	Start time	End time	Description	Password
	Period 1	4/18/2023 2:45 PM	4/19/2023 2:45 PM		12345678
	Period 2	4/19/2023 2:45 PM	4/20/2023 2:45 PM		12345678
	nable dynamic i				
	nable dynamic i Installment key Dynamic Installment		Dynamic super     password	4	Generate dynamic

Only by checking this option can dynamic installment payments be set.

Ī	installment key	The password includes uppercase and lowercase letters and numbers, and the length does not
		exceed 10 digits; You can also enter the installment key in the "Generate dynamic" interface,
		and the passwords in both places are synchronized
	dynamic	The password is automatically generated by the system. The dynamic password on this
	installment	interface can only be viewed and copied, and cannot be edited
	dynamic super	The password is automatically generated by the system, and the dynamic super password on
	password	this interface can only be viewed and copied, and cannot be edited

The dynamic password and dynamic super password are both 32-bit. When copying the password, manually select all with the mouse and copy it when the password is visible.

■ Generate dynamic password

Click "generate dynamic" to enter dynamic installment password interface.

			Hire purchase			×	
-			nite purchase				
	Enable static installment						
	Enter administrator	Administrator		tion			
A	d Batch add Delete Delete all	Dynamic	password genera				
	The second second	Device ID			Password		
-	Period Start t	Installment key			Password		
		Start time of					
		installment	2023/04/18 00:00				
		• End time of	2023/05/18 00:00				
		O Duration of	30	_			
		Obdiadon of	30				
		Dynamic		æ			
		Dynamic					
	Enable dynamic installment						
	Installment key		Confirm	Cancel	Gene		
	Dynamic		namic super		dyna	mic	
	Installment	pa	ssword				
				Determine	Cancel Appl	lication	
device ID	pop up a win 设备信息 Hmi版本: 1.1.3.22100 系统版本: 1.1.3.22100 硬件版本: HV2 设备IP: 172.31.6.22 设备ID: 022-009-01 2. check the III FOUCHWIN MODEL:TS3-700-E POWER:DC24V 5W ID: 256-135-149-D518-	on the lower adow, the red 6 8 6 0 on the prod 1141 111 $C \in 0$ 0 on the prod	r right corner I color area is	of HMI scr the device	een, select "		will
		-	l on the model				
	TRIPC HMD						
	通信设置 注册方式 開坡用:	0	网络名称	iP地址 1772/11/6/229	设备ID 022-009-018-0811-0016	11.02	
	<ul> <li>(新聞) (新聞)</li> <li>(新聞) (新聞)</li> <li>(新聞) (新聞)</li> <li>(新聞) (新聞)</li> <li>(新聞)</li> <li>(新)</li> <li>(新)</li> <li>(新)</li> <li>(新)</li> <li></li></ul>	~	Heni Heni	172.31.6.210	022-000-016-0056-0038 022-010-010-0856-0046	T53-700-E T55-700-E	
	〇 设備日産31, 022-00-016-6851-0036	~	Heri	172.31.6.150	022-009-007-0901-0029	T\$5-700-6	
	1980P 80.00	R.11	Hmi Hmi	172.31.7.141	022-010-010-0958-0007 022-009-027-1844-0001	155-700-E 153-700-E	
	下数用码 123456 🔹		Plani Plani	172.31.6.115 172.31.0.110	022-009-008-1438-0004 022-009-006-1659-0058	T\$5-700-E T\$5-700-E	
	口 允许工程上标						
	□ 用户自主义并机画面 □ 使用默认并机画	π					
installment key	The password inclue	les uppercas	e and lowerc	ase letters a	and numbers, a	nd the length does	not

333

	exceed 10 digits; You can also enter the installment key in the "installment payment" interface,
	and the passwords in both places are synchronized
start time of	Set the start time for the required installment encryption
installment	
end time of	Set the end time for the required installment encryption
installment	
duration of	Set the required duration for installment encryption
installment	
dynamic	The password is automatically generated by the system, and the dynamic installment password
password	on this interface can only be viewed and cannot be copied or edited.
	Click on "Dynamic password" and the dynamic installment password will be automatically
	generated. This password is used for decryption during the current period and is associated with
	the device ID, installment key, and time (start time, end time/duration). As long as one of the
	parameters is modified, you need to click on "Dynamic Password" again. The password will be
	updated. If no parameters are modified, the password will not be updated.
dynamic super	The password is automatically generated by the system, and the dynamic super password on this
password	interface can only be viewed and cannot be copied or edited.
	Click on 'Dynamic Super Password' and the dynamic super password will be automatically
	generated. This password can lift all installment restrictions and has the highest authority to lift
	them. And it is only related to the device ID and installment key, and is not related to the
	installment time. If you modify the device ID or installment key, you need to click on "Dynamic
	Super Password" again to update the password. If you do not modify any parameters, the
	password will not be updated.

In the pop-up window, enter the device ID, installment key, start time, and then select the end time or enter the duration. Entering the installment end time can automatically calculate the duration (one decimal place). Both are required items, otherwise dynamic installment passwords and dynamic super passwords cannot be successfully generated.

HMI display 

When entering the installment state, the HMI automatically enters the lock interface and prompts the user to enter the corresponding password.

If the installment password is entered correctly, it will prompt the remaining available days (which is consistent with the installment duration), and the system screen can continue to use normally within the duration range.

If the super password is entered correctly, it will prompt for permanent use; If the password is entered incorrectly, click OK and prompt "Incorrect password input".

If no password has been entered, click OK and a prompt will appear stating 'Password input is blank'. And the current interface window cannot be closed.



# 4-9. Special component

4-9-1. Timer

1. Click Parts/industry/timer or the kick icon in the device bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or use the ESC key to cancel the placement.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click on "Timer" or select "Timer" and right-click to select "attributes" for attribute settings.

Basic attributes

icic Attribe	Time	r
ISIC MUILSE	curity se Location	
	rol ID TM0	
Desc	ription	
Time	unit: 0.1 secc v	
		12
		e
Timer e Devic	xecution flag bit	✓ Settin
Addre	本地设备 PSB   V 0	v Settin
10000129102		
	Indirect	
End cor	1	
100700767	dition Stop when screen is clos Stop wher	the preset time is reached ange
100700767	Stop when screen is clos Stop wher	n the preset time is reached ange
Preset t	Stop when screen is clos Stop when	n the preset time is reached ange Specified by register
Preset t	Stop when screen is clos Stop when	
Preset t	Stop when screen is clos Stop when ime Constant	

control ID	Used for system management controls, user cannot operate
description	Can be used to annotate the purpose of this control
time unit	The minimum unit is 0.1 seconds, seconds or minutes
delay/execution cycle	After setting, the timer will only start executing after the set cycle time is
	executed when the trigger conditions for the timer are met
timer execution flag bit	When executing, the target coil lights up and goes out after the execution is
	completed
device	The device port currently communicating with
address	Set target coil number
setting	Click "Settings" to enter the address setting interface. This interface allows
	you to set the use of system registers and user-defined labels. You can click
	on the address label library or the project tree - library - address label library
	below to set the labels used (refer to 5-2 Address Label Library for the use of
	address label library and user-defined labels)

		Address
		Device 本地设备       Statio 0 n No.         Address type       PSB          Address 0       System register         Address format       [range : 0 - 9999]
		Address Label Determine Cancel Application
trigger conditions	bit state change	When the bit state of the coil that triggers the address is either the rising or falling edge, timing begins Trigger conditions  Bit state change ) Word value chaO Screen start Trigger ac PSB0 Trigger coRising e v
	word value change	Start timing when the data in the trigger address register changes (if "equal value" is checked, it means timing starts when the data in the trigger address register is equal to the set value) Trigger conditions Bit state change ) Word value chao Screen start Trigger ac PSW0 I Equal value 5
	screen start	Start timing when the screen where the timer is located starts Trigger conditions O Bit state change ) Word value cha Screen start
	screen end	When the screen where the timer is located is closed, the execution flag bit lights up
end condition	stop when screen is closed	Stop timing when the screen where the timer is located is closed
	stop when the preset time is reached	Stop timing when the timer reaches the preset time
preset time	bit state changed constant	Stop timing when the bit state of the coil is either the rising or falling edge You can directly select a number and change it, or you can click to change the time
	specified by register	The number in the register is the preset time

	Preset time Constant  Read address  O Constant  O Con
	Devic 本地设备 v Settin
	Addre pSW v 0 Data Word v Unsignec v type Indirect
timer arrival preset time notice	Specify a coil, and when the timer reaches the preset time, the coil is
	ON/OFF
time counted	Counted time can be displayed by specifying a register that displays the
	real-time cumulative time after triggering
reset bit	Specify a coil. When the set trigger condition (ON/OFF) is met, the time will
	be reset, the arrival notification will be reset, and all status bits will return to
	their default state. To start the timer, a new trigger is required

Security setting

E	ole control					
2.2	Enable					
-	Devic	本地设备		~	Settin	
	Addre	平地反量 PSB	~ 0	-	Settin	
	Enable	Sta ON V		direct		

Can be set with bit restrictions (customizable enabled state), and only when the enable conditions are met can the component be used normally (as shown in the figure above: when PSB0 is in the ON state and the trigger conditions are met, the component can be used; if PSB0 is in the OFF state, even if the trigger condition is met, the component is still unavailable)

#### Location

Same to chapter 4-1-1 straight line location part. (Cannot make size modifications or move horizontally or vertically)

### 4-9-2. Scrolling text

To achieve the effect of trotting horse lamp for the text:

1. Click on the "Parts/Text/Scrolling Text" icon in the menu bar or the icon in the special component bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button or use the ESC key to cancel the placement. Drag the boundary point to modify the length and width of the border.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click on "Scrolling Text" or select "Scrolling Text" and right-click to select "attributes" for attribute settings.

Basic attributes

sic A	ttribSecur	ity se Locati	ion		
6.	ontrol ID	SC1			
ce	muono	SCI			
n.	ecrintion				
_	Display o			Show conter	nts
	Always sh				
	Controlle	the second se			
2	Always sh	now Y			
0.446.97	ld	Delete	M	ove up	Move
Fon Fo	t 微软雅黑	Enter California Co	~	General	Move
Fon	t 微软雅黑	Enter California Co	M V Size	General	Move ~
Fon Fo Co	t 微软雅黑		~	General	×
Fon Fo Co Scrol	t 微软雅黑 II ssage		~	General	•
Fon Fo Co Scrol Mes	t 微软雅黑 Issage order	1	v Size	General 12 scroll spe	•
Fon Fo Co Scrol Mes D B Thi	t 微软雅黑 II ssage	1	~	General 12 scroll spe	•
Fon Fo Co Scrol Mes D B Thi	t 微软雅黑 Issage order	1	v Size	General 12 scroll spe	•
Fon Fo Co Scrol Mes D B Thi	t 微软雅黑 ssage order Border	1	v Size	General 12 scroll spe	•
Fon Fo Co Scrol Me: B Thi Co	t 微软雅黑 ssage order Border	1	v Size	General 12 scroll spe	•
Fon Fo Co Scrol Me: B Thi Co	t 微软雅黑 II ssage order Border	1	v Size Style	General 12 scroll spe	•

control ID	Used for system management controls, user cannot operate
description	Can be used to annotate the purpose of this control
display control	include always show and controlled by coil
always show	Right click and select the item to be displayed directly in the displayed content

		Always show      Thank you for your kindness     Controlle PSR0     Always show      Text string     Text     Multiling     Thank you for your kindness
		Determine Cancel Application
contro	lled by coil	To set the address of the triggering coil first, then right-click and select the item to be displayed in the displayed content Display control Show contents 0 Always show Y Thank you for your kindness 2 Always show Y
		Register assignment       Address       Devic     本地设备       Addre     PSB       Indirect
		Positive logic     ORegative logic     Determine     Cancel     Application
show	<sup>7</sup> contents	Right click on the displayed content to copy it, create a new text string, create a new variable text, create a new data display, and delete the displayed content. Click/double-click on the displayed content to edit it again.           Display control       Show contents         0       Always show Y         1       Controlle         2       Always show Y         1       New Text String         New Variable text       New Data Display         Delete       Delete
opei	rate item	Can add, delete, move up, and down display controls and content
-	font	Can change the font, color, size of scrolling text, and set whether scrolling text is bold or italic
scroll	message space	Set the distance interval between each displayed content, in pixels
	scroll	Set the text scrolling speed to a few pixels per 0.1s (100ms), meaning that the larger the value,
1	speed	the faster the scrolling speed
b	order	Set whether to display borders, as well as the thickness, style, and color of the borders
	fill	Set whether the background of scrolling text is filled and the fill color

The use of text string refers to the use of static text string in chapter 4-2-1.

The use of variable text refers to the use of dynamic text in chapter 4-2-2.

The use of data display refers to the use of data display in chapter 4-2-4.

#### Security setting

Display contro	ol				
When	隐藏	~			
Devic	本地设备	ŕ		¥	Settin
Addre	PSB	1	• 0		
Enable	Sta ON	~	🗌 Indi	rect	
User permissio	on				

Same to chapter 4-1-1 straight line security setting part.

#### Location

Same to chapter 4-1-1 straight line location part.

#### 4-9-3. Camera

TS5 series HMI support for connecting cameras and playing monitoring images:

Click on the "Parts/Multimedia" menu bar or the "Camera Play " icon in the special parts bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button or use the ESC key to cancel the placement. Modify the border length and width by dragging boundary points.
 When setting attributes, you can set them in the attribute box that pops up when placing components, or double-click "Camera Play" or select "Camera Play" and right-click to select "Properties" for attribute settings.

Basic property

Basic Attribute	Security settin Location	
Control	ID CPO	
		1
Descrip	tion	
	Webcam	
Path	Webcam	
		ream
*Example:	rtsp://admin:123@192.168.1.1:554/h264/ch1/main/av_str	ream
	rtsp://admin:123@192.168.1.1:554/h264/ch1/main/av_strontrol	ream
*Example: - 🗹 Image co	rtsp://admin:123@192.168.1.1:554/h264/ch1/main/av_str ontrol Enable Enable dynamic RTSP	
*Example: Image co Device	rtsp://admin:123@192.168.1.1:554/h264/ch1/main/av_strontrol Enable Enable dynamic RTSP Local Device v Se	ream
*Example:	rtsp://admin:123@192.168.1.1:554/h264/ch1/main/av_str ontrol Enable Enable dynamic RTSP	

Control ID	Used for system management controls, user cannot operate.
Description	Can be used to annotate the purpose of this control.
Webcam	The default is checked and cannot be cancelled. Currently, only network cameras are
	supported.
Path	Set the RTSP address for the network camera.
	Example of address format: rtsp://admin:123@192.168.1.1:554/h264/ch1/main/av stream,
	detailed as follows:
	Rtsp://- Address prefix, fixed format, can be uppercase or lowercase
	Admin - Connect the camera username, default to admin
	:- User name and password connectors
	123- Password for connecting the camera, default to verification code
	192.168.1.1- IP address of the camera
	:554- Camera RTSP address port number, default to 554
	h264- Encoding type of camera, only supports h264
	ch1- Channel number of the camera
	main - The stream type of the camera; Main: Main code stream; Sub: Auxiliary code stream
	Av_Stream - Fixed Format
Image control	The playback control of the monitoring screen only has start/stop signals by default, and the
	address can be set below, with PSW0 as the default. PSW0=0 stops playing, PSW0=1 starts
	playing. When stopping playback, the camera playback control area is displayed as blank.
	You can select Enable pause and Enable Dynamic RTSP according to your usage needs.
Enable pause	If you need to add a pause signal, you can check this option. After checking it, use the image
	address+1 as the address to enable pause control. If PSW1=1, pause playback, and PSW1=0
	resumes playback.
	Image control
	Enable     Enable dynamic RTSP
	Device     Local Device     Settings       Address     PSW     0
	Address PSW ~ 0 Data Word ~ BCD ~ Indirect
	Start/stop import: PSW0 Pause: PSW1

Enable dynamic RTSP	Set whether to dynamically specify RTSP addresses          Image control         Image control         Image control         Enable	
	Device Local Device ~ Settings	
	Address PSW ~ 0	
	Data Word V BCD V Indirect	
	Start/stop import: PSW0 Pause: PSW1	
	RTSP : PSW2 (64Word)	
	After checking, use the image address+2 as the RTSP header address, occupying a total or words.	f 64

The RTSP addresses of different brands of cameras may vary. Please refer to the instructions provided by the camera manufacturer for accuracy.

1. User name, password

The default username for the camera factory is admin, and the password is a verification code, which can be viewed through the camera body label.



#### 2. IP address

Open the Ezviz Cloud Studio software, click on [Device Management] in the bottom left corner, find the camera you want to view, and click on [Network Parameter Configuration] to view the camera IP address.

S EZVIZÃE	E		诸王王	菜单	- 0	×
	设备管理			×	0	意见留意
1221 E24 0	被求到的网络阿亚省				🖸 熈市著	四序号
- 我的说着(0)	CS-C6CN-1C2WF-D(G75404997)		619	6		
您没有登录,请	带衣网络参数 ×					
+ 本地设备	IF地址 10 . 100 . 19 . 214					
	→ 回過参数配置 高级距離 → 子网境码 255 255 0					
	/					
	減定 取消					
🕲 设备管理	+ 添加	1	9	(16)	(25)	

#### 3. RTSP port

Open the Ezviz Cloud Studio software, click on [Device Management] in the bottom left corner, find the camera you want to view, click on [Advanced Configuration], and in [Network] - [Common], you can view the camera's RTSP address and port number.

		ì	8 <b>ER</b> E		
备管理	- C ***	配置设备的网络参数			
裸变到的弊端同论备	<ul> <li>公内法</li> <li>(2)用用</li> </ul>		10M/100M/1000M 自适应		
	© NAT © WHEI		10.100.19.214		
CS-C6CN-1C2WF-D(G75404997)	@ ####	横码地址(IPv4)	255,255,255.0		
	@ \$6z	同关她址(IPv4):	18 100 19 254		
	土國神秘	PVG模式	踏曲公告	w.	
	· · · · · · · · · · · · · · · · · · ·	Pv6的社:			
~~~ (	土 📽 形術教教	闷关地址(Pv6):			
Itime	1 C C C C C C C C C C C C C C C C C C C		ec97 #0.2d all 54		
本出現作 网络参数配置 美坂配置		MTU(Byte):			
Contraction Contraction		设备端口号:			
		多髓地址 HTTP撤口号			
		RISPHED: 1			
					保存

4. Channel, stream type, and encoding type (please refer to this diagram for setting up the Ezviz cloud) Still following the advanced configuration path from the previous step, switch to Image Video Audio to view the camera's channel, stream type, resolution, video frame rate, and encoding type.

		远载政武			×
• 📽 系统	配置监控点的图像	质量、分辨率及其他	压缩参数		
🖂 🚳 网络	<b>监控点</b> :	通道 1	-		
(2) 常用	視频				
W NAT	码流类型	主码流	- 祝频类型	复合流	~
<ul> <li>W-Fi</li> <li>第級设置</li> </ul>	码率类型:	变码率	- 码室上微	1024 Kbps 👻	
<ul> <li>         ···················         ······</li></ul>	图像质量	中等	- 分辨率	4CIF(704*576)	-
• C 存储	帧类型:	P	~ 视频帧率	15fps	•
		60	音频编码类型	AAC	
🕑 🚳 前端参数	编码类型:	STD_H264	- 1 (		
<ul> <li>         · · · · · · · · · · · · · · ·</li></ul>	全天录像文件大小	10.0G			
A Mast	音频				(
@ 图像设置	音频输入类型:	MicIn	- 输入音量		-
@ 图像显示	输出音里:		-		
	夏利到				保存

5. Based on all the configuration information, it can be concluded that the RTSP address of the Ezviz camera used in this example is rtsp://admin:KPEBID@10.100.19.214:554/h264/ch1/main/av stream. You can directly input this address into the camera playback control for monitoring.

Security setting

urveillance camera			
asic Attribute Secu	rity setting Location		
Display control			
🗹 Enable			
When	Hide ~		
Device	Local Device	~	Settings
Address	PSB ~ 0		
Enable St	ON v Indirect		
User permissior	1		
🗹 Hide this co	mponent when the user has no permission	i scope	
User permi	ssion Permission1		
range			

Same as chapter 4-1-1. Straight line safety setting section.

Location

Same as chapter 4-1-1. Straight line location part.

# 5. Library description

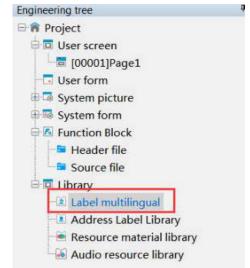
# 5-1. Label multilingual

# 5-1-1. Label multilingual introduction

When the text content of a component requires the display of multiple languages, programmers can establish the content of a multilingual tag library according to actual needs, and support the display of text in 8 different languages simultaneously.

In addition to using a multilingual tag library, it is also necessary to cooperate with the use of the system address "multilingual switching". The effective setting range for "multilingual switching" is 0-7, and different data corresponds to the desired language type to be displayed. The following is an example of using indicator buttons to illustrate how to use multiple languages.

When multiple languages need to be used in engineering documents, it is necessary to first establish a multilingual table and then select the desired label from it. Double click on the project tree library - label - multi language icon to enter the following interface.



						Label r	nultilingual					×
	Label	Multiling		el Delete	a tap Delete	all Add status	Deleted state	Copy Paste	Import Ex	port		
Г	No.	Label name	Number	State	Language 1	Language 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language 1
L												
									Dete	rmine	Cancel	pplication

Label multilingualism is divided into label libraries and multilingual tables. Label libraries are suitable for multi-state components, such as indicator lights that turn on or off two states, indicator buttons, buttons, or

multi-state indicator lights for multiple states, multi-state buttons, etc. Multilingual tables are suitable for components with only a single state, such as static text, dynamic text, data tables, etc.

# 5-1-2. Label library

	19.071				e a tap Delete		Deleted state	1. 1882	<u>.</u>			
-	No.	Label name	Number	State	Language 1	Language 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language
	1	label_1	4	0	Text1		-					
				1	Text1							
_				2	Text1		-					
_				3	Text1							
	2	label_2	3	0	Text1							
				1	Text1							
				2	Text1							
		label_3										
									Dette	ermine (	Cancel	oplication

Search for the set language and quickly locate the line
add a label
Delete selected labels
Delete all labels
Add a state to a certain label (for example, the indicator light has two states, state 0 and
state 1. Here, two states need to be added, and the text of the set state corresponds to each
other)
Delete selected status
Copy the selected row
Paste a copied line
Import Label Library Table
Export Label Library Table

#### **Operation steps**

(1) Click to add a label to define the name, quantity, status, and related language of the text label (click on the drop-down list after the status to set the text content in different states).

	NewLabel		NewLabel
Label	label_1	Label	label_1
Status Quantity	2	Status Quantity	2
	o ~		1 ~
Language 1	OFF	Language 1	ON
Language 2	off	Language 2	on
Language 3		Language 3	
Language 4		Language 4	
Language 5		Language 5	
Language 6		Language 6	
Language 7		Language 7	
Language 8		Language 8	
	Confirm		Confirm

status 0 setting

status 1 setting

(2) After clicking OK, it will be displayed in the table and can be modified directly in the table. (Double click to bring up the settings bar in the first step, and click below the language to directly modify the text)

1	No.	Label name	Add lat	bel Delet	e a tap Delete	1	Deleted state				Language 7	Language
-	1	label_1	2	0	OFF	off	canguage 5	canguage 4	Language 5	Language o	canguage /	Language
•		HOUCE -	1	1	ON	on						-

(3) click determine to save the settings.

# 5-1-3. Label table

apl lic	; 000]	<ul> <li>Add ta</li> </ul>	ible Delete					
	0	Add Delete De	elete all Copy Pas	te Import Export	t			
No.	Language 1	La Add ge 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language 8
1	Text1	1.00 p			5 5	, ,		, , ,
2	Text1							
-	Text1							
3								
3								
3								
3								
3								
3								
3								
3								

Add a multilingual table
delete the table
Search for the set language and quickly locate the line
Add a number to the selected table
Delete numbers in the selected table
Delete all numbers
Copy the row containing the selected number
Paste a copied line
Import Multilingual Table
Export Multilingual Table

### **Operation steps:**

(1) Click to add a table, and the added table will be displayed in the screen, as shown in the following figure. (You can select the table you want to set from the drop-down list after the 'Table')

Lat	oel Multiling							
abl	[ID: 001]	✓ Add t	able Delete					
	[ID: 000] [ID: 001]	Delete D	elete all Copy Pas	te Import Export	t			
No.	Language 1	Language 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language 8
	Text1							

(2) Click on options such as add/delete and click under Language to directly set text.

	C	Add Delete De	ete all Copy Pas	te Import Expor	t			
No. I	Language 1	Language 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language 8
1	Text1	aa	cc	dd				
2	Text1	bb						-
3	Text1							

(3) click determine to save the setting.

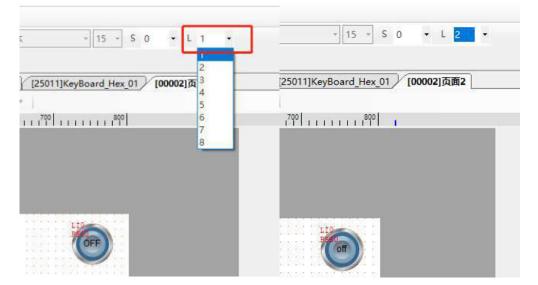
### 5-1-4. Examples of Multilingual Usage of Labels

1. Example of using label library (indicator light)

In the "Appearance" tab of the indicator light, follow the operating steps as shown in the figure to set it. You can click on the "Edit" font to directly jump to the label multilingual setting interface. (For the "indicator light [2]" in the fourth step, refer to the operating steps of the label library mentioned earlier.)

	indicator 🛛 💌
Basic Attrib Appearances ecurity	v set Location
1	Use pictures
	Status 1 v
aa	Name lamp_05_a
da	category svg
	Size 60 × 60
Change appearar	More pictures
✓ Fill	2
State 1	Display text Font applied to each
O Tevt  Multiling	Edit
✓ Enable 3     Label label_1[2]	✓ Lang Language ✓
Laber_1[2]	Canguage V
Font	
Fo微软雅黑	✓ General ✓
Co	Size 12 V
Ali Middle_Center Y	
	Determine Cancel Application

As shown in the following figure, select multiple languages from the drop-down list after "L" (downloaded to the HMI, you can switch between multiple languages by using the values in the system register SPFW260. The input value range 0-7 corresponds to the set language 1 to language 8, and if the input value is not 0-7, language 1 will be displayed).



2. Example of using multiple language library (static text/dynamic text string)

In the "Basic attributes" tab of static text, follow the operating steps as shown in the figure to set it. You can click "Edit" font to directly jump to the label multilingual setting interface. (For the "ID: 004" in the fourth step, refer to the operating steps of a multilingual library)

		Stati	c text attribute:	\$	
asic At	trib Security se	Location			
	ntrol ID ST2				
	scription				
O Te		ultiling 2		Edit	
🖌 En	Table [ID: 00		lo. 1 🗸	Lang Language V	
	1able [10.00			Canguage V	
	4		5		
			Text1		
Font					
Fo	微软雅黑	~	General	~	
Co		√ Size	e 12	~	
Ali	Middle_Center	~	Autofit size		
Bord	ler				
Thi	Borderless	✓ Style	e		
Co		v			

In the "Display" tab of the dynamic text string, follow the operating steps as shown in the figure to set it. You can click "..." in the second step to directly jump to the label multilingual setting interface. (For the third and fourth steps, please refer to the operating steps of multilingual library)

Basic At	tril Display Sec	urity se Location				-
Cont	ent			-		
No	. Value	Te	ext description strin	g 🚄	Add	1
0	0		string0			2
1	1		Variable string1		Delete	1
					l'againstaine a	
				Label n	Move up nultilingual	
abl	: 004] 3	✓ Add ta		]	nultilingual	
abl [ID No.	. cost			]	nultilingual Export	guaç
Lino.		Add Delete De	elete all Copy Pas	te Import	nultilingual Export	gua

As shown in the following figure, select multiple languages from the drop-down list after "L". (Downloading to the HMI, multilingual switching through the values in the system register SPFW260. The input value range 0-7 corresponds to the set language 1 to language 8, respectively. If the input value is not 0-7, language 1 will be displayed.).

楷体	* 15 *	S 0	• L	1 •	2	*	15 - S 0	- L	2 •
01 [25011]	KeyBoard_Hex	01/[	00002]页面	<b>1</b> 2	[250	11]KeyBoa	rd_Hex_01	[00002]贡	5面2
™           <sup>700</sup>	800	1			700 	1	800		1
	ote					誕头↔	÷2		
	静态文字1 011 修状态文字1					₩33又 011 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	. <del>7</del> -2 文字2		

language 1

language 2

### 5-2. Address label library

### 5-2-1. HMI internal address

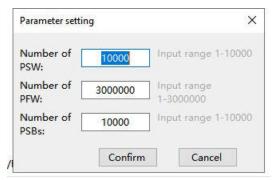
#### The TS series HMI has six types of internal objects: PSB, PSW, PFW, SPSB, SPSW, and SPFW.

Object type	Note
PSB	Bit object
PSW	Non power outage maintenance word object
PFW	Power outage maintenance word object
SPSB	The system used bit addresses, which belong to special addresses. For detailed
51.28	meanings, please refer to chapter 5-2-2
SPSW	The system's non power outage maintenance word address belongs to a special
SFSW	address, and its detailed meaning can be found in chapter 5-2-2
CDEW	The system's power outage maintenance word address belongs to a special
SPFW	address, and its detailed meaning can be found in chapter 5-2-2

The scope of internal objects that can be used by each model:

	TS2 series	TS3/TS5/TS5D series
PSB	0~10000	
PSW	0~10000	
PFW	0~1000000	0~3000000

The number and range of PFW data can be modified through "File/System Settings/Monitor/Parameter", and the number of PFW generally does not need to be modified; The range of initial values set in the file PFW data is greater than the number of PFWs or during configuration operation, and the number of PFWs can be modified to not be less than the number of PFWs used in the program.



### 5-2-2. System label

Used to display HMI system address information, making it easy for users to view and use.

			Addre	ess Label Libra	ary		
Lat	oel type						
•	System label ု Custom label	O Equipment			*		
	1.0	10 (P	12	12 12			
Sea	Add Add	Delete Delete all		port Export			
-	Label name	Function	Address	Address 1	Read/Write	Power off hold	Y
2	用户权限登录标志位	工程對认值	SPSB0	Bit	ReadOnly	False	
	用户权限取消标志位	工程默认值	SPSB1	Bit	ReadOnly	False	
	剩余存储空间标志	工程默认值	SPSB2	Bit	ReadOnly	False	
	存储空间不足警告	工程默认值	SPSB3	Bit	ReadOnly	False	
	屏保状态标志	工程默认值	SPSB4	Bit	ReadOnly	False	
	背景灯状态标志	工程默认值	SPSB5	Bit	ReadOnly	False	
	Hmi自身IP文件保存标志	系统使用	SPSB6	Bit	ReadOnly	False	
	下载后第一次扫描	工程默认值	SPSB7	Bit	ReadOnly	False	
	上电后第一次扫描	工程默认值	SPSB8	Bit	ReadOnly	False	
	100ms为周期的脉冲线圈	工程默认值	SPSB9	Bit	ReadOnly	False	
	1s为周期的脉冲线圈	工程默认值	SPSB10	Bit	ReadOnly	False	
	1min为周期的脉冲线圈	工程默认值	SPSB11	Bit	ReadOnly	False	
	U盘弹出失败标志	硬件相关	SPSB12	Bit	ReadOnly	False	
	常开线圈	工程默认值	SPSB13	Bit	ReadOnly	False	
	常闭线圈	工程默认值	SPSB14	Bit	ReadOnly	False	
	U盘插入标志	硬件相关	SPSB15	Bit	ReadOnly	False	
	SD卡插入标志	系统使用	SPSB16	Bit	ReadOnly	False	
	USB下载线插入标志	系统使用	SPSB17	Bit	ReadOnly	False	
	模块插入标志	硬件相关	SPSB18	Bit	ReadOnly	False	
	MQTT服务标志	通信相关	SPSB19	Bit	ReadOnly	False	
	远程登录标志	通信相关	SPSB20	Bit	ReadOnly	False	
	穿透连接标志	通信相关	SPSB21	Bit	ReadOnly	False	
_	VNC服务标志	通信相关	SPSB22	Bit	ReadOnly	False	

You can search in the search area and click *it* to quickly query the required registers (system registers cannot be changed).

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
	User permission login flag	Local	0	SPSB	0	Bit	ReadOnly	False
	bit	device						
	User permission	Local	0	SPSB	1	Bit	ReadOnly	False
	cancellation flag bit	device						
	Remaining storage space	Local	0	SPSB	2	Bit	ReadOnly	False
		device						
	Insufficient storage space	Local	0	SPSB	3	Bit	ReadOnly	False
HMI related	warning	device						
	Screen saver status flag	Local	0	SPSB	4	Bit	ReadOnly	False
		device						
	Backlight control	Local	0	SPSB	5	Bit	ReadOnly	False
		device						
	First scan after download	Local	0	SPSB	7	Bit	ReadOnly	False
		device						
	First scan after power on	Local	0	SPSB	8	Bit	ReadOnly	False

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
		device						
	Pulse coil with a period of	Local	0	SPSB	9	Bit	ReadOnly	False
	100ms	device						
	Pulse coil with a period of 1	Local	0	SPSB	10	Bit	ReadOnly	False
	second	device						
	Pulse coil with a period of 1	Local	0	SPSB	11	Bit	ReadOnly	False
	minute	device						
	normally open coil	Local	0	SPSB	13	Bit	ReadOnly	False
		device						
	normally close coil	Local	0	SPSB	14	Bit	ReadOnly	False
		device						
	Clear alarm records	Local	0	SPSB	120	Bit	R/W	False
		device						
	HMI ID	Local	0	SPSW	0	String	ReadOnly	False
		device						
	Year -Decimal	Local	0	SPSW	16	Word	ReadOnly	False
		device						
	Month -Decimal	Local	0	SPSW	17	Word	ReadOnly	False
		device						
	Day -Decimal	Local	0	SPSW	18	Word	ReadOnly	False
		device						
	Hour -Decimal	Local	0	SPSW	19	Word	ReadOnly	False
		device						
	Minute -Decimal	Local	0	SPSW	20	Word	ReadOnly	False
		device						
	Second -Decimal	Local	0	SPSW	21	Word	ReadOnly	False
		device						
	Week -Decimal	Local	0	SPSW	22	Word	ReadOnly	False
		device						
	Year -Hex	Local	0	SPSW	23	Word	ReadOnly	False
		device						
	Month - Hex	Local	0	SPSW	24	Word	ReadOnly	False
		device						
	Day - Hex	Local	0	SPSW	25	Word	ReadOnly	False
		device						
	Hour - Hex	Local	0	SPSW	26	Word	ReadOnly	False
		device						
	Minute - Hex	Local	0	SPSW	27	Word	ReadOnly	False
		device						
	Second - Hex	Local	0	SPSW	28	Word	ReadOnly	False
		device						
	Week - Hex	Local	0	SPSW	29	Word	ReadOnly	False
		device						

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type		21	mode	holding
	Current screen number	Local	0	SPSW	30	Word	ReadOnly	False
		device						
	System running time	Local	0	SPSW	31	DWord	ReadOnly	False
		device						
	HMI software version	Local	0	SPSW	90	String	ReadOnly	False
		device				_		
	System runtime - hour	Local	0	SPSW	200	Word	ReadOnly	False
		device						
	System runtime - minute	Local	0	SPSW	201	Word	ReadOnly	False
		device						
	System runtime - second	Local	0	SPSW	202	Word	ReadOnly	False
		device						
	HMI model	Local	0	SPSW	209	Word	ReadOnly	False
		device	Ŭ	5151				
	HmiMain version	Local	0	SPSW	211	String	ReadOnly	False
		device	Ŭ	51510	211	Sung	liceucomy	1 uise
	System version	Local	0	SPSW	221	String	ReadOnly	False
	System version	device	0	515 W	221	Stillig	Readonly	1 4150
	Memory footprint	Local	0	SPSW	231	DWord	ReadOnly	False
	Wembry Tootprint	device	0	51 5 W	231	Dword	ReauOnry	Taise
	Memory total capacity	Local	0	SPSW	233	DWord	ReadOnly	False
	wembry total capacity	device	0	51 5 W	235	Dword	ReauOnry	Taise
	Storage ecouronau	Local	0	SPSW	235	DWord	ReadOnly	False
	Storage occupancy		0	5F 5 W	235	Dword	ReauOnry	Faise
	Total starses seresity	device	0	SPSW	227	DWord	DeadOuly	False
	Total storage capacity	Local	0	5P5 W	237	Dword	ReadOnly	raise
		device	0	ODEW	252	<b>W</b> 7 1	D/W/	т
	Backlight adjustment	Local	0	SPFW	252	Word	R/W	True
	(values 0-11)	device		CDEUU	0.5.6	<b>TT7</b> 1	D/W	
	Recipe Index	Local	0	SPFW	256	Word	R/W	True
		device				4	_ /	
	Start screen number	Local	0	SPFW	257	Word	R/W	True
		device						
	Screensaver time	Local	0	SPFW	258	Word	R/W	True
		device						
	Multi language switching	Local	0	SPFW	260	Word	R/W	True
		device						
	Turn off the buzzer	Local	0	SPFW	448	Bit	R/W	True
		device						
	hide cursor	Local	0	SPFW	449	Bit	R/W	True
		device						
	Hide System Menu	Local	0	SPFW	450	Bit	R/W	True
		device						
	Turn off backlight	Local	0	SPFW	452	Bit	R/W	True

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
		device						
	Flash disk eject failure flag	Local	0	SPSB	12	Bit	ReadOnly	False
		device						
	Flash disk insertion flag	Local	0	SPSB	15	Bit	ReadOnly	False
		device						
	Module insertion flag	Local	0	SPSB	18	Bit	ReadOnly	False
		device						
	Clear alarm records	Local	0	SPSB	120	Bit	R/W	False
Hardware		device						
	restart	Local	0	SPSB	200	Bit	WriteOnly	False
		device						
	Safely ejecting the flash	Local	0	SPSB	201	Bit	WriteOnly	False
	disk	device						
	HMI hardware version	Local	0	SPSW	33	String	ReadOnly	False
		device						
	MQTT service flag	Local	0	SPSB	19	Bit	ReadOnly	False
		device						
	Remote login flag	Local	0	SPSB	20	Bit	ReadOnly	False
		device						
	passthrough connection flag	Local	0	SPSB	21	Bit	ReadOnly	False
		device						
	VNC service flag	Local	0	SPSB	22	Bit	ReadOnly	False
		device						
	Informationization LAN	Local	0	SPSB	23	Bit	ReadOnly	False
	Connection Flag	device						
	Communication failure flag	Local	0	SPSB	48	Bit	ReadOnly	False
		device						
	Communication failure flag	Local	0	SPSB	49	Bit	ReadOnly	False
Communication	for communication port 1	device						
Communication	Communication failure flag	Local	0	SPSB	50	Bit	ReadOnly	False
	for communication port 2	device						
	Communication failure flag	Local	0	SPSB	51	Bit	ReadOnly	False
	for communication port 3	device						
	Ethernet device	Local	0	SPSB	52	Bit	ReadOnly	False
	communication failure flag	device						
	Number of devices	Local	0	SPSW	43	Word	ReadOnly	True
		device						
	port 1 communication	Local	0	SPSW	44	Word	ReadOnly	False
	successful times	device						
	port 1 communication error	Local	0	SPSW	45	Word	ReadOnly	False
	times	device						
	port 1 communication	Local	0	SPSW	46	Word	ReadOnly	False
	timeout times	device						

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
	port 1 communication	Local	0	SPSW	47	Word	ReadOnly	False
	failure times	device						
	port 2 communication	Local	0	SPSW	48	Word	ReadOnly	False
	successful times	device						
	port 2 communication error	Local	0	SPSW	49	Word	ReadOnly	False
	times	device						
	port 2 communication	Local	0	SPSW	50	Word	ReadOnly	False
	timeout times	device						
	port 2 communication	Local	0	SPSW	51	Word	ReadOnly	False
	failure times	device						
	port 3 communication	Local	0	SPSW	52	Word	ReadOnly	False
	successful times	device						
	port 3 communication error	Local	0	SPSW	53	Word	ReadOnly	False
	times	device						
	port 3 communication	Local	0	SPSW	54	Word	ReadOnly	False
	timeout times	device						
	port 3 communication	Local	0	SPSW	55	Word	ReadOnly	False
	failure times	device						
	present connection method	Local	0	SPSW	56	Word	ReadOnly	False
		device						
	present connection signal	Local	0	SPSW	57	Word	ReadOnly	False
	strength	device						
	Informatization IP address	Local	0	SPSW	58	Word	ReadOnly	False
		device						
	Informatization subnet	Local	0	SPSW	62	Word	ReadOnly	False
	mask	device						
	Informatization default	Local	0	SPSW	66	Word	ReadOnly	False
	gateway	device						
	Informatization port no.	Local	0	SPSW	70	Word	ReadOnly	False
		device						
	Informatization DNS server	Local	0	SPSW	71	Word	ReadOnly	False
		device						
	Informatization MAC	Local	0	SPSW	75	Word	ReadOnly	False
	address	device						
	Informatization module	Local	0	SPSW	81	Word	ReadOnly	False
	information	device						
	COM1 communication	Local	0	SPSW	203	DWord	ReadOnly	False
	response code	device						
	COM2 communication	Local	0	SPSW	205	DWord	ReadOnly	False
	response code	device						
	COM3 communication	Local	0	SPSW	207	DWord	ReadOnly	False
	response code	device						
	Ethernet device 1 IP	Local	0	SPFW	1	Word	R/W	True

	address Ethernet device 1 port no. Ethernet device 2 IP address Ethernet device 2 port no.	name device Local device Local device Local	no.           0           0           0	type SPFW SPFW	5	Word	R/W	holding True
	Ethernet device 1 port no. Ethernet device 2 IP address Ethernet device 2 port no.	Local device Local device			5	Word	R/W	True
	Ethernet device 2 IP address Ethernet device 2 port no.	device Local device			5	Word	R/W	True
	address Ethernet device 2 port no.	Local device	0	SPFW				
	address Ethernet device 2 port no.	device	0	SPFW	1			
	Ethernet device 2 port no.				6	Word	R/W	True
	_	Local						
H			0	SPFW	10	Word	R/W	True
H		device						
F	Ethernet device 3 IP	Local	0	SPFW	11	Word	R/W	True
H	address	device						
	Ethernet device 3 port no.	Local	0	SPFW	15	Word	R/W	True
		device						
	Ethernet device 4 IP	Local	0	SPFW	16	Word	R/W	True
	address	device						
E	Ethernet device 4 port no.	Local	0	SPFW	20	Word	R/W	True
		device						
	Ethernet device 5 IP	Local	0	SPFW	21	Word	R/W	True
	address	device						
I	Ethernet device 5 port no.	Local	0	SPFW	25	Word	R/W	True
		device						
	Ethernet device 6 IP	Local	0	SPFW	26	Word	R/W	True
	address	device						
F	Ethernet device 6 port no.	Local	0	SPFW	30	Word	R/W	True
		device						
	Ethernet device 7 IP	Local	0	SPFW	31	Word	R/W	True
	address	device						
H	Ethernet device 7 port no.	Local	0	SPFW	35	Word	R/W	True
		device						
	Ethernet device 8 IP	Local	0	SPFW	36	Word	R/W	True
	address	device						
I	Ethernet device 8 port no.	Local	0	SPFW	40	Word	R/W	True
		device						
	Ethernet device 9 IP	Local	0	SPFW	41	Word	R/W	True
	address	device						
F	Ethernet device 9 port no.	Local	0	SPFW	45	Word	R/W	True
	*	device						
-	Ethernet device 10 IP	Local	0	SPFW	46	Word	R/W	True
	address	device						
E	Ethernet device 10 port no.	Local	0	SPFW	50	Word	R/W	True
	10 port no.	device	Ť					
	Ethernet device 11 IP	Local	0	SPFW	51	Word	R/W	True
	address	device		511 11				
F	Ethernet device 11 port no.	Local	0	SPFW	55	Word	R/W	True
E	anemet device 11 poit 110.	device	U	ST 1. M		word	IV/ VV	IIUC

type	label name	device	station	address	address	data type	read write	-
		name	no.	type			mode	holding
	Ethernet device 12 IP	Local	0	SPFW	56	Word	R/W	True
	address	device						
	Ethernet device 12 port no.	Local	0	SPFW	60	Word	R/W	True
		device						
	Ethernet device 13 IP	Local	0	SPFW	61	Word	R/W	True
	address	device						
	Ethernet device 13 port no.	Local	0	SPFW	65	Word	R/W	True
		device						
	Ethernet device 14 IP	Local	0	SPFW	66	Word	R/W	True
	address	device						
	Ethernet device 14 port no.	Local	0	SPFW	70	Word	R/W	True
		device						
	Ethernet device 15 IP	Local	0	SPFW	71	Word	R/W	True
	address	device						
	Ethernet device 15 port no.	Local	0	SPFW	75	Word	R/W	True
		device						
	Ethernet device 16 IP	Local	0	SPFW	76	Word	R/W	True
	address	device						
	Ethernet device 16 port no.	Local	0	SPFW	80	Word	R/W	True
		device						
	Ethernet device 17 IP	Local	0	SPFW	81	Word	R/W	True
	address	device						
	Ethernet device 17 port no.	Local	0	SPFW	85	Word	R/W	True
		device						
	Ethernet device 18 IP	Local	0	SPFW	86	Word	R/W	True
	address	device						
	Ethernet device 18 port no.	Local	0	SPFW	90	Word	R/W	True
		device						
	Ethernet device 19 IP	Local	0	SPFW	91	Word	R/W	True
	address	device						
	Ethernet device 19 port no.	Local	0	SPFW	95	Word	R/W	True
		device						
	Ethernet device 20 IP	Local	0	SPFW	96	Word	R/W	True
	address	device						
	Ethernet device 20 port no.	Local	0	SPFW	100	Word	R/W	True
		device						
	Ethernet device 21 IP	Local	0	SPFW	101	Word	R/W	True
	address	device		511 11				
	Ethernet device 21 port no.	Local	0	SPFW	105	Word	R/W	True
	Enternet device 21 port llo.	device		511 1	105	moru		IIUC
	Ethomat device 22 ID		0	CDEW	104	Wand	D/W/	True
	Ethernet device 22 IP	Local		SPFW	106	Word	R/W	Irue
	address	device		ODEMA	110	<b>XX</b> 7 1	D /117	т
	Ethernet device 22 port no.	Local	0	SPFW	110	Word	R/W	True

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
		device						
	Ethernet device 23 IP	Local	0	SPFW	111	Word	R/W	True
	address	device						
	Ethernet device 23 port no.	Local	0	SPFW	115	Word	R/W	True
		device						
	Ethernet device 24 IP	Local	0	SPFW	116	Word	R/W	True
	address	device						
	Ethernet device 24 port no.	Local	0	SPFW	120	Word	R/W	True
		device						
	Ethernet device 25 IP	Local	0	SPFW	121	Word	R/W	True
	address	device						
	Ethernet device 25 port no.	Local	0	SPFW	125	Word	R/W	True
		device						
	Ethernet device 26 IP	Local	0	SPFW	126	Word	R/W	True
	address	device						
	Ethernet device 26 port no.	Local	0	SPFW	130	Word	R/W	True
		device						
	Ethernet device 27 IP	Local	0	SPFW	131	Word	R/W	True
	address	device						
	Ethernet device 27 port no.	Local	0	SPFW	135	Word	R/W	True
		device						
	Ethernet device 28 IP	Local	0	SPFW	136	Word	R/W	True
	address	device						
	Ethernet device 28 port no.	Local	0	SPFW	140	Word	R/W	True
		device						
	Ethernet device 29 IP	Local	0	SPFW	141	Word	R/W	True
	address	device						
	Ethernet device 29 port no.	Local	0	SPFW	145	Word	R/W	True
		device						
	Ethernet device 30 IP	Local	0	SPFW	146	Word	R/W	True
	address	device						
	Ethernet device 30 port no.	Local	0	SPFW	150	Word	R/W	True
		device						
	Ethernet device 31 IP	Local	0	SPFW	151	Word	R/W	True
	address	device						
	Ethernet device 31 port no.	Local	0	SPFW	155	Word	R/W	True
		device						
	Ethernet device 32 IP	Local	0	SPFW	156	Word	R/W	True
	address	device						
	Ethernet device 32 port no.	Local	0	SPFW	160	Word	R/W	True
		device						
	Ethernet device 33 IP	Local	0	SPFW	161	Word	R/W	True
	address	device						

type	label name	device	station	address	address	data type	read write	-
		name	no.	type			mode	holding
	Ethernet device 33 port no.	Local	0	SPFW	165	Word	R/W	True
		device		CDEUZ	1.00	<b>TT7</b> 1	D /III	
	Ethernet device 34 IP	Local	0	SPFW	166	Word	R/W	True
	address	device		appur	1.50		D (111	
	Ethernet device 34 port no.	Local	0	SPFW	170	Word	R/W	True
		device		appur	1.51		D (111	
	Ethernet device 35 IP	Local	0	SPFW	171	Word	R/W	True
	address	device						
	Ethernet device 35 port no.	Local	0	SPFW	175	Word	R/W	True
		device						
	Ethernet device 36 IP	Local	0	SPFW	176	Word	R/W	True
	address	device						
	Ethernet device 36 port no.	Local	0	SPFW	180	Word	R/W	True
		device						
	Ethernet device 37 IP	Local	0	SPFW	181	Word	R/W	True
	address	device						
	Ethernet device 37 port no.	Local	0	SPFW	185	Word	R/W	True
		device						
	Ethernet device 38 IP	Local	0	SPFW	186	Word	R/W	True
	address	device						
	Ethernet device 38 port no.	Local	0	SPFW	190	Word	R/W	True
		device						
	Ethernet device 39 IP	Local	0	SPFW	191	Word	R/W	True
	address	device						
	Ethernet device 39 port no.	Local	0	SPFW	195	Word	R/W	True
		device						
	Ethernet device 40 IP	Local	0	SPFW	196	Word	R/W	True
	address	device						
	Ethernet device 40 port no.	Local	0	SPFW	200	Word	R/W	True
		device						
	Ethernet device 41 IP	Local	0	SPFW	201	Word	R/W	True
	address	device						
	Ethernet device 41 port no.	Local	0	SPFW	205	Word	R/W	True
	Zanomo ao no ri portitor	device	Ŭ		200			1140
	Ethernet device 42 IP	Local	0	SPFW	206	Word	R/W	True
	address	device	Ŭ	511 11	200	word	10.00	Inde
	Ethernet device 42 port no.	Local	0	SPFW	210	Word	R/W	True
	Enternet device 42 port llo.	device		511 W	210	moru	10,14	
	Ethernet device 43 IP	Local	0	SPFW	211	Word	R/W	True
	address	device		SEL W	211	word	IV. W	Inte
				ODENT	215	<b>XX</b> 7 1	D /117	
	Ethernet device 43 port no.	Local	0	SPFW	215	Word	R/W	True
		device				·		_
	Ethernet device 44 IP	Local	0	SPFW	216	Word	R/W	True

type	label name	device	station	address	address	data type	read write	-
		name	no.	type			mode	holding
	address	device						
	Ethernet device 44 port no.	Local	0	SPFW	220	Word	R/W	True
		device						
	Ethernet device 45 IP	Local	0	SPFW	221	Word	R/W	True
	address	device						
	Ethernet device 45 port no.	Local	0	SPFW	225	Word	R/W	True
		device				4	- /	
	Ethernet device 46 IP	Local	0	SPFW	226	Word	R/W	True
	address	device						
	Ethernet device 46 port no.	Local	0	SPFW	230	Word	R/W	True
		device						
	Ethernet device 47 IP	Local	0	SPFW	231	Word	R/W	True
	address	device						
	Ethernet device 47 port no.	Local	0	SPFW	235	Word	R/W	True
		device						
	Ethernet device 48 IP	Local	0	SPFW	236	Word	R/W	True
	address	device						
	Ethernet device 48 port no.	Local	0	SPFW	240	Word	R/W	True
		device						
	Ethernet device 49 IP	Local	0	SPFW	241	Word	R/W	True
	address	device						
	Ethernet device 49 port no.	Local	0	SPFW	245	Word	R/W	True
		device						
	Ethernet device 50 IP	Local	0	SPFW	246	Word	R/W	True
	address	device						
	Ethernet device 50 port no.	Local	0	SPFW	250	Word	R/W	True
		device						
	HMI IP address	Local	0	SPFW	318	Word	R/W	True
		device						
	HMI subnet	Local	0	SPFW	322	Word	R/W	True
		device						
	HMI gateway	Local	0	SPFW	326	Word	R/W	True
		device						
	HMI port no.	Local	0	SPFW	330	Word	R/W	True
		device						
	HMI DNS server	Local	0	SPFW	331	Word	R/W	True
		device						
	Communication port 1	Local	0	SPFW	335	Word	R/W	True
	interface type	device						
	Communication port 1	Local	0	SPFW	336	Word	R/W	True
	device station no.	device						
	Communication port 1	Local	0	SPFW	337	Word	R/W	True
	device baud rate	device						

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
	Communication port 1	Local	0	SPFW	338	Word	R/W	True
	device data bit	device						
	Communication port 1	Local	0	SPFW	339	Word	R/W	True
	device stop bit	device						
	Communication port 1	Local	0	SPFW	340	Word	R/W	True
	device parity bit	device						
	Communication port 1	Local	0	SPFW	341	Word	R/W	True
	delay before sending	device						
	Communication port 2	Local	0	SPFW	343	Word	R/W	True
	interface type	device						
	Communication port 2	Local	0	SPFW	344	Word	R/W	True
	device station no.	device						
	Communication port 2	Local	0	SPFW	345	Word	R/W	True
	device baud rate	device						
	Communication port 2	Local	0	SPFW	346	Word	R/W	True
	device data bit	device						
	Communication port 2	Local	0	SPFW	347	Word	R/W	True
	device stop bit	device						
	Communication port 2	Local	0	SPFW	348	Word	R/W	True
	device parity bit	device						
	Communication port 2	Local	0	SPFW	349	Word	R/W	True
	delay before sending	device						
	Communication port 3	Local	0	SPFW	351	Word	R/W	True
	interface type	device						
	Communication port 3	Local	0	SPFW	352	Word	R/W	True
	device station no.	device						
	Communication port 3	Local	0	SPFW	353	Word	R/W	True
	device baud rate	device						
	Communication port 3	Local	0	SPFW	354	Word	R/W	True
	device data bit	device						
	Communication port 3	Local	0	SPFW	355	Word	R/W	True
	device stop bit	device						
	Communication port 3	Local	0	SPFW	356	Word	R/W	True
	device parity bit	device						
	Communication port 3	Local	0	SPFW	357	Word	R/W	True
	delay before sending	device						
	Communication port 1	Local	0	SPFW	400	Bit	R/W	True
	station number shielding	device						
	Communication port 2	Local	0	SPFW	416	Bit	R/W	True
	station number shielding	device						
	Communication port 3	Local	0	SPFW	432	Bit	R/W	True
	station number shielding	device						
	VNC service control	Local	0	SPFW	451	Bit	R/W	True

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
		device						
	Real time mode of	Local	0	SPFW	453	Bit	R/W	True
	communication register	device						

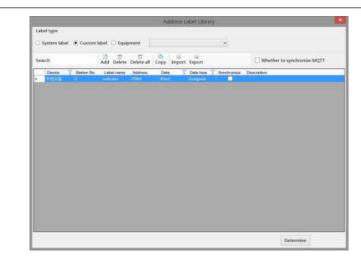
### 5-2-3. Custom label

According to personal usage habits, create tags for HMI internal addresses or device addresses, and view the usage of each tag address in this window.

		Address Label Library		×
Label type O System label  Custom	label 🔿 Equipment 🛛		•	
Search	Add Delete Delete all	Copy Import Export	Whether to synchronize MQ	ſΠ
Device T Station No.	Label name Address		Synchronize Description	
			Determine	

New address label
Variable name Address mode Descripti on
Devic 本地设备 v Settin
Addre pSB v 0 Data Word v Unsignec v Indirect Type Determine Cancel Application

	name	
	address mode	Choose whether the address is a bit address or a word address.
	description	Set description information for the current address label, this is an optional item.
	device	Select the device where the address is located, and you can select a local device
		or a newly added device in the communication port.
	address	Set the address corresponding to the current label.
	data type	Set the data type for the current address.
	indirect	Set the current address offset, where the current register address changes with the
	specify	indirectly specified register value, i.e. Dx [Dy]=D [x+Dy numerical value] (x,
		y=0, 1, 2, 3). Example: The current register address is PSW0, if the indirectly
		specified address is PSW100; When the value of the PSW100 register is 0, the
		register that controls this component remains PSW0; When the value of the
		PSW100 register is 1, the register that controls this component is PSW1 (and so
		on).
delete	Delete the spe	cified address label.
delete all	Delete all adde	ed address labels.
copy	Copy the spec	ified address label.
paste	This item is or	nly displayed when there is copied content, used to paste the copied address label
	at the specified	d location.
export	Export the cur	rently added address label in CSV format to the specified path in the computer.
import	Import the CS	V format address table of the specified path in the computer into the HMI.
example	The indicator	button uses a user-defined label.
	(1) add cr	ustom label
	File Edit Parts	Touch Win Pro - 工程 - [00001]Page1 Mapping Tool View Help
	New Open Save Clo	se Undo Recovery Copy Cut Paste Delete Lookup Download Online simulation Offline Simulator Compile System settings Data sampling Alarm e
	Engineering tree	1 × 00001/Page1
	☐ I User screen ☐ I 00001]Page1	Address Label Library
	User form System picture System form	System label Custom label Equipment
	E System form	Search Add Delete all Copy Import Export Whether to synchronize MQTT
	Source file	Device V Station No. Label name Address Data V Data type V Synchronize Description New address label
	Address Libel	Library name
	Audio resource	
		on .
		Devic angles v Settin
		Addre psB v 0 Data word v Unsigner v Indirect
		Determine Cancel Application
	after clicking	ok, it will show below picture:
	and the mexing (	en, a vin shen seren pressee.



(2) use custom label

Place indicator buttons on the engineering screen and follow the steps shown in the following figure for configuration.

Basic AttribiAppearance Security set Location
Control ID L10 Description Read address Devic 本地设备
Address
Device 本地设备 v
Address indicator  V User defined labe
Address 0 System register
Address Use custom labels : indicator format
Address Label
Determine Cancel Application

	Ba	sic AttribiAppe	arance Security se	Location			
		Control ID	LIO				
		Description					
		Read address Devic 本地设 Addre indica		0	v Settin		
		logic Positiv	ve logic	0	Negative logic		
		Flash On sta	itus flashes	0	Off status flashe	s	
At the sa	ne time the	usaga seraa		frequency	mized label y	vill also l	he displa
on Librar		abel Librar	en and windo y/ Custom L	w of custor abels to vie	mized label v ew. (When a		
on Librar	y/ Address L	abel Librar	en and windo y/ Custom L	w of custor abels to vie	mized label v ew. (When a		
on Librar	y/ Address L ress, "1 1" w	abel Librar vill appear a	en and windo y/ Custom L	w of custor abels to vie	mized label v ew. (When a		eads/writ
on Librar	y/ Address L ress, "1 1" w 地话签师 ● 用户自定义标签 查谢方式	abel Librar vill appear a	en and windo y/ Custom L Is shown in t	w of custon abels to vie he followin	mized label v ew. (When a		eads/writ
on Librar	y/ Address L ress, "1 1" w 地话签师 ● 用户自定义标签 查谢方式	abel Librar vill appear a 〇新統府得 〇柄	en and winde y/ Custom L s shown in t	w of custor abels to vie he followin	mized label v ew. (When a		eads/writ
on Librar	y/ Address L ress, "1 1" w Putsza O RPORXSZ	abel Librar vill appear a	en and winde y/ Custom L ss shown in t 典照表 ① 重明模式 全部 第1 号出 号 金哥 第1 号出 号	w of custor abels to vie he followin	mized label w ew. (When a ng figure)		eads/writ

構定

### 5-2-4. Equipment label

0 1	统标签 〇 自定义标签 ⑧ 设备标签 信捷	XS系列 (CodeSys)	CODES ~
搜索	前 10 日 日 市田 1000 101日 日本	우入 무법	
	标签名称	新播業型 7	描述
	Application/GVL_MMI_Group_Asis/Group_AsisCtrl	Bool	
	Application/GVL_MMI_Group_Axis/Group_AxisCtrl	Bool	
	Application/GVL_MMI_Group_Asis/Group_AsisCtrl	Bool	
	Application/GVL_MMI_Group_Asis/Group_AsisCtrl	Bool	
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool	
	Application/GVL_MMI_Group_Asis/Group_AsisCtrl	Bool	
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool	
	Application/GVL_MMI_Group_Asis/Group_AsisCtrl	Bool	
	Application/GVL_MMI_Group_Asis/Group_AsisCtrl	Bool	
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool	
	Application/GVL_MMT_Group_Axis/Group_AxisCtrl_	Int	
	Application/GVL_MMI_Group_Asis/Group_AsisCtrl	Bool	
	Application/GVL_MMI_Group_Asis/Group_AsisCtrl	Bool	
	Application/GVL_MMI_Group_Axis/Group_AxisCtrl	lool	
	Application/GVL_)MMI_Group_Asis/Group_AsisCtrl	Byte	
	Application/GVL_HMI_Group_Asis/Group_AsisCtrl	LReal	
	Application/GVL_MMI_Group_Axis/Group_AxisCtrl	LReal	
	Annlightion/GVL MMT Group Avis/Group AvisCtrl	I.Real	

Mainly displaying device labels, currently suitable for displaying codesys labels.

#### 5-3. Resource material library

By accessing the resource material library, diversity in the appearance of editing tools can be achieved. Double click on the Project Tree/ Resource Material Library icon.

Engineering tree
□ 🛜 Project
🗄 🗖 User screen
🖶 🗔 System picture
🖶 🔜 System form
E Function Block
🗄 🗖 Library
🖃 Label multilingual
- 🗷 Address Label Library
💌 Resource material library
- 🐱 Audio resource library

The resource material library selection image dialog box appears, as shown in the following figure:

		Resource library				
	Ad	d folders Delete folders Add Element Delete Element				
<ul> <li>● 按键</li> <li>● 按键</li> <li>● 按指示灯支援</li> <li>● 紧张示灯支援</li> <li>● 紧张 水量</li> <li>● 紧张 水量</li> <li>● 紧张 水量</li> <li>● 紧张 水量</li> <li>● 紧张 小型、</li>     &lt;</ul>	J	Dutton 01 Dutton 02   Dutton 01 Dutton 02   Dutton 03 Dutton 04   Dutton 04 Dutton 05   Dutton 06 Dutton 07   Dutton 07 Dutton 07   Dutton 08 Dutton 09   Dutton 08 Dutton 09   Dutton 09 Dutton 10				
Left engineering column section		<u>Determine</u> <u>Cancel</u> <u>Application</u> <u>Cancel</u> <u>Application</u>				
	New folder	Add a new blank folder, which can be used to improve the material library by adding materials later				
	add folder	Add a folder containing photos and quickly add materials				
		Delete selected folder				
	add element					
	delete	Delete selected material				
	element					
	rename	Rename the added folder				
	e target file	Select the object image, click the "OK" button below after selecting it, and confirm to				
section o	n the right	enter the target editing interface. At the same time, the function of adding or deleting materials can be realized through "adding elements" or "deleting elements"				
		Inaterials can be realized unough adding elements of deleting elements				

#### 5-4. Audio resource library

The audio resource library can manage all audio information in the software, including buttons, indicator buttons, character keys, function keys, alarms, and other audio playback functions.

				<ul> <li>Library</li> <li>Label multilingual</li> <li>Address Label Librar</li> <li>Resource material librar</li> <li>Audio resource librar</li> </ul>	brary		
				音频库			×
	<b>0</b> II		-	文件	大小	播放	
			0	alarm01.wav	831.256K	播放	
sounds			1	alarm02.wav	384.044K	播放	
			2	alarm03.wav	105.58K	播放	
			3	beep02.wav	209.96K	播放	
			4	message01.wav	132.404K	播放	
			5	ring01.wav	768.04K	播放	
			6	ring02.wav	720.044K	播放	
			7	tune01.wav	1910.66K	播放	
			8	tune02.wav	1974.292K	播放	
			9	welcome01.way	488.64K	播放	
					Determine Can		
dd folder 🝺	Add a fol format)	der c	onta	iining audio to quickly a	dd audio materials (cui	rently only su	ipports w
lete folder [	Delete the	selec	cted	folder, please note that if	deleted by mistake, it c	annot be restor	ed
d material	Add custo	m ma	ateri	als			

Take the indicator button as an example (follow the steps in the figure).

Step 1: Select the indicator light button and place it on the screen.

Step 2: Set operation related parameters according to usage requirements. As shown in the figure, the setting is reversed, meaning that every time the indicator button is clicked, the status of the indicator button changes, and it also triggers the function of playing audio. (There is currently no pause function, as long as there is a trigger signal, the selected audio will be played completely).

Step 3: Check the start sound and click on the gray box behind it to enter the audio library interface.

Step 4 ~ Step 5: Select an audio file in the audio library, select it, and click OK.

Step 6: After clicking OK at the indicator button component, the selected audio name will be displayed in the gray box.

AttribiAppearance Function bi Securit	y set Location	3	0 1	N 🔼 🗖	8
Control ID 8T1				npling Alarmentry Recipe	
Description					
Vrite address		ii 13	SION 4		
Devic 本地设备	✓ Settin	6.0.0.6	, şqo] şqo] 7qo]		11111 <sup>1</sup> pqo
Addre psg v 0	Conc. Record Concerns				
			音顺库		
		<b>b</b> I <b>b</b>	文件	大小	播放
ction		0	alarm01.wav	831.256K	播放
◯ Set on ◯ Set off	Negate	1	alarm02.wav	384.044K	播放
o aron o aron	() Heguie	2	alarm03.wav	105.58K	播放
		3	beep02.wav	209.96K	播放
Start alarm02.wav		4	message01.wav	132.404K	播放
		5	ring01.wav	768.04K	播放
		6	ring02.wav	720.044K	播放
		7	tune01.wav	1910.66K	播放
		8	tune02.wav	1974.292K	播放

# 6. Function block

This chapter explains the usage of the C function by introducing the C instruction and combining some simple examples. Therefore, only some simple and easy to understand C function knowledge is used in the introduction. The main purpose is to help customers understand this function, understand some basic writing rules, and some precautions during use.

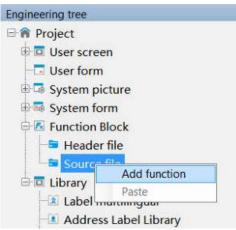
### 6-1. Function block introduction

#### 6-1-1. Function block operating conditions

Unlike general TG series HMI, TS series HMI support function block offline/online simulation.

#### 6-1-2. Build a function block

1. Open TouchWin Pro software, click engineering tree/project/function block/source file/add function.



2. Fill in the basic information of the function block in the pop-up information dialog box, and click "OK" to create a new function. (Function block names can be up to 30 characters)

	Function Attribute	×
Function name	Func0 .C	
Descriptio n		
Author Date	Tuesday , April Y	
	Ok Cancel	

Function Name naming Rules Refer to 6-2-1 Writing Method.

3. Select the newly created function, double-click the left mouse button, and open the function block for function writing.

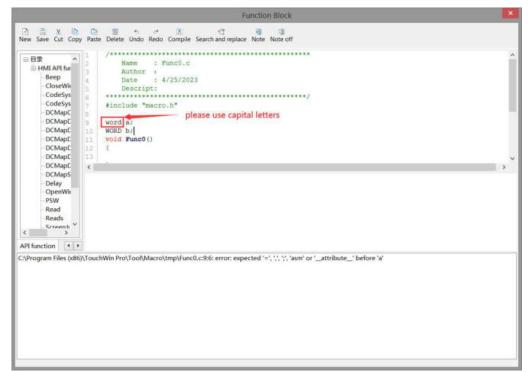
	Function Block	×
New Save Cut Copy	Paste Delete Undo Redo Compile Search and replace Note Note off	
- CodeSys - CodeSys	1 /************************************	î
- DCMapE - DCMapE - DCMapE - DCMapE - DCMapE - DCMapE	9 <b>void runc0</b> () 10 ( 11 ) 12 ) 13	
DCMapE DCMap5 Delay OpenWii PSW Read Reads Screen In *		,
API function + +		

#### 6-1-3. Function block compilation

Depending on the current use of the computer keyboard, users can compile functions by pressing the F5 key on the keyboard or the 'Compile' button on the menu bar during the editing process.

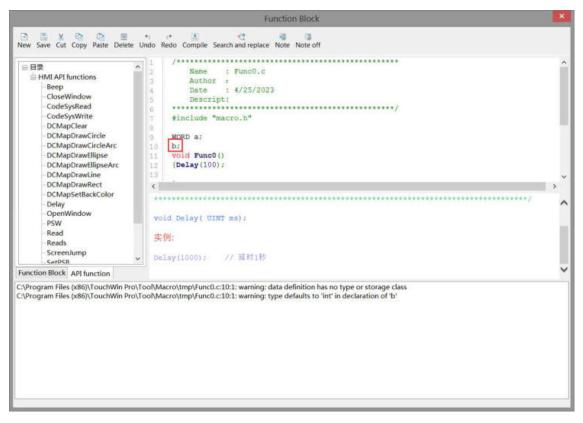
The compilation function can detect whether the function has syntax and writing errors, variable definitions, editing function errors, etc.

1. Grammar and writing errors



2. When using functions or macros in the function library, directly select the function to be used in the function library list, double-click it, or input the function in the editing area according to the format displayed in the function list:

3. undefined variable



4. Function edit error

When operating functions, many users manually enter function names and variables within the function, which can easily lead to editing errors. When inputting functions, you can refer to the following usage methods:

For example, Read function: directly select "Read" in the API function list, double-click it, and the function will be displayed in the editing area. Then press "shift + (" key on the keyboard. The system will pop up the following dialog box, and you can set it directly.

日录 HMI API functions Beep - CloseWindow - CodeSysRead - CodeSysWrite	<ul> <li>Name</li> <li>Author</li> <li>Author</li> <li>Date</li> <li>Description</li> <li>include</li> </ul>	: 4/25/2023	
DCMapClear	1	读儒性 🔛	
DCMapDrawCircle DCMapDrawCircleArc DCMapDrawEllipse DCMapDrawEllipseArc DCMapDrawLine	9 WORD a; 10 void Func( 11 (Read( 12 13 )	Register type Type ≄ ✓ Station	
- DCMapDrawRect - DCMapSetBackColor - Delay - OpenWindow - PSW - Read	<	type PSW v 0	<pre>int add2, void* pVal</pre>
-Reads -ScreenJump	<b>实例:</b> Read (\$ ("本地设)	Value Data type Word v	
Program Files (x86)\TouchWin Pro Program Files (x86)\TouchWin Pro		Determine Cancel Application	>

When editing functions, the input method needs to be set to English.

#### 6-1-4. Run the function block

Users can choose function keys/functional domains/indicator buttons/buttons/multi state buttons to call function blocks according to their own needs. The specific introduction is as follows:

1. Function key calls function blocks

Place a function key on the screen, select "Function Call" from the "Optional Functions" on the right, and then click the "Add" button to add this function. Select "Call Function" on the left, and select the name of the function to be called to add the function.

			Function k		
unction	Appea	rance Security set	Location		
Con	trol ID	FB1			
Dese	cription				
Acti	on Pre	ss Status	~		
🗌 Sta	art				
Functio	ns			Optional fu	inctions
	Ų	朝用函数			2置线圈
			Add	i i	受置数据
		function	ı call	×	1)运算
sic Attri	ibutes s	ecurity settings	C. HENN		居传输
unction	And				面切换
ıl	Func0		✓ Edit	Function	月窗口
		al executior Par			刊窗口
	Jen Sen		aller execution		CSV
					HCSV
		Determine	Cancel	Application	電方
	_				龙配方
_				1.1	
				Ē	函数调用

2. Function domain calls function blocks

1> Place a functional domain in the screen and set the "Action Mode" to "Continuous".

		Function domain	
Mode	Function	Location	
Control Descrip	Cases Unicas		
Action r	node Screen		
0	Screen		
	Coil Timing		
-	Continuo		
-	First scan after	nuour mode	

2> Function options: Select "Function Call" from the "Optional Functions" on the right, then click the "Add" button to add this function. Select "Call Function" on the left, and select the name of the function to be called to add the function.

Function selected 调用函数 function ca al Func0 ~ ③ Serial executior Parall	Edit	Optional functions 设置线圈 设置数据 四则运算 × 俞 Function	
function al Func0 ~	ill Edit	び置数据 四则运算 A Function 日	
Function al Func0 V	Edit	四则远算 × 俞 Function 英	
Function al Func0 V	Edit	Function 免	
Function al Func0 V	Edit	前 Function 日	
al Func0 ~			
	el executio	2	
Serial execution     Parall	el executio	22.0	
		Dn l	
		V	
Determine	Cancel	Application V	
		工作配方	
		下载配方	
		函数调用	

3. Indicator light button/button/multi state button call function block

Taking the indicator key as an example:

Place an indicator button on the screen and set it under the function binding bar. The setting steps are shown in the following figure. After setting, every time the indicator button is triggered, the set function will be called.

Key When	pressed V			
	Add to			
	Delete			
	Move			
	Move			
	Move			
- 1.0	function call		×	
al Function	· ·	Edit	Function	
• Ser	■ ial executior○ Parallel ex	recution		
1000		19-5		

### 6-2. Function block explanation

#### 6-2-1. Writing method

The writing of function block identifiers is entirely in accordance with the standard C language. The effective character sequence used to identify names in C language is called identifier, which refers to user-defined variable, function, constant, and statement symbol names.

#### Legal identifier

- (1) Composed of letters, numbers, and underscores
- (2) The first digit can only be a letter or an underscore
- (3) Cannot be exactly the same as the keywords in C language

(4) 256 characters or less in length

(5) The defined function name and variable name cannot be the same as the standard function name in C language

#### 6-2-2. Function type

According to the usage of functions, the HMI editing software TouchWin Pro divides functions into header files and source files. The header file and source file are not function types, they are two different file types. The header file is "xxx. h" and the source file is "xxx. c".

#### Header file function

Header file: can define global variables, declare or implement functions, and the variables and functions defined in the header file can be used in the source file containing the header file. When the header file contains other header files, variables and functions in the header file can also be used.

Example:

Func.h	
// System header files	s or other header files included
#include <stdio.h></stdio.h>	// use system header file
#include <string.h></string.h>	
#include "Func1.h"	// use user-defined header file""
int a = 10; //	/ define the variables
void Test()	// realize the function
{	
a = 20;	
}	
int Add(int a, int b);	// declare the function and implement it in the source file

#### ■ Source file function

Source file: can define variables and implement specific function functions. It can be called through controls such as function keys, function domains, indicator buttons, buttons, and multi state buttons. Example:

Func.c

#include "Func.h"

```
int b = 20;
                     // define the variables
int Add(int a, int b)
{
          return a + b;
}
```

```
6-2-3. Predefined data types
```

```
#pragma once
  #include "funkey.h"
  enum LocalRegType
  {
      TP PSB = 0,
      TP_SPSB,
      TP PSW,
      TP_PFW,
      TP_SPSW,
      TP_SPFW,
      TP_COUNT,
  };
enum VarDataType
  DT Bit = 0x1,
  DT_Byte = 0x2,
  DT WORD = 0x4,
  DT_DWORD = 0x8,
  DT DDWORD = 0x10,
  DT String = 0x20,
  DT_Bytes = 0x40,
  DT Words = 0x80,
  DT_DWords = 0x100,
  DT DDWords = 0x200,
};
enum NewVarDataType
{
  DT Word = 0x4,
```

{

```
DT_DWord = 0x8,
DT DDWord = 0x10,
DT_Byte_String = 0x40,
```

```
DT_Word_String = 0x80,
DT_DWord_String = 0x100,
DT_DDWord_String = 0x200,
};
```

typedef int(\*\_Sys\_HMIMacroApi)(const char\* apiid, void \*param); extern int \_MID(int mapid); typedef char bool; typedef unsigned int DWORD; typedef unsigned short WORD;

### 6-2-4. Predefined macro instructions

#define Max(a,b)	(((a) > (b)) ? (a) : (b))
Eg. $Max(3, 4) == 4$	
#define Min(a,b)	(((a) < (b)) ? (a) : (b))
Eg. $Min(3, 4) == 3$	
#define MAKEWORD(byl, byh)	((WORD)(((BYTE)(byl))   ((WORD)((BYTE)(byh))) << 8))
Eg. MAKEWORD $(0x01, 0x02) = 0$	0x0201
#define MAKELONG(wl,wh)	((long)(((WORD)(wl)) ((DWORD)((WORD)(wh))) <<16))
Eg. MAKEDWORD $(0x01, 0x02) =$	= 0x00020001
#define LOWORD(l)	((WORD)(l))
Eg. LOWORD $(0x00020001) == 0x0$	0001
#define HIWORD(l)	((WORD)(((DWORD)(l) >> 16) & 0xFFFF))
Eg. HIWORD $(0x00020001) == 0x0$	002
#define LOBYTE(w)	((BYTE)(w))
Eg. LOBYTE(0x0201) == 0x01	
#define HIBYTE(w)	((BYTE)(((WORD)(w) >> 8) & 0xFF))
Eg. HIBYTE $(0x0201) == 0x02$	

### 6-2-5. API function

#### 6-2-5-1. Read/Write

function	Read and wi	Read and write operations (for reading and writing bits and registers)	
format	read	void Read(int devId, int staID, int objType, int dataType, int add1, int add2,	
	operation	void* pValue);	
	write	void Write(int devId, int staID, int objType, int dataType, int add1, int add2, void	
	operation	pValue);	
note	devId:	device ID	
	staID:	station no.	
	objType:	Register Address Type	
	dataType:	Register data type	
		DT_Bit Enumeration Type, occupy 1 byte	
		DT_Byte occupy 1 byte	

		DT_WORD occupy 2 bytes	
		DT_DWORD occupy 4 bytes	
		DT_DDWORD occupy 8 bytes	
	add1,add2:	register address	
	pValue:	data buffer (The length should match the dataType)	
	return value	TRUE / FALSE (Success/Failure)	
example	bool bValu	e;// Define a Boolean variable	
	WORD wValue;// Define an integer variable		
	Read(_T("Xinje XD/XL/XG series (Modbus RTU)"), 1, TP2_M, DT_Bit, 0, 0, &bValue);//read bit M0		
	Read(_T("Xinje XD/XL/XG series (Modbus RTU)"), 1, TP2_D, DT_WORD, 0, 0, &wValue);//read		
	D0		
	Write(_T("Xinje XD/XL/XG series (Modbus RTU)"), 1, TP2_M, DT_Bit, 10, 0, bValue);//write bit		
	M10		
	Write(_T("Xinje XD/XL/XG series (Modbus RTU)"), 1, TP2_D, DT_WORD, 10, 0, wValue);//write		
	D10		
caution	When writing Read functions, be sure to add the&addressing character		

#### 6-2-5-2. Reads/Writes

function	read write reg	sister groups
format	read	void Reads(int devId, int staID, int objType,int dataType, int addr,int addr1, int
	operation	regs, void* pRegs);
	write	void Writes(int devId, int staID, int objType, int dataType, int addr, int addr1, int
	operation	regs, void* pRegs);
note	devId:	device ID
	staID:	station no.
	objType:	register address type
	dataType:	register data type
	addr add1:	register address
	regs:	register numbers
	pRegs:	data buffer (The length should match the size of the register group that needs to
		be read and written)
	return value:	TRUE / FALSE (Success/Failure)
example	WORD wValue [10];// Define an integer variable	
	Reads(_T("XINJE XD/XL/XG series (Modbus RTU)"), 1, TP2_D, DT_WORD, 0, 0, 10, wValue);	
	//read D0 group	
	Writes(_T("XINJE XD/XL/XG series (Modbus RTU)"), 1, TP2_D, DT_WORD, 100, 0,	
	10,wValue);//write D100 group	
caution	Read and writ	te data for floating point numbers and multiple continuous address registers.

#### 6-2-5-3. WriteF

function	Write register (used to write floating point number)	
format	BOOL Write	eF(int devId, int staID, int objType, int dataType, int add1, int add2, void pValue);
note	devId:	device ID
	staID:	station no.
	objType:	register address type
	dataType: register data type	
	add1,add2: register address	
	pValue:	data buffer (The length should match the dataType type)
	return TRUE / FALSE (Success/Failure)	
	value:	
example	double bValue;// Define a double precision variable	
	WriteF(_T("XINJE XD/XL/XG series (Modbus RTU)"), 1, TP2_D, DT_DDWORD, 0,	
	0,bValue);//write D0	

### 6-2-5-4. Delay

function	delay	
format	void Delay( UINT ms);	
note	ms: delay time (unit: ms)	
example	Delay(10);//delay 10ms	
	<b>Delay</b> (1000);//delay 1s	

### 6-2-5-5. ScreenJump

function	screen jump	screen jump	
format	WORD ScreenJump(WORD ScreenNo);		
note	screenNo:	screen no.	
example	Return:	jump to screen no.	
	ScreenJump(2);//jump to screen no.2		

## 6-2-5-6. OpenWindow

function	open win	open window	
format	void Ope	void OpenWindow(int winNo, int winX, int winY);	
note	winNo:	window no.	
example	winX:	Start position of window X-axis	
	winY: Start position of window Y-axis		
	<b>OpenWindow</b> (5001,10,10);//display window 5001 at the location (10, 10)		

### 6-2-5-7. CloseWindow

function	close window	
format	void CloseWindow(WORD winNo);	
note	winNo:	window no.

example	CloseWindow(5001);//close window no. 5001

### 6-2-5-8. Beep

function	Buzzer sounds once
format	void Beep(void);
example	Beep();// Buzzer sounds once

#### 6-2-5-9. PSW

function	PSW register can be operated directly, the type is unsigned short (i.e. WORD)	
example	PSW[300]++; // PSW[300]++ as word	
	DWORD dwValue = *(DWORD*)(PSW + 300); // send the value in PSW[300] and PSW[301] to a	
	double word	
	float fValue = *(float*)(PSW + 300); // read the value in PSW[300] and PSW[301] as floating	
	number format	
	*(DWORD*)(PSW + 300) = dwValue; // set a double word value to PSW[300] and PSW[301]	

#### 6-2-5-10. SetPSB

function	set ON/OFF PSB	
format	SetPSB(addr, val);	
note	Addr:	register address
	Val:	data buffer, 1-ON;0-OFF
example	SetPSB(0,1);//set ON PSB0	
	SetPSB(0,0);//set OFF PSB0	

## 6-2-5-11. DCMapSetBackColor

function	Modify the background color of the function canvas		
format	BOOL DCMapSetBackColor( DWORD dwDCMapID, DWORD BackColor )		
note	dwDCMapID:	Set Function Canvas Number	
	BackColor:	Set color values, usually entered in hexadecimal, such as 0x00ff00	
example	DCMapSetBackColor(1,0x000000);// Fill the background color of the function canvas number 1		
	with black		
caution	The TS series HMI uses RGB mode, where one color occupies one byte, i.e. 0xFF0000		
	represents B (BLUE), 0x00FF00 represents G (Green), and 0x0000FF represents R (RED).		

### 6-2-5-12. DCMapDrawLine

function	Custom Line D	Custom Line Drawing		
format	BOOL DCMap	BOOL DCMapDrawLine( DWORD dwDCMapID, int x, int y, int Width, int Height, int		
	linewidth, DW0	linewidth, DWORD color)		
note	dwDCMapID:	Set Function Canvas Number		
	х:	Set the X-axis coordinate point value of the starting point of the line using the		

		upper left corner of the function canvas as the coordinate origin $(0,0)$
	у:	Set the Y-axis coordinate point value of the starting point of the line using the
		upper left corner of the function canvas as the coordinate origin $(0,0)$
	Width:	Set the Y-axis coordinate point value of the endpoint of the line using the upper
		left corner of the function canvas as the coordinate origin $(0,0)$
	Height:	Set the Y-axis coordinate point value of the endpoint of the line using the upper
		left corner of the function canvas as the coordinate origin $(0,0)$
	Linewidth:	Set the line width, i.e. thickness
	Color:	Set Line Color Values
example	int x_pos,y_pos	s,line_height,line_width,linewidth;
	DWORD line_color;	
	x_pos=PSW[300];	
	y_pos=PSW[301]; line_color=*(DWORD *)(PSW+302); line_height=PSW[304];	
line_width=PSW[305];		W[305];
	linewidth=PSW[306];	
	DCMapClear(	1); // Use the DCMapClear command to delete the drawing during use
	<b>DCMapDrawLine</b> (1,x_pos,y_pos,line_width,line_height,linewidth,line_color);	
-		

## 6-2-5-13. DCMapDrawRect

function	Custom Draw Rectangle		
format	BOOL DCMapl	DrawRect (DWORD dwDCMapID, int x, int y, int Width, int Height, int	
	linewidth, DWORD color, BOOL FillRect, DWORD FillColor)		
note	dwDCMapID:	Set Function Canvas Number	
	X:	Set the X-axis coordinate point value of the starting point of the rectangle	
		using the upper left corner of the function canvas as the coordinate origin $(0,0)$	
	y:	Set the Y-axis coordinate point value of the starting point of the rectangle	
		using the upper left corner of the function canvas as the coordinate origin $(0,0)$	
	Width:	Set rectangular width value	
	Height:	Set rectangular height value	
	Linewidth:	Set the width of the rectangular line, i.e. thickness	
	Color:	Set the color value of rectangular edges	
	FillRect:	Set whether the interior of the rectangle needs to be filled, 0 is not filled, and 1	
		is filled	
	Ellicator		
	FillColor: Set the fill color value. If FillRect is set to 0, the fill color setting is invalid		
example	int x_pos,y_pos,rec_height,rec_width,linewidth;		
	DWORD rec_color,fillcolor; bool Fill;		
	Read(_T("local	device"), 0, TP_PSB, DT_Bit, 300, 0, &Fill);	
	x_pos=PSW[300	];	
	y_pos=PSW[301];		
	rec_color=*(DWORD *)(PSW+302);		

rec_height=PSW[304];
rec_width=PSW[305];
linewidth=PSW[306];
fillcolor=*(DWORD *)(PSW+308);
DCMapClear(1);
<b>DCMapDrawRect</b> (1,x_pos,y_pos,rec_width,rec_height,linewidth,rec_color,Fill,fillcolor);

### 6-2-5-14. DCMapDrawCircle

function	Custom circle drawing		
format	BOOL DCMapDrawCircle( DWORD dwDCMapID, int x, int y, int Radius, int linewidth,		
	DWORD color, BOOL FillRect, DWORD FillColor )		
note	dwDCMapID:	Set Function Canvas Number	
	x:	Set the X-axis coordinate point value of the center display position using the upper left corner of the function canvas as the coordinate origin $(0, 0)$	
	у:	Using the upper left corner of the function canvas as the coordinate origin (0, 0), set the Y-axis coordinate point value for the center display position	
	Radius:	Set circle radius	
	Linewidth:	Set the width of the circular line, i.e. thickness	
	Color:	Set the color value of the circular edge	
	FillRect:	Set whether to fill the interior of the circle, 0 for no filling, 1 for filling	
	FillColor:	Set the circle fill color value. If FillRect is set to 0, the fill color setting is	
		invalid	
example	<pre>int x_pos,y_pos,Radius,linewidth;</pre>		
	DWORD circle_	_color,fillcolor;	
	bool fill;		
	<b>Read</b> (_T("local device"), 0, TP_PSB, DT_Bit, 300, 0, &fill);		
	x_pos=PSW[300];		
	y_pos=PSW[301];		
	circle_color=*(DWORD *)(PSW+302);		
	Radius=PSW[304];		
	linewidth=PSW[306];		
	fillcolor=*(DWORD *)(PSW+308);		
	DCMapClear(1);		
	DCMapDrawCircle(1,x_pos,y_pos,Radius,linewidth,circle_color,fill,fillcolor);		

### 6-2-5-15. DCMapDrawCircleArc

function	Custom arc drawing		
format	BOOL DCMapDrawCircleArc( DWORD dwDCMapID, int x, int y, int Radius, int linewidth,		
	DWORD color, DWORD StartAngle, DWORD EndAngle )		
note	dwDCMapID:	Set Function Canvas Number	
	X:	Using the upper left corner of the function canvas as the coordinate origin (0,	
		0), set the X-axis coordinate point value for the display position of the arc	
		center	

	y:	Using the upper left corner of the function canvas as the coordinate origin		
		(0,0), set the Y-axis coordinate point value for the display position of the arc		
		center		
	Radius:	Set the arc radius value		
	Linewidth:	Set the arc line width value, i.e. thickness		
	Color:	Set the color value of arc edges		
	StartAngle:	Set the starting angle value of the arc, which is the angle between the line		
		connecting the base point and starting point and the horizontal 0 $^\circ$		
	EndAngle:	Set the angle value of the endpoint of the arc, which is the angle between the		
		line connecting the base point and endpoint and the horizontal 0 $^\circ$		
example	int x_pos,y_pos,Radius,linewidth;			
	DWORD circle_color;			
	float StartAngle,EndAngle;			
	x_pos=PSW[300];			
	y_pos=PSW[30	01];		
	circle_color=*(DWORD *)(PSW+302); Radius=PSW[304];			
	linewidth=PSW	W[306];		
	StartAngle=*(f	StartAngle=*(float *)(PSW+308);		
	EndAngle=*(float *)(PSW+310);			
	DCMapClear(1);			
	<b>DCMapDrawCircleArc</b> (1,x_pos,y_pos,Radius,linewidth,circle_color,StartAngle,EndAngle);			
caution	Taking the arc	origin (center point) as the base point, the direction to the right of the horizontal		
	line passing th	rough that base point is horizontal 0 °.		

## 6-2-5-16. DCMapDrawEllipse

function	Customize drawing ellipses		
format	BOOL DCMapDrawEllipse(DWORD dwDCMapID, int x, int y, int X_Axis_Len, int		
	Y_Axis_Len, in	t linewidth, DWORD color, BOOL FillRect, DWORD FillColor )	
note	dwDCMapID:	Set Function Canvas Number	
	X:	Using the upper left corner of the function canvas as the coordinate origin (0,	
		0), set the display position of the ellipse origin X-axis coordinate point value	
	y:	Using the upper left corner of the function canvas as the coordinate origin (0,	
		0), set the Y-axis coordinate point value of the ellipse origin display position	
	X_Axis_Len:	Set the ellipse radius value of the X axis	
	Y_Axis_Len:	Set the ellipse radius value of the Y axis	
	Linewidth:	Set the elliptical line width, i.e. thickness	
	Color:	Set elliptical edge color values	
	FillRect:	Set whether to fill the interior of the ellipse, 0 for no filling, 1 for filling	
	FillColor:	Set the fill color value. If FillRect is set to 0, the fill color setting is invalid	
example	int x_pos,y_pos,x_Axis,Y_Axis,linewidth;		
	DWORD E_color, fillcolor;		
	bool Fill;		
	x_pos=PSW[300	];	

	y_pos=PSW[301];
	$E_color=*(DWORD *)(PSW+302);$
	x_Axis=PSW[305];
	Y_Axis=PSW[304];
	linewidth=PSW[306];
	Read(_T("local device"), 0, TP_PSB, DT_Bit, 300, 0, &Fill);
	fillcolor=*(DWORD *)(PSW+308);
	DCMapClear(1);
	<b>DCMapDrawEllipse</b> (1,x_pos,y_pos,x_Axis,Y_Axis,linewidth,E_color,Fill,fillcolor);
caution	The function parameters x and y are the origin (center point) of the ellipse, not the focal point.

# 6-2-5-17. DCMapDrawEllipseArc

function	Customize draw	ving elliptical arcs
format	BOOL DCMapl	DrawEllipseArc( DWORD dwDCMapID, int x, int y, int X_Axis_Len, int
	Y_Axis_Len, in	t linewidth, DWORD color, DWORD StartAngle, DWORD EndAngle)
note	dwDCMapID:	Set Function Canvas Number
	X:	Using the upper left corner of the function canvas as the coordinate origin (0,
		0), set the display position of the elliptical arc origin X-axis coordinate point
		value
	у:	Using the upper left corner of the function canvas as the coordinate origin (0,
		0), set the display position of the elliptical arc origin Y-axis coordinate point
		value
	X_Axis_Len:	Set the X-axis radius value of the elliptical arc
	Y_Axis_Len:	Set the Y-axis radius value of the elliptical arc
	Linewidth:	Set the width of the elliptical arc line, i.e. thickness
	Color:	Set the color value of elliptical arc edges
	StartAngle:	Set the starting angle value of the elliptical arc, which is the angle between the
		line connecting the base point and starting point and the horizontal 0 $^\circ$
	EndAngle:	Set the angle value of the endpoint of the elliptical arc, which is the angle
		between the line connecting the base point and endpoint and the horizontal 0 $^\circ$
example	int x_pos,y_pos,	x_Axis,Y_Axis,linewidth;
	DWORD eArc_c	color;
	float StartAngle,	-
	x_pos=PSW[300	)];
	y_pos=PSW[301	-
		WORD *)(PSW+302);
	x_Axis=PSW[30	-
	Y_Axis=PSW[30	-
	linewidth=PSW[	-
		pat *)(PSW+308);
	EndAngle=*(floa	
	DCMapClear(1)	
	-	llipseArc(1,x_pos,y_pos,x_Axis,Y_Axis,linewidth,eArc_color,StartAngle,EndAngle
	);	
caution	Taking the origi	n (center point) of the elliptical arc as the base point, the direction to the right of

the horizontal line passing through the base point is horizontal 0 °. The function parameters x
and y are the origin (center point) of the elliptical arc, not the focal point.

# 6-2-5-18. DCMapClear

function	Clear Canvas Content
format	BOOL DCMapClear( DWORD dwDCMapID )
note	dwDCMapID: Set Canvas Number
example	DCMapClear(1);// Clear the contents of the function canvas number 1

# 6-2-5-19. CodeSysRead/CodeSysWrite

Function	Read and wri	te codesys label address operation (used for reading and writing bits and word
	registers)	
Format	Read	BOOL CodeSysRead(int devId, char * labelName, int count, int labelType, void*
	operation	pValue);
	Write	BOOL CodeSysWrite(int devId, char * labelName, int count, int dataType, void*
	operation	pValue);
Note	devId:	CodeSys device ID
	labelName:	CodeSys label name
	count:	Operation quantity
	labelType:	CodeSys label type
	pValue:	Numerical buffer (length should match dataType type)
Example	bool bValue	;// Define a bool variable
	float fValue;//	Define a floating-point word type
	CodeSysR	ead(_T("Xinje XS series (CodeSys)"),
	"Application/	GVL_HMI_Group_Axis/Group_AxisCtrl_InOut[0]/ib_axis enable", 1, 0, &bValue);//
	Read bit label	ib_Axis Enable
	CodeSysR	ead(_T("Xinje XS series (CodeSys)"),
	"Application/	GVL_HMI_Group_Axis/Group_AxisCtrl_InOut[0]/if_axis Jog speed", 1, 13,
	&fValue);// R	ead floating-point label if_Axis Jog speed
	CodeSysW	rite(_T("Xinje XS series (CodeSys)"),
	"Application/	GVL_HMI_Group_Axis/Group_AxisCtrl_InOut[0]/ib_axis enable", 1, 0, &bValue);//
	Read bit label	ib_Axis Enable
		rite(_T("Xinje XS series (CodeSys)"),
	"Application/	GVL_HMI_Group_Axis/Group_AxisCtrl_InOut[0]/if_axis Jog speed", 1, 13,
	&fValue);// R	ead floating-point label if_Axis Jog speed
Note	When writing	g CodeSysRead/CodeSysWrite functions, be sure to add the & addressing symbol.

Function	Read and writ	te codesys label address operation (used for reading and writing string registers)
Format	Read string	BOOL CodeSysReadString(int devId, char * labelName, int count, int len, void*
	operation	pValue);
	Write string	BOOL CodeSysWriteString(int devId, char * labelName, int count, int len, void*
	operation	pValue);
Note	devId:	CodeSys device ID
	labelName:	CodeSys label name
	count:	Operation quantity
	len:	String length
	pValue:	Numerical buffer (length should match dataType type)
Example	char charVa	lue[2];// Define a string type variable
	CodeSysRead	String(_T("Xinje XS series (CodeSys)"), "Application/STR1[2]", 2, 20,
	&charValue);/	// Read string labels
	CodeSysWrit	eString(_T("Xinje XS series (CodeSys)"), "Application/STR1[2]", 2, 20,
	&charValue);/	/ Write string labels
Note	When writing	CodeSysReadString/CodeSysWriteString functions, be sure to add the &
	addressing sy	mbol.

6-2-5-20. CodeSysReadString/CodeSysWriteString

# 6-2-5-21. Lock/Unlock

Function	Mutually exc	lusive locks; If multiple functions need to access a variable simultaneously, a mutex
	lock should b	e used. If Lock is used to lock an ID, the program that locks the ID again will block
	until it is unlo	ocked by UnLock
Format	Lock	void Lock(int id);
	UnLock	void Lock(int id);
Note	Id:	Range: 0~9
Example	// The follows	ing two functions run simultaneously:
	void func0()	
	{	
	Lo	ck(1);
	PS	W[123] = 55;
	Ur	Lock(1);
	}	
	void func1()	
	{	
	Lo	ck(1);
	PS	W[123] = 66;
	Ur	Lock(1);
	}	

### 6-2-5-22. COMReceive

Function	Free Communi	cation - Free Format Serial Port Reception Function
Format	int COMRecei timeBytes)	ve(int devId, char* buf, int len, unsigned short timeOut, unsigned short
Note	devId:	Free format device identification
	buf:	Data buffer (length should match actual data length)
	len:	Data buffer length (in bytes)
	timeOut:	Time out in milliseconds, 0/greater than 0 (blocking until data is received/no
		data execution ends after timeout in milliseconds)
	timeBytes:	Frame interval, 0/greater than 0 (blocking until receiving len length
		data/exceeding timeBytes characters without data execution ends)
	Return:	-1/Greater than or equal to 0 (execution failed/actual received length)
Example	<b>int</b> result = $-1$ ;	
	char data[256]	$= \{0\};$
	result = COMF	Receive(_T("free format"), data, 100, 0, 0);// Received 100 characters, execution
	ended	
	result = COMF	Receive(_T("free format"), data, 100, 1000, 0);// If there is no data after 1000
		e execution will end. Otherwise, if there are 100 characters received, the execution
	will end	
		<b>Receive</b> (_ <b>T</b> ("free format"), data, 100, 1000, 10);// If there is no data execution end
		seconds, otherwise the actual received length will be returned if there is no data
		fter receiving 100 characters or more than 10 characters
Note		d frame interval are configured according to the requirements of the target
	communication	device

### 6-2-5-23. COMSend

Function	Free Communica	ation - Free Format Serial Port Sending Function
Format	int COMSend(in	t devId, char* buf, int len)
Note	devId:	Free format device ID
	buf:	Data buffer (length should match actual data length)
	len:	Data buffer length (in bytes)
Example	<b>int</b> result = $-1$ ;	
	char data $[256] =$	{0};
	// Send 100 chara	cters
	result = COMSer	nd(_T("free format"), data, 100);
Communication	Taking Xinje PLC	C free communication as an example, equipment: XL5E; Function: Set Y0 to ON.
example	The statement is a	as follows:
	<b>int</b> result = $-1$ ;	
	char snd[8] = $\{0\}$	, $data[8] = \{0\};$
	snd[0]=0x01;// H	ere is an example of modbus, which can be used according to the communication
	product protocol	
	snd[1]=0x05;	
	snd[2]=0x60;	
	snd[3]=0x00;	

snd[4]=0xFF;
snd[5]=0x00;
snd[6]=0x92;
snd[7]=0x3A;
<pre>result = COMSend(_T("free format"), snd, 8);</pre>

# 6-3. Project example

#### 6-3-1. Data compare

Example requirements:

Take three integers from the PLC for comparison, and output the maximum and minimum values for display on the HMI.

Example device:

(1) One TS3-700-E and one XD5E-30T4-E

(2) One USB download cable, one PLC communication cable, and one computer

Related information:

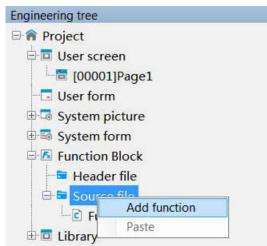
(1) User Manual for XD/XL Series Programmable Controllers (Basic Instructions)

(2) TouchWin Pro Editing Software User Manual

Operation process:

1. Establish C function block

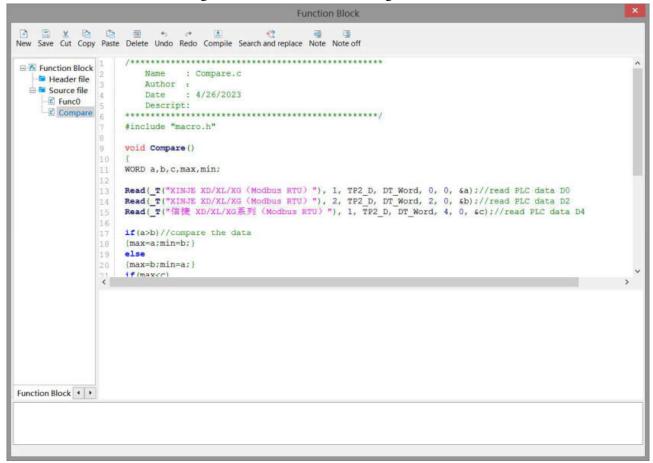
In the Engineering Tree Function Block, right-click and select Add Function.



The function block information input box appears (as shown in the figure below), fill in the relevant information and click OK.

		Function A	Attribute		×
Function name	Compare			.c	
Descriptio n					
Author					
Date	Wednesday,	April ~			

Establish a C function block editing environment, with the following functions:



#### 2. Call the function

Place a function key on the screen, and the remaining settings are shown in the following figure. Select "Function Call" from the "Optional Functions" on the right, then click the "Add" button to add this function. Double click "Call Function" in the "Selected Functions" section, and select the name of the function to be called in the "Function" section (select the newly created function "Compare" above) to add the function.

		Funct	ion key	
inction Ap	pearance Secu	rity set Locati	on	
Control I	D FB1			
Descripti	on			
Action	Press Status	~		
Start				
unctions			(	Optional functions
	调用函数			设置线圈
			Add	设置数据
		function	call	×
Basic At	tributes Secu	rity settings		
Functi al	Compare		Edit	Function
	Serial et	▲ xecutior() Para	lel execution	
	O Serial C			
		Determine	Cancel	Application
			Ľ	下事業自由アフ
				函数调用
				画面打印

Click on the "Appearance" option, set the function key text to "Function Call", and finally click "OK" to complete the settings.

#### 3. screen editing

Place 3 numerical inputs, addresses D0, D2, D4, 2 numerical displays, addresses PS300, PSW301, 5 text strings, as follows:

st0 <sub>D0</sub>	st1 D2	812 D4
0000	0000	0000
Max(PSW300)	0000	函数调用
Min(PSW301)	0000	

4. Finally, download the program to the HMI and connect it to the PLC for operation.

#### 6-3-2. Clear the data block

Example requirements:

The data blocks in the PLC are cleared to zero.

Example device:

(1) One TS3-700-E and one XD5E-30T4-E

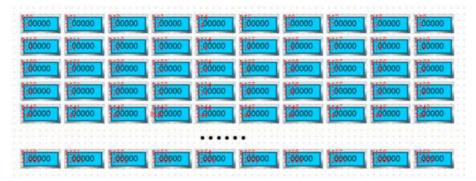
(2) One USB download cable, one PLC communication cable, and one computer

Related information:

(1) TouchWin Pro Editing Software User Manual

Operation process:

1. Place 3000 data input components on the screen, with addresses set to D0, D1... D2999, and attributes set to WORD. The number of digits is 5, and unsigned number (i.e. WORD unsigned). As follows:



2. Establish C function block

In the Engineering Tree Function Block, right-click and select Add Function.

Engineering tree
🖻 🎓 Project
🖨 🗖 User screen
[00001]Page1
🖶 🗔 System picture
🖶 🔜 System form
E Function Block
Header file
E-Source file
C FL Add function
Paste

The function block information input box appears (as shown in the figure below), fill in the relevant information and click OK.

		Function A	Attribute		×
Function name Descriptio n	Clr			.c	
Author Date	Wednesday,	April ~	Ok		Cancel

#### Establish a C function block editing environment, with the following functions:

	Function Block	×
New Save Cut Copy	Paste Delete Undo Redo Compile Search and replace Note off	
C Function Block	<pre>2 Name : Clr.c 3 Author : 4 Date : 4/26/2023 5 Descript: ************************************</pre>	
	<	>

3. call the function

Place a function key on the screen, and the remaining settings are shown in the following figure. Select "Function Call" from the "Optional Functions" on the right, then click the "Add" button to add this function. Double click "Call Function" in the "Selected Functions" section, and select the name of the function to be called in the "Function" section (select the newly created function "Clr" above) to add the function.

	Function	n key		
Function Appearance Security set	Location			
Control ID FB2 Description				
Action Press Status	~			
Functions 週用函数			Optional functions	
调用函数		dd	设置线圈	
			设置数据	
fu	nction call		×	
Basic Attributes Security sett	ings			
Function al Clr	v [	Edit	Function	
Serial execution	O Parallel	execution		-
Deter	mine	Cancel	Application	
			函数调用	

Click on the "Appearance" option, set the function key text to "Reset", and finally click "OK" to complete the settings.

4. Download the program to the HMI for operation.

#### 6-3-3. Four arithmetic operations of floating point

Example requirements:

Perform addition, subtraction, multiplication, and division operations.

Example device:

(1) One TS3-700-E

(2) One USB download cable and one computer

Related information:

(1) TouchWin Pro Editing Software User Manual

Operation process:

1. New project, screen content production

(1) Place two data input components on the screen, with their addresses set to PFW300 and PFW302, their attributes set to DWORD, floating point display (DWORD float), integer bits 3 and decimal bits 2. The settings are shown in the following figure (all other data input operations are the same):

Numeric input properties	×
Basic AttData inp Scale co Notice Appeara Security Location Control ID DI2 Description	Î
□ Read / Write use different address Read / Write Address Devic 本地设备 Addre PFW ~ 300 Data DWord ~ Float ~ □ Indirect	
Numeric input properties Att Data inpl <mark>Scale co</mark> Notice Appeara Security Location	
Show Leading 0	
Integer digits Decimal digits 2	•

(2) Place four data display components on the screen, with addresses of PFW304, PFW306, PFW308, and PFW310. The attributes are all set to DWORD, floating point display (DWORD float), with 3 integer bits and 2 decimal bits. The settings are shown in the following figure (all other data display operations are the same):

sic Attri	Data displ Scale con Appearan Security s Location
Contr	rol ID DD0
Descr	ription
Read ac	ddress
Devic	本地设备 v Settin
Addre	PFW ¥ 304
Data	DWord V Float V
type	Indirect
	Numeric Display Properties
Attri Da	ata displiScale con Appearan Security s Location
2226012	
Show	v 🗌 Leading 0
	a at the
Number (	of digits Decimal digits

#### 3. Establish C function block

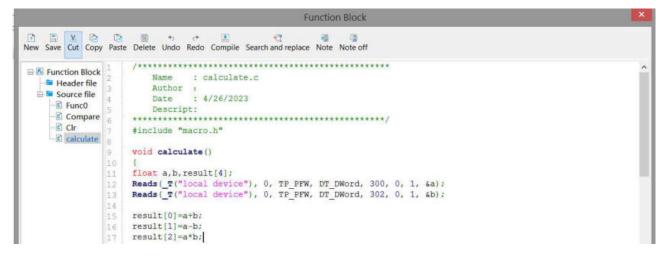
In the Engineering Tree Function Block, right-click and select Add Function.

Engineering tree	
🖃 🎓 Project	
🕂 🗖 User screen	
[00001]Page1	
🗔 User form	
🗄 🗔 System picture	
🗄 🗟 System form	
E E Function Block	
🗧 Header file	
🖻 🖬 Source file	
••••• 🖸 Fi	function
	2

The function block information input box appears (as shown in the figure below), fill in the relevant information and click OK.

		Function	Attribute		×
Function name Descriptio n	calculate			.c	
Author					
Date	Wednesday,	April	~		

Establish a C function block editing environment, with the following functions:



4. call the function

Place a function key on the screen, and the remaining settings are shown in the following figure. Select 'Function Call' from the 'Optional Functions' on the right, then click the' Add 'button to add this function. Double click on' Call Function 'in the' Selected Functions' section, and select the name of the function to be called in the 'Functions' section (select the newly created function' calculate 'above) to add the function.

and the second		1			
unction Appe	arance Security set	t Location			
Control ID	F82				
Description					
Action Pr	ess Status	~			
Start					
Functions				Optional funct	tions
	函数calculate	_		设置	线圈
1			Add		数据
	funct	tion call		×	算
Basic Attribute	s Security setting	js			输
Function cal	culate	~	Edit	Function	)换
Areas and a second					印
					2012 C
۲	Serial executior	Parallel ex	ecution		10
۲	Serial executior	Parallel ex	ecution		sv
۲				Application	
۲	Serial executior		ancel	Application	sv
۲					sv sv
•				下载	sv sv 坊

Click on the "Appearance" option, set the function key text to "Four operations", and finally click "OK" to complete the settings.

5. Download the program to the HMI for operation.

### 6-3-4. Data type cast

Example requirements:

It is mainly used to realize the forced conversion of data type through C function, where floating point is converted to integer, and integer is converted to floating point.

Example device:

(1) One TS3-700-E

(2) One USB download cable and one computer

Related information:

(1) TouchWin Pro Editing Software User Manual

Operation process:

1. New project, screen content production

Place two data input components on the screen, with their addresses set to PFW300 and PFW400, and their attributes set to DWORD. The PFW300 data type is floating point (DWORD float), with 3 integer bits and 2 decimal bits. The PFW400 data type is set to unsigned numbers with 5 integer bits and 0 decimal places. Place a data display unit on the screen, with the address set to PFW500, the attribute set to DWORD, the data type floating point (DWORD float), integer bits 3 and decimal bits 2. The settings are shown in the following figure:

PFW300	\$** PFW400	SPFW500	
Fx000.00	00000	900.00	
Dword-float	Dword-unsigned	Dword-float	

#### 3. Establish C function block

In the Engineering Tree Function Block, right-click and select Add Function.

Engineering tree
🕀 🎓 Project
🖨 🗖 User screen
🔚 [00001]Page1
- 🗔 User form
🖶 🗔 System picture
🗄 🔜 System form
🖶 🖪 Function Block
🖻 Header file
E Source file
E FL Add function
E Library Paste

The function block information input box appears (as shown in the figure below), fill in the relevant information and click OK.

		Function A	ttribute		>
Function name	convert			.c	
Descriptio n					
	L				
Author					
	Wednesday,	April V			

Establish a C function block editing environment, with the following function sections Convert: cast a floating point number to an integer.

Function	n Block
New Save Cut Copy Paste Delete Undo Redo Compile Search and replace Note	Note off
<pre>Processor State Processor State Processor</pre>	DWord, 300, 0, 1, 6a);

Convert1: Integer cast to floating point number.

	Function Block	×
New Save Cut Copy	Paste Delete Undo Redo Compile Search and replace Note Note off	
Function Block     Header file     Source file     Cr     Compare     Cr     calculate     convert1     convert1	2 Name : converti.c 3 Author : 4 Date : 4/26/2023 5 Descript: 6 ************************************	Î

4. call the functions

Place a function key on the screen, and the remaining settings are shown in the following figure. Select "Function Call" from the "Optional Functions" on the right, then click the "Add" button to add this function. Double click on "Call Function" in the "Selected Functions" section, and select the name of the function to be called in the "Functions" section (select the newly created function "convert1" above) to add the function.

		Function key		
unction Appe	arance Security set	Location		
Control ID	FB2			
Description				
Action Pre	ess Status	~		
Start				
Functions			Optional functions	
调用	函数convert1		设置线圈	
		Add	设置数据	
	fund	tion call	×	
Basic Attribu	tes Security settin	gs		
Function	convert1	<ul> <li>✓ Edit</li> </ul>	Function	
	Serial execution	Parallel executi	on	
			'	
	Determ	ine Cancel	Application	
			E-course 1	
			函数调用	
			画面打印	

Click the "Appearance" option, set the function key text to "floating point>Integer", and finally click "OK" to complete the setting.

Create another function key, the operation is the same as above, call the function "convert", and the text is "integer>floating point number".

5. Download the program to the touch screen for operation.

# 7. HMI system settings

# 7-1. System setting introduction

This function is to modify and display the system parameters of the HMI. After downloading the project, it will

be displayed in the bottom right corner of the touch screen by default. Clicking on the "Setting icon will

display the default hidden " icon, which includes system settings, keyboard, and device information from left to right. If you do not need this function, you can hide it by checking the "Hide System Menu" on the project download page. The setting icon will not appear in the bottom right corner of the touch screen (after checking hide, you need to download the project).

	Download (PC - > HM	I) 🔽
Communication settings		
Connection USB	~	
US	B Communic	
Upload Download		
Downloa	æ.	
<ul> <li>Allow project upload</li> </ul>	✓ Upload pa ••••	•••
User defined boot scr	ree[] Use the default boot	screen
Synchronize PC time	✓ Hide menu system	Enable installment
Clear alarm record	<ul> <li>Clear operation</li> </ul>	<ul> <li>Clear data acquisition</li> </ul>
Overwrite recipe data	Download fonts to	✓ Clear PFW/SPFW data

# 7-2. Keyboard

Click on the "use icon to pop up the keyboard, which serves as the input keyboard for modifying system parameters on the touch screen and can also be used as the input keyboard for registers.

Esc	1	2	3	4	5	6	7	8	9	0	1025	=	Back	Space
Tal	>	q	w	e	ाः	t	у		u	i	0	р	1	1
Ca	ps	a	5	d	f	g	1		ĵ	k	1	8	1	X
Sh	ift	z	x	c	v	b	n		m	ĸ	ex.	1	Ent	er
c	trl		Alt		-					4		*	Ι.	L

# 7-3. Device information

**(i**)

Click the *icon* to display a device information pop-up window, which includes HMI version, download version, system version, device IP, and device ID.

设备信息		
Hmi版本:	1.1.3.221018	
系统版本:	1.1.3.2201012	
硬件版本:	HV2	
设备IP:	172.31.8.169	
设备ID;	118-049-202-8EB2-0671	

# 7-4. Setting

Click to pop up the 'Please Enter Password' pop-up window, where you can enter the 'Set Password' (default initial password 123456, which can be customized on the chapter 7-2 password setting page) and enter the setting interface. There are 7 pages under the settings interface, from left to right: name, password, network, time, VNC, system, and others.

	Virt	ual K	eyboa	rd										-	
	Esc	1	2	3	4	5	6	7	8	9	0	*	=	Back	Space
_	Tai	b	q	w	e	r	t	y	T	u	1	0	p	t	1
	G	aps		\$	d	f	9	Ì	h	1	k	1	ŧ,		N
确认取消	S	hift	z	×	c	v	b	1	,	m		40	1	Ent	er

#### 7-4-1. Name

Click on "Name" to enter, click on the "Modify" button on this page to modify the name of this HMI. After entering the name, click "Confirm" to save it.

Hmi	名称: gy		
	HIS. ST		

When the modified name is downloaded through the local area network on the download page, scan the IP to display the corresponding name.

man	下载 (PC -> HMI)	0.112			× her muselin
	遺信设置 连接方式	局域网	~	Ĩ.	
1:101:110	● 设备IP查找	172.31.2.147			and the second
	〇 设备ID查找	133-192-026-63	83-5723 ~		
		扫描IP	通信测试		
大网设备信息查询					1
DevName	•	1P		DevID	Model
Hmi		172.31.0.55		133-192-026-63B3-5723	TS3-1000-E
Hmi		172.31.1.241	1	096-120-250-CE2C-7572	TS3-700-E
97		172.31.2.147		361-071-138-C4C9-1476	T53-1000-E
Hmi		172.31.0.110		275-036-242-DA23-4362	T\$3-700-E
Hmi		172.31.0.1		314-127-180-D7AF-7974	TS5L-1500-E
Hmi		172.31.1.223		304-060-020-79B5-2471	TS5L-700-E
Hmi		172.31.1.222		125-152-049-77DE-0156	TS3-700-E
Hmi		172,31,2,170		110-191-008-F918-7089	Т53-700-Е
Hmi		172.31.1.53		419-161-108-5CA7-3998	TS3-700-E

#### 7-4-2. Password

Click "Password" to enter, where you can modify the upload password, download password, set password, and VNC password. To modify the password, you need to enter the original password, and the system default password is "12345678".



change upload	This function is used to modify the upload password of the corresponding project.
password	If the upload password is set in the software before downloading the project, and is modified
	on the touch screen after downloading the project, the corresponding password when
	uploading the project is the modified password.
	If the upload password is set before downloading the project and is not modified on the touch
	screen after downloading the project, the upload password remains the password set in the
	software before downloading the project, and the upload password can be blank.
	If the input upload password does not correspond to the set password, the download page will
	prompt for an incorrect command password. For the specific operation steps of the project
	upload function, please refer to chapter 2-6 Upload Project
change	The download password is used for the download interface and can only be modified through
download	the password setting interface in the HMI settings. After modifying the download password,
password	the corresponding password on the download page during project download is the modified
	password, and the download password cannot be empty. If the entered download password
	does not correspond to the set password, the download page will prompt "Command password
	error". Please refer to chapter 2-5 project download for the specific operation steps of the
	engineering download function
change setting	This function is used to modify the password for entering HMI settings. After modifying the
password	setting password, the corresponding password when entering the settings is the modified
	password. If the entered setting password is incorrect, the HMI page will pop up a "Password
	Incorrect" pop-up window. The HMI settings interface can only be accessed by entering the
	correct setting password.
change VNC	This function is used to modify the password when VNC connects to the HMI the next time.
password	
change remote	This function is used to modify the password when connecting to the HMI remotely the next
password	time. The modified password requires a HMI restart to take effect

#### 7-4-3. Network

Click "Network" to enter, where you can modify the IP address of the HMI. You can choose to automatically obtain the IP address through DHCP or manually set the IP address. If an IP address is set in the project, the IP displayed on this page after downloading the project is the IP set by the project.

6 通过DHCP自		(HOUSEE			
④ 手动设置中世	BALL				
			_		
IP address: Subnet Mask:	172	31	. 2	. 147	
Gateway:		31	255	. 0	
DNS address:		-	255	1	
	d	11	101	10 <b>1</b>	

#### 7-4-4. Time

Click "Time" to enter. On this page, you can modify the display time of the HMI. If you want to set the time, you need to remove the default "Disable Clock Setting" check from the system clock setting page in the project. Then you can download the project to the HMI and modify the time on this page.

	System settings	
Paramete Monitor Interactic User	per Clock Device Printer Project	
✓ Disable clock setting		
Clock source		
HMI internal		
O Peripheral		
Uvrite clock to peripheral		
Write mode Continuity ~		
Clock display format		
Decimal system	ecimal	
Number of synchroniz		
Device	Register	
<u>校前</u> 名利	★ 密码 网络 时间 VNC 系统 其它 Tuesday          2022 年 6 月 21 日         16 时 2 分 29 秒	
	修改 确认 取消	



VNC connection supports two connection methods: one is the information configuration entry within TS software. The other type is an external VNC Viewer.

Start VNC single-connection	Only a single VNC can be enabled, that is, only one VNC entry can					
Start vive single-connection	be enabled to connect to this HMI. If an external VNC Viewer is					
	enabled, priority should be given to connecting to the VNC					
	configured internally in the software, and the settings will take					
	effect synchronously.					
Start VNC multi-connection	Support multiple VNC usage, that is, multiple VNC entries are					
Start vive man-connection	enabled simultaneously to connect to this HMI, and synchronization					
	takes effect after setting.					
Stop VNC connection	Close VNC connection, that is, other VNC ports cannot enable VNC					
a stop vive connection	connection to this HMI. After setting, synchronization will take					
	effect.					

#### 7-4-6. System

Click "System" to enter, where you can view system information and the proportion of system resources.

	系统信息		系统资源
均核版本:	4.14.40-v1.0.2-gbbe8cfc	可用内存	341/113.7M8 30.0%
系统版本:	1.1.2 220630	可用存储	66.9/100.2M8 66.7%
Hmi版本:	1.1.1.220711	CPU使用率:	usr:57.7% sys:22.7%
设备ID:	133-192-026-6383-5723		
MAC:	6c:79:b8:83:e5:d1		

# 7-5. System menu

Under the system menu, touch calibration, firmware updates, and viewing and modifying partial system information of the HMI can be performed, including local information, time, IP, password, and information functions. At the same time, all screens serve as system menus and can be called up in user project.

#### Enter mode

If the hardware version of the HMI is H1, in the event of a power outage, turn the 3rd dial switch on the back of the HMI to ON and then power on to enter the system menu; If the hardware version of the HMI is H2 or above, you need to first hold down any position of the touch screen, then power on the HMI to enter the system menu

工程画面 面件更新 在任意空白区域长按3秒进入触爆控校准

Function description	

Project screen	Click to directly enter the project editing screen.
System	After clicking this button, you can enter the touch screen system settings screen, where you can
setting	view or modify the internal settings of the touch screen, including the local information, time, IP,
	password, and information related functions of the HMI. In the following sections, a detailed
	explanation of this feature will be provided.
Firmware	Used to update HMI firmware.
update	
Touch	When there is a deviation in the touch, this function can be used for calibration. Press and hold for
calibration	3 seconds in any blank area to enter the calibration screen

The information function is only supported by the TS5 series HMI.

#### 7-5-1. Native information

After clicking the "System Settings" button, you will enter the screen shown in the following figure. Under this function, you can view and modify the local information, time settings, HMI IP settings, and password settings of the touch screen. The TS5 series has an additional information settings page, which can be switched through the left button. Click the "Home" button in the upper left corner to return to the startup page of the project screen.

In the local information, you can view the local model, module model, HMI version, system version, hardware version, local IP, local ID, available memory, and available storage.

育首页						
■ 本机信息	本机型号:	TS5-700-E/	N/4G			
	模块型号:	Wifi				
到 时间设置	HMI版本:	1.1.4.23061	7			
	系统版本:	1.2.25.2306	14			
P HMI IP设置	硬件版本:	HV2				
	设备IP:	10 - 100	) · 19	55		
2 密码设置	设备ID:	120-144-13	9-0FB7-28	387		
	可用内存:	20.6	Mb/	128.0	Mb	
合息化设置	可用存储:	41.7	Mb /	128.0	Mb	

#### 7-5-2. Time setting

The time setting page allows you to view and modify the current date, time, and week.

育 前							
▲机信息							
🚫 时间设置	日期:	2023	#	6	月	30	E
ПРНИПРЮШ	时间:	15	时	38	*	27	秒
0	星期:	5					
<b>他</b> 密码设置							
1000 (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (100				C	修改	)	

If you need to change the date, you can click the "Modify" button in the bottom right corner to directly modify the sub items that need to be corrected. After modification, click "Confirm" and the page will prompt the modification result; If you click the "Cancel" button, the modified content will not be saved.

🏫 首页									
■ 本机信息									
<u> 时间设置</u>	日期: [	2023	#	6	月	30	B		
	时间:	15	] Bf [	38	\$	44	B		
-	12月:	5							日期修改成功!
<b>6</b> 8998 <b>8</b>									
<u>今</u> 信息化设置				C	确认		RCH		确定

#### 7-5-3. HMI IP setting

The IP settings page allows you to view and modify the IP acquisition method and IP address related information of the HMI.

▲ 本机信息	<ul> <li>通过</li> </ul>	tDHCP自i	动获取IP	地址		0	手动获闻	双IP地站上
♥ 时间设置	IP#84E	10	].[	100	].[	19	].[	55
	子阿掩码	255	].[	255	].[	255	] . [	0
IP HMI IP设置	默认网关	10		100		19	-	254
	DNS	10	].[	100	$\left  \cdot \right $	2		10
🔒 密码设置	MAC	3c	47	57		7	89	77

Under the condition of manually setting the IP address, after changing the IP address, click "OK" to save, and the page will pop up with the modification result; If you click the "Cancel" button, the modified content will not be saved.

本机信息	() iiii	tDHCP自ら	动铁取 IP	地址		<b>e</b> 4	手动获得	<b>双IP地址</b>	
2 时间设置	IP地址	10	].[	100		19	].[	55	
a sheet	子网掩码	255	] - [	255		255	].[	0	
HMI IP120	默认网关	10	].[	100		19		254	
	DNS	10		100		2	] + [	10	IP修改成功!
密码设置	MAC	3c	.47	57	1	7	89	77	

#### 7-5-4. Password setting

The password setting page is used to modify the upload password, download password, and set password of the HMI. If you need to modify the password, you can directly enter the original password, new password, and confirm the new password in the input box under the corresponding category. After entering all three, click "Modify" and the page will prompt you with the modification result.

	上後密码(	修改	) 下载密码 (	修改	设置密码(	修改
😢 时间设置	原密码		原密码		原密码	
IP HMI IP设置	新密码		新密码		新密码	
🔒 密码设置	确认新密码		确认新密码		确认新密码	
1000 信息化设置						

Kind reminder: Please remember your password information. If you forget it, you will not be able to retrieve it.

#### 7-5-5. Informatization settings

The TS5 series products support the IoT function, which can be viewed and switched through the "Information Settings" page, including internet access and password changes. Due to the impact of information technology related function settings on HMI networking, it is necessary to verify the information technology password, which is the remote password of the HMI. The default password at the factory is 12345678.

育 首页		
😥 时间设置		
	请输入信息化设置密码:	
<b>全</b> 密码设置		
		确定

After successfully entering the password, you can enter the relevant information configuration page. The homepage allows you to view information related to information technology, such as the current device's networking method, signal strength, SIM card status, and remote related flag status.

<b>联网方式:</b> 有线	一次 云智造通用版体验
信号强度: 0 🔡	同次法院 Filty: (cloud.xinje.net
SIM卡状态: 未插4G模块	
远程登录标志: 己登录	直接的一些方式。 位用商域提示云智道 (华为、小米、OPPO)
VNC启用标志: VNC已启用	
MQTT服务标志: 已登录	が出い、 1915年 「日本」「日本」 「日本」「日本」 「日本」「日本」 「 「日本」 「日本」 「 「 「 「 「 「 「 「 「 」 「 「 「 」 「 」 「 」 「 「 「 」 「 「 」 「 「 「 」 「 「 」 「 」 「 「 「 」 「 」 「

Networking	Display the current networking status of the HMI. The information on networking methods					
method	includes: wired, WiFi, 4G, and not connected.					
Signal strength	Display the signal strength in 4G or WiFi mode, with a value of -99~0. The closer to 0, the					
	stronger the signal. In wired mode, the signal strength is displayed as 0.					
SIM card status	Display the status of the SIM card in 4G internet mode.					
	The SIM card status includes six different states: network normal, SIM card detected,					
	successful network login, internet failure, SIM card detected, network login failure, internet					
	failure, SIM card not detected, error, and 4G module not inserted.					
Remote login flag	Display the current remote login status of the device. This includes two states: logged in and					
	not logged in.					
VNC enable flag	Display the current VNC enabled status of the device. Including two states: enabled and not					
	enabled.					
MQTT service flag	Display the current MQTT service status of the device. This includes two states: logged in					
	and not logged in.					
Xinje Cloud QR	The three QR codes are the QR codes for Cloud webpage, APP download, and WeChat mini					
code	program, which can be scanned and recognized with a mobile phone. Through cloud					
	platform, remote operations such as VNC and data transmission can be performed on touc screens.					
Information	Click "Information Password Modification" to enter the password modification page as					
password	shown in the following figure. On this page, you can modify the VNC password and remote					
modification	password of the HMI.					
	VNC畫稿 修改 选程编码 修改 运程密码修改后需重启生效!					
	勝定時 勝定時					
	新使码 新效码					
	确认新密码 确认新密码					
	Note: After changing the remote password, it must be restarted the HMI to take effect.					
Modify	Click the "Modify" button to enter the network configuration viewing and configuration					
wouldy	page. If the networking method has been configured, the current networking method page					
	It was a set of the se					

	will be displayed upon entering; If the internet connection method is not configured, the							
	wired internet connection page will be displayed.							
	You can switch the networking mode through the dropdown menu in the upper left corner of							
	the "Networking Mode" and make corresponding networking configurations. The following							
	will provide a detailed introduction to three different networking mode configurations.							
	联网方式: 有线上网 🛇							
	4G上网							
	WiFi上网							
	有线上网							
Return	Click to exit the information settings and return to the system page.							

#### (1) Wired networking

The wired internet configuration page is shown below, and you can choose to automatically obtain an IP address through DHCP or manually set an IP address according to your needs. After setting up, click "Confirm" to save. If you click the "Back" button during the setup process, all changes to the current page will not be saved.

1	P地址	10		100		19		55	
7	网掩码	255	].[	255	].[	255	].[	0	
50 ST	认网关	10	].[	100	].[	19	].[	254	
	DNS	10	].[	100	] . [	2	] . [	10	1

#### (2) WiFi networking

Under WiFi internet connection mode, it is necessary to configure the WiFi for internet connection, as shown in the following figure.

SSID	安全	信号强度	1.002
Xinje AP	WPA_WPA2_PSK	-65	T-3
xinxihua	WPA_WPA2_PSK	-77	~
xinje	WPA2_PSK	-85	F-3
TP-LINK_2108E8	NONE	-87	C
DIRECT-C6-HP Laser 136w	WPA2_PSK	-87	刷新
		1/2页	

The page will display 12 WiFi networks that can be selected in a table, divided into two pages with 6 rows displayed on each page. You can switch between the "Previous" and "Next" buttons on the right side. Currently, automatic refresh is not supported. To refresh, you can click the "Refresh" button on the right.

If you need to configure or switch to connected WiFi, you can click on the row where the target WiFi is located. A password prompt will appear above the table and below the networking method. After entering the correct password in the input box, the touch screen will try to connect to WiFi. If the connection is successful, the SSID of the WiFi will be displayed in the "Currently Connected to WiFi" section at the top right of the page, and it will be used to connect to the network.

请输入WiF密码:	安全	信号派成		SSID	82	信号法理	
			A				E
Xinja Ap	WPA_WPA2_PSK	-65	1-94	жаре Ад	WPA_WPA2_P5E	-65	-
xinxihua	WPA_WPA2_PSK	-77	<b>~</b>	xinxibua	WPA_WPA2_PSK	-75	
xirije	WPA2_PSK	-85	<b>R</b> -4	TP-LINK_2108E8	NONE	-87	Ŧ
TP-LINK_2108E8	NONE	-87	C.	DIRECT-C6-HP Laser 136w	WPA2_PSK	-87	5
DIRECT-C6-HP Laser 136w	WPA2_P5K	-87	HIM.	Galaxy Z Fold4 1490	WPA2_PSK	-88	
		1/2页				1/2页	

#### (3) 4G networking

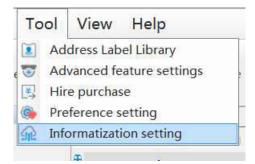
No other settings are required in 4G internet mode. After selecting the 4G internet mode, click "Confirm" to proceed.

联网方式:	46上网 💮		
		の日本	

# 8. Informationization settings

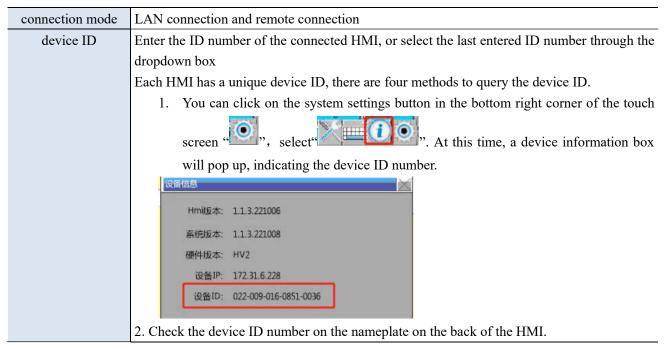
# 8-1. Information configuration login

1. Click on the menu bar - Tools - Informatization Setting to enter the Informatization Configuration interface



2. Information communication settings interface

Connection m	AN connection	~
Connection m	AN CONNECTION	•
Device ID:		~
Password:		۲
Find available	Communic	Connect to



		3. When downloading, select the LAN download and scan the IP interface to find the required device ID based on the model and IP address.
		Download (PC - > HMI)     Offline Simulator Compile System settings     Data sampling Alarm entry       Communication settings     Ethernet device information query     Image: Compile System settings       Connection LAN     IP address     Device ID     Model       Device IP discovery     192168.6.2     Image: Communic     Image: Communic       O Device ID lookup     412-169-050-9302-7761     TSS-703-27W/46       Upload Download     Communic     Image: Communic
		Allow project upload Upload pa
		4. See the description of 'Find Available Devices' below
-	password	default password: 12345678 (user can define the password, refer to chapter 7-3-2 password)
	find available	When the device ID address is uncertain or multiple touch screens are connected, you can
	device	click this button to scan the device IP that the computer is connected to. Select the IP
		address that needs to be connected from the scanned IP address, click "Find Available
		Devices", and the following pop-up window will pop up. Double click to select the device
		you want to connect to
		RxR28
		日本語作     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10
		Hmi         172.31.6.109         02200902310330009         T55.700-E         HVI/1.1.3.221006           Hmi         172.31.0.110         0220090016590058         T55.700-E         HVI/1.1.3.220929
		Hmi         172.31.6.115         02200900814380004         TS5-700-E         HV1/1.1.3.220929
		TC/H
-	communication test	Used to test whether the HMI is successfully connected to the computer. After clicking, a
		prompt box will pop up displaying whether the connection was successful or failed
		Communication settings 🦳 🗖 🔼
		Connection m Remote connection
		Device ID: Y
		Password:
		Commission Commission
		Find available Communic Connect to
	connect to the	After entering the correct device ID and password, click "Connect to the Device" to
	device	successfully log in to the information configuration interface



1. When connecting to a local area network, the HMI IP and the computer IP must be in the same network segment. When selecting the LAN connection method, it is necessary to enter the correct ID number and password; Alternatively, by clicking to find available devices, double-click to select the device you want to connect to (the default connection password is 12345678).

2. Before using the information function for the first time, the HMI must contain a program. When making remote connections for the first time, it must be connected through a local area network. After entering the information configuration interface, different internet access methods (4g/wifi) should be selected based on the modules behind the HMI. For specific usage methods, please refer to 2-3 internet access methods. After successful configuration, enter the device ID number and remote connection password to successfully connect remotely.

3. The information function can also be used when the project is not open. Select LAN or remote connection, and only after successful connection can you enter the configuration page. When modifying information configuration, it is necessary to maintain the connection between HMI and PC.

# 8-2. State information

View the currently mounted modules and system information:

Status information	Networking settings	Remote settings	Online transmission	Data release	
Module information:	None				
Module version:	V1.0				
Name	Reg:	ister	Value	Not	es
Networking n	node SF	SW56	3	Single word	Dec integer
Signal inten	sity SF	SW57	0	Single word	Dec integer
System tim	ne SF	SW16	2023-05-06 11:5:7	Six word E	ec integer
device running	g time SP	SW200	00:28:18	Triword dec	cimal integer
IP addres	s SF	SW58	192.168.6.2	Quadword	Dec integer
Subnet ma	sk SF	PSW62	255.255.255.0	Quadword	Dec integer
Gateway	SF	SW66	192.168.6.1	Quadword	Dec integer
DNS	SF	PSW71	0.0.0.0	Quadword	Dec integer
MAC addre	ss SF	SW75	3C-47-57-07-75-FF	Six word H	lex integer
VNC Service Ena	able Fl SF	PSB22	1	Bit, b	pinary
MQTT server en	able fl SF	PSB19	0	Bit, b	binary
LAN connectio	n sign SF	PSB23	1	Bit, t	binary
Login server	flea St	SB20	1	Rit k	oinary

Module information	Display the current module name, wired/4G/WiFi			
Module version	Display the current module version			
Networking mode	1: 4G 2: WiFi 3: wired			
Signal intensity	Effective in 4G and WiFi modes, displaying signal strength (-51dB~-113dB)			
	The signal greater than -51 is strongest, and the signal less than -113 is weakest The closer the value is to 0, the stronger the signal strength			
System time	Display the current system time			
Device running time	Accumulated time of operation after starting the device			
IP address	Display the IP address obtained by the current device			
Subnet mask	Displays the subnet mask obtained by the current device			
Gateway	Display the gateway address obtained by the current device			
DNS	Displays the Domain Name System server address obtained by the current device			
MAC address	MAC address			
VNC service enable flag	Monitor whether VNC server is enabled in HMI 1: ON 0: OFF			
MQTT service enable flag	Monitor whether MQTT server is enabled in HMI 1: ON 0: OFF			
LAN connection flag	1: ON 0: OFF			
Login server flag	Monitor whether HMI is connected to FRP server 1: ON 0: OFF			
	We suggest to use this flag bit to monitor if the HMI is in remote status.			

This page displays the corresponding status information and system registers of the module, which can only be viewed and cannot be modified.

# 8-3. Networking settings

#### 8-3-1. TouchwinPro software configuration

Inform	atizati	0 - 1	×
Status in	nformation Networking settings Remote settings Onlin	e transmission Data release	
N	etworking mode: Wired Internet Accr v		
	Get address automatically Use the following address		
i	P address 192 . 168 . 6 .	10	
3	Subnet mask 255 . 255 . 255 .	0	
1	Default Gateway 192 . 168 . 6 .	1	
۲	Get server address automatically		
100805	Use the following server address Preferred DNS Server 0 . 0 . 0 .	0	
		Applicatio Ok Cancel	
		Applicatio Ok Cancel	
4G	When selecting 4G internet access, clip selecting 4G internet access, clip prompt you to restart the HM configuration parameters will to configuration interface can be used	ck "Application" below, an I. After clicking "OK", r take effect. Next time, r	nd a pop-up window will estart the HMI, and the
WIFI	When selecting WIFI to access t wireless password, or click on t method, and signal strength of ne WiFi password. If the conne automatically filled in to the para	he internet, users can manu- the WiFi scan button to vi- earby devices. Click on Cor- ction is normal, the pa	iew the SSID, encryption nnect and enter the correct

You can set the internet access method here: 4G, WiFi, or wired mode:

Note: The password and name must be entered correctly, otherwise it may cause incorrect WiFi configuration to be downloaded and remote connections will not be able to log in. If this situation occurs, it is necessary to connect through the local area network and reconfigure the WiFi.

	Informatizati 0 - ×	
	Status information Networking settings Remote settings Online transmission Data release	
	Networking ID should be 17 bits w	
	mode: ID should be 17 bit: V WFi	
	Encryption WPA-PSK   enter wifi name and password	
	SSID	
	Wifi passwo	
	Please confirm that the wifi settings are correct, or the network will not be available a 2. After wifi fast connection, if the original networking mode is wifi, the original wifi w	
	3. It takes time for wifi to disconnect and reconnect	
	· · · · · · · · · · · · · · · · · · ·	
	Applicatio Ok Cancel	
	Step 1: Click on "WiFi Scan" Step 2: Click the "Quick Connect" button	
	Step 3: Enter the corresponding WiFi password in the pop-u	p prompt box. If the
	password is entered correctly, there will be a prompt of "Co	onnection Successful",
	otherwise there will be a prompt of "Connection Failed"	
	Step 4: After successful connection, click the "OK" button	
	successful". The configuration parameters will take effect and r be made	emote connection can
	SSID         安全         信号强度         操作	
	● 0         SZ-TEST         ¥FA#FA2FSK         快速连接           1         退控<         L模         K####################################	
	2 TF-LINK_B12C WFANPA2FSK 快速连接	
	3 DevLink WPANPA2PSK 快速连接	
	4         Xinje AP         FPAFFA2FSK         使速连接           5         TP-LISK_EA89         #PAFFA2FSK         快速连接	
	6 Tenda_522438 @ 提示 X 快速连接	
	清输入密码	
	(如无密码则无需输入)	
	确认 取消	
	◎趼 关闭	
wired	When selecting wired Internet access, users can configure to ob	otain IP automatically,
	or manually set Internet access parameters, including IP address	-

gateway and DNS



1. The settings on this page will take effect after downloading the program and power on the HMI again.

2. If switching the internet mode causes the HMI to be unable to connect, please use Ethernet to connect to the local area network and reset the information settings.

3. Clicking the "OK" button will update all page configuration information to the lower computer(HMI). Please make sure to check each page before clicking "OK".

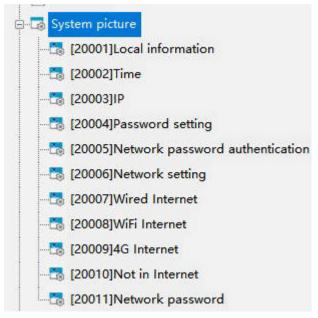
Whether each item of information on a page is incorrect, such as WiFi name, WiFi password, data publishing, etc; If only one page is changed or uncertain about the information, it suggests clicking the "Application" button, which will only update the current page configuration to the HMI.

#### 8-3-2. HMI (lower computer) configuration

It supports configure through the HMI (lower computer), please refer to chapter 7-5-5 informatization setting.

#### 8-3-3. User project configuration

Support information settings in the user project. The current information settings are set using the system template. Users can call relevant screens in the user project according to their needs, or transplant the relevant settings in the template to the user project. The current supported screens are as follows:



# 8-4. Remote settings (VNC)

The VNC function is a remote desktop function that can operate the HMI directly through a local area network or remote connection without the need for secondary configuration.

#### 8-4-1. TouchwinPro software connection

TouchwinPro software is mainly used for single device maintenance and remote viewing. Generally, related operations are performed with a known ID, and click remote settings when it is already remote login through informatization settings.

	mation Networking settings Remote settings Online transmission Data release
VNC	
VIAC	
	Port number: 5900
	VNC password 123456
	Network Start VNC
	If the network delay is high, it may not be connected or stuck
	If the network delay is high, it may not be connected of stuck

Port number	The default is 5900 and cannot be modified
VNC password	The default password is 123456 (customizable password, refer to chapter 7-3-2
	password)
Network detection	After clicking on network detection, an attempt will be made to establish an Frp
	connection with the HMI, reporting the connection status and whether the connection
	is normal or abnormal
Start VNC	Open the local VNC client when clicking to start VNC
Stop VNC	Close the local VNC client when clicking to stop VNC



#### 8-4-2. Boxmanger software connection

The Boxmanger software is mainly suitable for managing multiple devices, and can manage model devices through accounts. At the same time, using the Xinje IoT card can synchronize card management.

- (1) Boxmanger account and group setting Refer to A-BOX user manual.
- (2) Right click on the group, select add device.

Usemame: vanessa							0 - 1
Please enter the device     My Device     U test111     group1	14081	_	<b></b>	<b>]=</b>	Enter device name Enter device ID	New	
	Add dev Edit grou Delete g	up name	Ш	<b>D</b>	nter device password		
				(+)	Select device group	Add Device	

(3) Enter the device ID and password, finish the configuration.

User	iame: vanessa		
îî.	<b>*</b>	9	۲
Please e	iter the device nor	we pe 10	Q
▲ 我的话	#		
Ú	test111 499098207C131408	п	
group	1		

(4) Remote checking it.

Username: vanessa			0 – 🛛 X
n 🖬 🖈 🕮 🛈			
Please enter the device name or 10 Q	Device Name : New	ICCID : 8986	50485102270294942
<ul> <li>My Device</li> <li>test111</li> <li>499096207C1314081</li> </ul>	Device ID: 1642390904A332339	CardStatus :	正常
# group1	Online status : OnLine		12288.00 M 2748.02 M
1642390904A332339	Networking:有线		9539.98 M
	Version Info: HV2/1.1.4.230613 (TS5L-700-E)	MUU :	0.06 M
	Remarks : Delete Device Add collect		Configuration
	Delete Device Add collect		Configuration

TSSL-700-E: ID:1642390904A332339( HV2/1.1.4.230513 )			0 – 🛛 🗙
	Data Monit	Port Trans	
VNCapplications			
5.45U			
		2	
	a la		
VNC	password : 123456		
			Start VNC

#### 8-4-3. PC connection

The PC end mainly relies on the Xinje Cloud, which can achieve multi end access and be used directly in the browser.

Xinje Cloud Website: https://cloud.xinje.net/

Note: please refer to Xinje Cloud V4.1 user manual for details.

(1) Xinje Cloud account register and login.

1	· 使问整录 · 验证问登录 1 vanessa	
	<ul> <li>emember password</li> </ul>	Auto log
	- Login Register   ForgerADMRW   De	emo login   Lang +
	Register Forget ADM/PW De	emologin   Lang v

vanessa		@ Configure	🕐 💭 vanessa •
A Home	C 🗢 Hame 🔮 Configure 🗡	Configure - abc X	> ©
🖬 Item 🤇	Search by knyword	Search by knyword	👔 🕑 🖌 Add Item
Configure	15 未分組		
Contigure		Hiren India	
Set data collection			
Multifunctional Report			Total 2 Items < 1 > 10 /page ~ Goto 1
□ SCADA Screen (3) Add device			

vanessa		=	n Hòme 🐵	Configure		() 😅 🔵 vanessa •
		¢ 0.3	Add device		×	
			Device     name	TS5LHY		Add device
	*		• Communication	TS物味闷机量	-	
		2	device:			
		2	TS5LID	1642390904A352339		
	π	×.	TS5L 撤码	12345676		
	390 -	<u>ه:</u>	VNC 密码:	123456		
	3 <b>%</b>	- 36				
	~		GPS:	Automatic positioning     Manually positioning	_	
	~		Longitude :	Stiled	*	
			Latitude	Select	~	
			Device info:	+ . Add a row		
	<u>.</u>			Save x Cancel		

(4) Check the item

vanessa	a	😸 🔺 Home 🗉 Item		(?) 😅 vanessa •
A Home		K 🗇 Home 🔹 Item 🗵		
ar item		Search by Myword	Search by keyword. Q	
Configure	:0	□ 未分组	★ Hiren india	* abc
SCADA screen	۷		0.0000000	
👪 Data analysis	*		0 0 0 Total Read Uncread	0 0 0 Total Read Unread
▲ 生产进度管理	*		No Data	No Data
Alarm	~		Enter SCADA Enter VNC	Enter SCADA Enter VNC
A Maintenance	٠			Total 2 items (1) 10 /page (Goto 1)
				And a second sec

(5) Remote login to check, select image quality, compression level as the actual condition.

	VNC配置	×	
- (\$)-	密码 10 画质 低	<b>○</b> 高	
	压缩等级 (低	商取消 稳定	
	<u>(XINJE</u>	VNC	

#### 8-4-4. Mobile connection

The mobile end mainly relies on the Xinje Cloud to achieve multi end access, which can be directly used in apps and WeChat mini programs.

APP and Mini Program Address:



for IOS or Android



- (1) Project binding on Xinje Cloud PC end, refer to 8-4-3 for details.
- (2) Remote connection (take wechat app as an example)

		.em	•		云智造 - noVnc		0
Мар	Item Data	Alarm	8	4	Select VNC devic	e	
Q Search by	keyword		VE				
Total	Read	Unread					
	No Da	ata			连接参数		
Enter the	project	Enter VNC	- 1	密码	*****		
			-	画质	低	) — 高	
🗐 abc				压缩等级	11.5	[ei]	
0 Total	0 Read	0 Unread			低	高	
	No Da			Ca	ncel C	onfirm	

# 8-5. Online transmission

Transparent transmission function, which means that the computer does not need to be connected to a PLC, but only needs to be connected to a HMI to control the PLC. The PLC program can be directly downloaded and monitored through the HMI. Two transparent transmission methods are currently supported: serial port transparent transmission and VPN transparent transmission.

Transparent transmission function requirements: The HMI is TS5 series, and the PLC is connected to the HMI through serial/network ports.

If the TS5 access Internet mode is wired mode, only serial port transparent transmission is supported.

8-5-1. Serial port transparent transmission

Status information	Netwo	rking settings	Remote settings	Online transm	ission	Data release	
Transmiss	sion mo	o serial por	t passthr 👻				
COM1:			co	DM2:			
Bau	d rate:	19200	*	Baud rate:	19200	~ v	
Dat	a bits:	8	*	Data bits:	8	~	
Che	eck digi	Even	~	Check digi	Even	~	
Sto	p bit:	One	*	Stop bit:	One	~	
Virtua	l serial	COM1	~ \	/irtual serial	COM	2 ~	
Enabl	e statu	Enable	COM1	Enable statu	Ena	able COM2	
Rese	et virtu	al serial		Enable	virtua	al	

transmission mode	Serial port transparent transmission, VPN transparent transmission
baud rate	9600/19200/38400/57600/115200
data bit	7/8
parity bit	None/Odd/Even
stop bit	None/One/Two/OnePointFive
virtual serial port	COM1-COM255 optional
enable status	Check whether to enable COM1/COM2 ports, both serial ports can be enabled for virtual serial

	ports at the same time
reset virtual serial	After modifying multiple serial port parameters, it can be directly reset
port	
enable virtual	Enable the virtual serial port of COM1/COM2 for further transparent operation

#### Serial port transparent connection steps:

(1) Connect the COM port of the PLC to the COM port of the TS5 through an XVP cable.

(2) Connect the HMI to the PC using a local area network/remote connection (refer to chapter 8-1), and enter the Information Settings - Online Transparent Transmission interface.

(3) Set the serial port transmission related parameters, including baud rate, data bits, check bits, stop bits, etc., to be consistent with the PLC serial port parameters. Select the virtual serial port and enable it to start the transparent transmission service.

tatus information Netw	orking settings	Remote settings	Online transm	nission Data	a release	
Transmission n	no serial port	passthr 👻				
COM1:		C	OM2:			
Baud rate	e: 19200	*	Baud rate:	19200	~	
Data bits	: 8	~	Data bits:	8	~	
Check di	g <mark>i</mark> Even	~	Check dig	i Even	~	
Stop bit:	One	~	Stop bit:	One	~	
Virtual seria	COM27	~	Virtual serial	COM2	~	
Enable stat	tu 🗹 Enable (	COM1	Enable statu	Enable	COM2	
Reset virt	ual serial		Close ti	he virtual	]	
New virtual seria	l not pair	succeeded				
Opening serial p open the serial p Connecting to th Connect network	oort oort succes ne network	sfully				
COM1 port corre			nas been co	onnected		×

After enabling, the Device Manager interface will have a virtual serial port as shown in the figure below. Click "Abort" or "Clear residual virtual serial port", and the established virtual serial port will exit and no longer occupy the system port number.

1 28	普理器							
文件(F)	操作(A) 查看(V) 帮助(H)							
(+ + +	📰 🖾 🔝 🛒 🖳 🗙 📀							
~ 🖗	) 靖口 (COM 和 LPT) 闡 Electronic Team Virtual Serial Port (COM1)							
- I	Electronic Team Virtual Serial Port (COM27)							
	₩ 薑牙链接上的标准串行 (COM6)							
	■ 蓝牙链接上的标准串行 (COM7)							

(4) Open PLC programming software XDPpro.

(1) select local serial port (COM1), click Comm-test, it shows "connect to PLC succeeded", click ok.

(2) after connecting, the right lower corner will show , now user can download and monitor the PLC program.

Communication	COM_Modbus_1		
Connection mode	selection		
Interface Type:	COM	~	
CommProtocol:	Modbus	~	
Communication p	arameter configurat	ion	
Automatic Det	ection		
Station No		Baudrate(B)	
1		○ 4800BPS ○ 96	OOBPS
Serial Port(C)		19200BPS () 38	
COM27	~		HOODES
Blue Tooth	Serial Port	O 115200BPS	
Parity(P)		Other set	
	dd 🖲 Even	Databits:8 ,Stopbits	£ <mark>1</mark>
Connect To PLC \$	behaanus	Auto-con	nnect <mark>on exit</mark>
Sennou for Euro			

Note:

- 1. During transparent transmission, it is necessary to maintain network connectivity. If disconnected, it will affect transparent transmission operations.
- Transparent transmission can only be operated on the premise that PLC and HMI can communicate normally. During transparent transmission, communication between HMI and PLC will be disconnected, and it will resume after the transparent transmission is completed.
- 3. Only serial port transparent transmission is supported in LAN connection, and two transparent transmission methods are supported in remote connection mode.
- 4. Try to avoid using COM1 and COM2 for virtual serial ports to avoid confusion.

#### 8-5-2. VPN transparent transmission

VPN transparent transmission steps:

(1) PLC and HMI are connected through a network cable.

(2) Configure HMI to remote connection mode and enter the information settings online transparent transmission interface

(3) Select VPN transparent transmission method, set the network segments of PLC, HMI, and virtual gateway in

the same network segment, and click "Enable VPN".

状态信息 联网设置	远程设置	在线透信	ŧ	救援	泼	布					
适传方式:	VPN透传		~	l							
VPN参数面	遭										
	虚拟网关:	192	¥	168	Q.	1	4	1	1		
	子网掩码:	255	•	255		255		0	]		
	虚拟网段:	192	,	168		1		252			
		192	•	168	÷	1	3	254	]		
									倉用V	PN	

(4) Open PLC programming software XDPpro.

(1) enter the device IP and local IP, local IP refers to the local IP of the virtual network card, click Comm-test, it shows "connect to PLC succeeded", click ok.

(2) after connecting, the right lower corner will show <sup>1,Scan Cycle:0.0m:</sup>, now user can download and monitor the PLC program.

	Communication con	figuration 🛛 💌
Communication	Ethernet_Modbus_1	
Connection mode	e selection	
Interface Type:	Ethernet	~
CommProtocol:	Modbus	~
Scan IP Device IP:	192 . 168 . 1 . 100	502
Device IP:	192 . 168 . 1 . 100	502
Local IP:	192 . 168 . 1 . 252	
		✓ Auto-connect on exit



- (1) Please refer to ABOX user manual for other brands of PLC transparent transmission method.
- (2) Siemens S7-200 smart, Matsushita FP-XH series PLC cannot support serial port transparent transmission.
- (3) Enabling VPN will occupy the HMI IP, and the IP in the bottom right corner of the touch screen will be blank. After turn off the VPN, will default to the previous IP address.
- (4) Transparent transmission supports the use of TouchwinPro software and Boxmanger software in the same way.

#### 8-6. Data release

#### 8-6-1. Data release configuration

Data release refers to sending local data information to the cloud through a specified protocol. Data release function requirements: The HMI is TS5 series, 4G/WIFI/wired connected and can access the corresponding server.

tus information	Networking setting	s Remote settings	Online transmission	Data release	
QTT server	configuration				
	Server type:	General MQTT se	erver	~	
	Release met	Ensure successfu	I publishing once	(once ~	
	Server address	mqtt.x-net.info			
	User name	xinjeadmin			
	Passwor	•••••	••••	ø	
Re	store	Rea	d	Wri	te
ata configura	ation				
Instruction		mmand	Instruction		
Instruction name	Communic			N	lotes
device1	本地设备	F PSB	) 1[Bit]		
device2	本地设备	S PSB	) 1[Bit]		

#### **MQTT** server setting

	server type	general MQTT server /Aliyun server/Custom server
release		Corresponding QoS service quality level: QoS0, published only once, regardless of
method	nublish once	whether it reaches the publisher or not, the publisher (when the client or server is
method		the sender) only sends once, regardless of whether the receiving end has received

	the data
Successfully	Corresponding QoS service quality level: QoS1, successfully published at least
published at least	once. The publisher needs to confirm upon arrival. After publishing the message, the
once (possibly	publisher waits for the recipient's confirmation message. If the receiving end does
multiple times)	not reply, resend it
Ensure successful	Corresponding QoS service quality level: QoS2, to ensure successful publication
publishing once	once, the publisher needs to confirm upon arrival, and the recipient needs to confirm
(with and only once)	again by the publisher
server address	Default mqtt.x-net.info and cannot be modified
user name	The default is xinjeadmin, which can be modified by users themselves
password	Default 16 bits password and not visible
restore	Restore the publishing method, username, and password to the default configuration
	Read the published MQTT configuration, password, username, and publishing
read	method
write	Write the latest configuration to the MQTT server

Data Configuration: Configure data publishing, allowing for creation, deletion, and editing of published content.

add	Add instructions to be released
instruction	
edit	Edit the added instructions to view their details or modify them
instruction	
delete	To delete an added instruction, left click on the line that needs to be deleted and click on the
instruction	instruction to delete it

#### Click on the command add to enter the data command configuration and edit the data source

Data specifi Bit     V     Add metho Single addition     V       Data object PSB     V     Start addre     0     0       MQTT     Data type: BOOL(Bool)     Trigger m. Triggered when the value V	evice command				
Data object PSB V Start addre 0 0 MQTT Data type: BOOL(Bool) Trigger m Triggered when the value V Trigger co less than Minimue ‡ Maximu ‡Publish even S	Command r		Communica 本地设	备	~
MQTT Data type: BOOL(Bool) Trigger m Triggered when the value Trigger cc less than Minimue Maximue Publish even S	Data specifi Bit	~	Add metho Single	addition	~
Data type:     BOOL(Bool)     Trigger mi Triggered when the value v       Trigger cc less than     Minimut     ‡       Maximut     ‡     Publish event     S	Data object PSB	~	Start addre 0	. 0	
Trigger co less than Minimu ‡ Maximu ‡Publish ev S	MQTT				
Maximu Publish ev S	Data type: BOOL(Bool)	Trigger	m Triggered when the	valut ~	
	Trigger colless than	Minim	u	*	
remar	Maximu	🗘 Publish e	evi	S	
	remar				

#### device command:

command name Name the current instruction, the instruction name cannot be empty

communication	Select the data source, which can be connected to devices within the HMI project or local HMI
device	
data	select the data format, Bit/Word
specification	
add method	Single addition: mapping one instruction to one address
	Batch Add: Multiple addresses mapped to a specified command (with consistent data types)
data object	select the register type
start address	enter the start address

### MQTT:

data type	the data type includes INT16U, INT16S, INT32U, INT32S, INT64S, Float, Double, Char[]
trigger method	Triggered when the value changes, triggered when the condition is met, and triggered at a fixed
	time
trigger	Trigger conditions are divided into: less than, within range, greater than, not equal to, and
condition	beyond range
minimum	Set the minimum value of the range. When the trigger condition is greater than, this item is not
	filled in
maximum	Set the maximum value of the range, and leave this field blank when the trigger condition is less
	than
publish space	The interval between publishing data, in seconds
remark	Comment name for data

Click on the command edit and enter the editing interface:

						KOR)	editing setti	ings				
arch		Add	Delete Delete	all Import	Export							
I			Instruction	Data	Data	Y	Min value	Max value	Publish	Notes		
ľ	2	本地设备 本地设备	PS80 PS80	1(Bit) 1(Bit)	bool bool							
des.			1								.e	
											-	
										Ok		Cancel

search	Enter relevant keywords to search
add	add a instruction
delete	Select a line of instructions to delete
delete all	delete all the commands

#### 8-6-2. Xinje cloud server

#### **Operation steps (take Xinje Cloud server as an example):**

(1) Enter the information settings - data release interface.

atus information	Networking settings	Remote settings	Online transmission	Data release
AQTT server	configuration			
	Server type: G	eneral MQTT se	erver	~
	Release met E	nsure successfu	publishing once (	once 🗸
	Server addres:	nqtt.x-net.info		
	User namexi	njeadmin		
	Passwor	•••••	•••••	1
R	estore	Rea	d	Write
ata configur	ation			
Instruction	Con	nmand	Instruction	
Instruction name	Communica device			Notes

(2) select server type: general MQTT server.

Server type:	General MQTT server	~
Release me	et Ensure successful publishing o	nce (once 🗸
Server addre	semqtt.x-net.info	
User nan	nexinjeadmin	
User nan Passwo		Ø

(3) select release method, please choose it as needs.

Server type	: General MQTT server	~
Release n	net Ensure successful publishing onc	e (once 🗸
	Publish only once Publish successfully at least once	
Server adar		the second s
	Ensure successful publishing onc	e (once an
User na	ensure successful publishing one	e (once an
User na Passv	amexinjeadmin	e (once an

(4) click add instrcution, click ok after addition.

Instruction	C	ommand	Instru	ction				
		Data ir	struction co	nfigurati	on		-	Surger.
Device com	mand							
Command r			Co	ommunica	本地设备			
Data specifi	Bit	×	Ad	dd metho	Single ad	ldition		
Data object	PSB	Ŷ	St	art addre	0	[	0	
MQTT								
Data type:	BOOL(Bool)		Trigger m Trig	gered wh	en the va	lui Y		
Trigger co <sup>1</sup>	ess than	Ŷ	Minimu			*		
Maximu		* T	Publish evi			S		
remar								

Note: When adding or deleting device protocols in the system settings, it is necessary to download the project to the HMI in order to update the communication devices in the data command settings.

(5) After adding instructions, click Apply or Confirm, then power on the HMI again to complete data publishing. After successful publishing, open the Xinje Cloud Server and proceed to the next step on the server.

tus information	Networking setting	ngs Remote	e settings Onl	ine transmission D	ata release
AQTT server of	configuration				
	Server type:	General N	AQTT serve	r	~
	Release me	t Ensure su	ccessful pu	blishing once (or	nce ~
	Server addres	amqtt.x-ne	et.info		
	User nam	xinjeadm	in		
	Passwo	•••••	•••••	•••	
Re	store		Read		Write
ata configura	ation				
Instruction	-	ommand		Instruction	
Instruction name	Commun devi		address	Data number	Notes
D20	本地道	诸	PSW20	1[Word]	

# 

- (1) Xinje Cloud Server Monitoring currently does not support monitoring bit group addresses.
- (2) The cloud platform corresponding to the Xinje MQTT protocol is limited to Cloud V4.1 and above.
- (3) For specific details on the operation of the cloud platform, please refer to the cloud platform manual "Xinje Cloud V4.1 User Manual".

#### Xinje Cloud operation steps:

(1) login Xinje Cloud, add a new project.

	ure i 🖶 Configure		
C 🕘 Home 🛛 8 Item 🛪	Settings × 🛛 Monitor View × 🔮 Confi	ave ×	
Search by keyword. Q	Skarth by keywort. Q	🖉 Enter project configurati	ion
二 未分相	177 Haar (		
		$(\rightarrow)$	
5			
	XD5E	abc001	$\rightarrow$
			Total 4 items 1
	Search by keyword.	Search by keyword. Q. Search by Keyword. Q.	Search by keyword. Q. Search by keyword. Q.

(2) After entering the project, click "New Device", select the TS IoT model for the communication device, and then enter the ID number of the HMI and the TS5L password (remote password, 12345678 by default), which can be modified on the screen. The cloud platform limits 8 bits password, VNC password (123456 by default), and click Save.

Add device		×
* Device name:	TS5	
* Communication device:	TS物联网机型	~
TS5L ID:		
TS5L 密码:		
VNC 密码:		

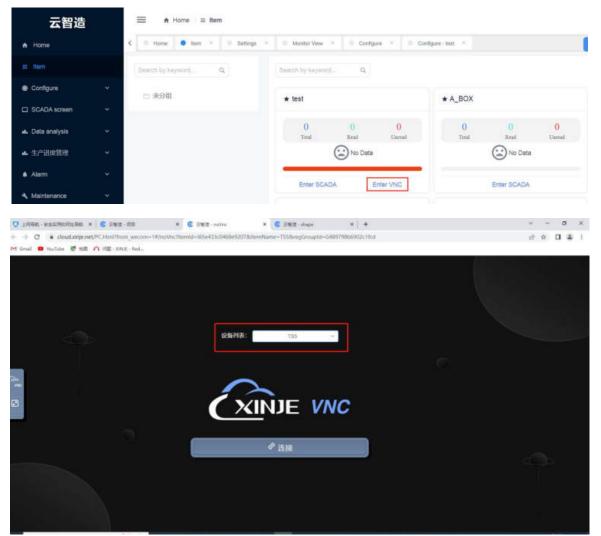
(3) Monitor in [device configuration]: click "refresh device" and monitor to see all the data.

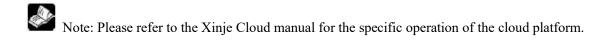
~ TS5L			◎ 监控 C Refresh devi	ce 🖉 Edit device 🔋 Delete device
	Name <b>T</b>	🗹 Data type	Data length	监控

(4) Monitor in [data source]: after adding device, click "batch import", it will pop up a window. Select the device added just now, then select "import all" or "import part". After importing, click monitor to monitor the data.

数据加工:	中心 data ci	enter														
							1	variable g	roup	monitor	batch i	nodify		batch impo	rt	batch
数据源 d	lata source							变量组管	<b>1</b>	♀ 监控	勿 批量物	殿 -	+ Add	り 批量导入	] 1	日批量删除
周注1年	~	机热冲	*	选择	~		~	南海	7	都空						
	数据源名称	设备	支	服组 ;	是否可写	Data t	进制	扇码 数	据下阻	数据上限	单位	保	留小数位	多段字符目	B	监控
# 100		- 887									08083	9 1210	Seiler	+ 800 Tries	EX. 1	
n 821 ● 522		- 8187		*******	-	ana ing	-) (m	12-164		a 342	atura	Q 1210	日代最终改	+1820 勾注重5	A I	-
				and the second	- 1	8575	-	Carrows a	- 816738	878 1.50 878 1.50	28488	9 559 9 559	S NEWX SOPNe			T 11.0000
• 82		100.00	- 10			and the second s										
• A/R • 10/187	RRM	- mm	nsiine	UN	2.021	8595 5	-	install				0000-0-0010	\$12773.8	80		irt:
• A/E • 1011A7 • 104547	RRM		MREAN MREAN	UM INN	9.994 (1.944_05d	8595 5 8	Box.	200023				0.000	8070a 98	812	e essit	1019
ALE     MULTAT     MULTAT     MULTAT     MULTAT	9 <b>6</b> 7	0 0	AND	0.04 0.05	9.994 0.1942_054 0.1942_054	#545 5 5 5 5	Boot Boot	239943 +234 +234				0 0	807PM8 88 88	- RE	e ensk ensk	809 809
A28     SUDAT     SUDAT     SUDAT	8705 875 	0 0 0	MININAL AND	10.04 10.05 10.05 10.05	9.0044 00.044_054 00.044_054 00.044_054	#545 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Beef Beef Beef Beef	200083 1284 1284 1284				0 0 0	849788 88 88 88 88		1 101 101 101	809 809 809

(5) Xinje Cloud VNC monitor: select the project, click "enter VNC". Select the device name, click connect, input correct VNC password (default is 123456) to enter VNC interface





# 8-6-3. Custom MQTT server

#### Operation steps:

(1) Enter information interface, click Data release, select custom MQTT server. Then set the server name and user name, password.

Status information N	etworking settings	Remote settings	Online transmission	Data release
MQTT server con	figuration			
Ser	ver type: Custo	om MQTT serve	r	~
Ser	ver name:			
	. East		blishing once (a	
		re successiui pu	biisning once (d	
Ser	ver addre			
	User nam			
	Passwo		0	<b>v</b>
Resto			1	Write
Restor	e	Read	I	Write
Data configuration	n			
Instruction	Comma	nd I	nstruction	
Instruction	Communication	Instruction	Data	1
name	device	address	number	Notes

(2) Select the release mode as you need.

Server type:	Custom MQTT server	~
Server name:		
Release me	Ensure successful publishing once (	- ~
Server addre	Publish only once	
User nam	Ensure successful publishing once (c	once
Passwo	<	۲
Restore	Read	Write

(3) Click Instruction, add the instruction to be monitored, click ok after adding.

MQTT server con	figuration				
Sen	ver type:	Custom MQTT server	~		
Sen	er name:				
R		uction configuration command			- 0
Ser	Comma	nd	Communic	Local Device	~
	Data sp	eci Bit	<ul> <li>Add metho</li> </ul>	Single addition	۰ v
Resto	Data ob	ojec PSB	∽ Start addre	0.	0
Data configurati	MQTT			1946 VI	
Instruction	Data ty	pe BOOL(Bool)	<ul> <li>Trigger m</li> </ul>	Triggered whe	n the val $\sim$
Instruction name	Trigge	r celess than	Minimu		-
	Max	mu	C Publish ev		S
	rei	mai			

When adding or deleting device protocols in the system settings, it is necessary to download the project to the HMI in order to update the communication devices in the data command settings.

(4) After adding instructions, click on the application or ok button and power on the HMI again to complete the data publishing. After successful publishing, open the Cloud server and proceed to the next step.



Currently, port number settings are not supported;

The specific cloud server needs to be deployed independently and can be debugged using MQTT.fx; The message format can refer to 8-6-5 MQTT Data Explanation.

8-6-4. Aliyun server

Operation steps:

(1) Log in the Aliyun website (<u>https://www.aliyun.com/</u>). Log in to your account and open the IoT platform.

<b>秋奈江产品</b>	Q. 搜索更多元产品 >		
3 <b>~</b> #	如取用式服务	但在這種秀	67 sk 100 km
њ° –	地脉间无线连编服务	AliOS Things (物語(生影紙)	城市较联同平台
s>	他戰與平台	这季计算股份	生活物联网平台 (飞燕平台)
8.2	他联网督和范围服务		田和田
各地CDU >	loT 设备集份认证		云投屏
2 ×	いて安全活動中心		
64 3	他联网络管理平台		
R:#			
EN REASON REASON			
4 <b>9</b> 5			

(2) Select manage the console;

物联网平台	
物戰與平台還供全托費的企业很实例服务,具有低成本,高可樂,高佳能,高安 點即可接入各种主流的反设备,實理這種22級板構設备,存储备份和处理分析EB 現设备数据和应用数据的融合,实现设备暂能化升级。	
一品の時 产品の相 環道服务 应用活業	春户至例 接入方室 产品动态 文指与工具
优惠活动	重要功能
《用中O 访问试用中O, 企业版实例新用户免费试用一个月	土 <sup>建</sup> 工时 全球实例发布,设备房地域分发助力客户业务出海
#新新加 転准型、事享型实例新购可提交咨询申请折扣优惠	<b>新闻版</b> 表 支持数据存储备份。加工处理。分析和展示等功能
RIDIE用 增值服务IOT事生引擎全新上线,限时免费试用	tof Stude 新版物眼网应用开发服务(IoT Studio)全新上线

(3) Click Public instance.

实例概范 增值期	务 产品文档		
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胸灭实例	快速入门		
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试用 测试环境 公共实例		购买企业版实例	
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(4) Create a product in the "Product" column of "Device Management", set relevant configurations, and confirm saving.

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	物联网平台 / iot-(	06z00blol294w4t / 设备管理 / 产	品 / 新建产品		
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设备管理					
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设备	* 产品名称				
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	~ 校验类型				
	~认证方式				
	更多信息				
	✓产品描述				
回新板反開	MALL ROAD	6			

(5) In "Devices", click "Add Device", set a "DeviceName" for the device, and set relevant configurations;

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(6) Click View - After entering the device, click "DeviceSecret" to view. Copy the device certificate with just one click. View "Region" as "East China 2 (Shanghai)".

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(7) Connect to the IoT HMI, select "Aliyun Server Settings" in "Server Type", paste the one-click copied device certificate into the input box, and select "East China 2" for region information.

	设备证书:	"De	oductKey*: *j10 viceName*: *T		-
	发布方式: 皆定域名:	只发布			~
1	地区信息:	华东2			~
恢复對	til		读取		写入
据配置 指令添加		指令编辑	1	指令删除	导入物模型
指令名称	通讯设	备	指令地址	数据个数	备注

(8) In the Aliyun IoT platform, select the created product in the product category, click "Function Definition", and then click "Edit Draft".

← 10年月平台	() [月間示1] (物学科) [牛爾加西極公共民物原則上現支更] 書書作篇	
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(9) Click "Add Custom Function" to define data names, types, units, etc. After adding the data, click "Publish Online". The current upper computer version only supports attributes, and the service and event functions have not been developed yet.

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<b>0</b> [印象章] [地址同平台] [中	<b>新社治統公共案例項標上推支费</b> ]	29.4 <u>0</u>	添加自定义功能		×	
epara / arosotocosa ← 编辑草稿 ***** SteePa		<b>46</b> / 数据定义	<ul> <li>辺影装置●</li> <li>20前安置</li> <li>20前安置</li> <li>20前安入型的方面名称</li> </ul>			NizyoFXFan <b>SEN</b>
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256155 622				MBCA.	Rin	

(10) Click on "Model TSL" and in the Perfect Model, select "Ctrl+A" and then "Ctrl+C" to copy or export the model file.

	查看初接型	×
O DIRAMINE RELIAS CALIFORNES.	地域型基订设备在云洞的功能完成。此后设备的重性、最低和事件、也使用干台通过定义一系 物的描述而算完整定物模型。称之为 TSL(即 Thing Specification Language),就用 ISON 考 式。如何以根据 TSL 编集上报告者的故意,忽可以用出来整时模型,用于云确定用开发。它也 可以只导出编数线模型。配合设备的 SXL 实现设备开发。	
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(11) In data publishing, select the imported object model and paste it in the "Perfect Object Model JSON Text" using Ctrl+V. After pasting, click on "Import Object Model Text". Or directly import the object model Josn file.

的信息 联网设置 远程 IQTT服务器配置	收直 任残废传 默婚	84.10		完整物模型Json文本
服务器类型	阿里云服务器		~	"productkey" "j10zjnFXFxm" }, "properties": [ { 'identifier': 'test', 'name': "例试数据台", 'accessMode':
设备证书	* { *ProductKey*: *DeviceName*		<	デ型初発生TSon及本: 「productKey」、j10rjnFXF#n" ], "properties": [ { identifier test, name 那社法社会, accessMode", 'v", required false, dataType [ type int, speci [ nin, 2147483648", max' 2147483647, unit nF unitName "新 identifier post, name post, type info "required true, deco 開目上後, nethod", 'dentifier test, name, post, type info "required true, deco 開目上後, nethod", 'dentifier test, name, net, speci [ 'dentifier test, name, net, speci [ 'tidentifier test, name, net, speci [ 'tidentifier test, name, net, speci [ 'tesp' ] [ ] ], name, name, name, speci [ 'tesp' ] ] ], identifier set, name, name, speci [
发布方式	: 月发布一次		~	required true, "desc": "屬性上报", "nethod": "thing event property post", outputData": [ {
描定域名 地区信息			v	[identifier]. 'tert', "name", "別词動据点", "dataType", ("type": int", "specs": [ min", "-2147483648", "name", "2147483647", "unit", "和", "unitName", "纳法",
恢复默认	读取		写入	services [ { identifier set name set
黨配置				required true, callype async, desc <u>H115</u> ", "method": "thing service property set", "inputData"; "desc H115 "inputData"; test", "name", "MidI2bil
播令添加	指令编辑	指令删除	导入物模型	5", "dataType", 1 "type": "int", "nex": "specs": { min": "-2147483648", "nex":
指令名称 通讯	设备 指令地址	数据个数	贅注	"2147483647", "unit": "nF", "unitHane": " 纳法", "step" 1 , ] ] ] ]
和试验探索 本計	B设备 PSB0	1[DWord]		], outputData [] ] 1 identifier get name get, required true, callType async
				<pre>""""""""""""""""""""""""""""""""""""</pre>

(12) Select the command to add. At this point, the relevant data points can be selected. Once the settings are complete, click on Apply, download the program, or restart to complete the relevant settings.

数据指令配置	1			-		信息化设置						0 -
设备指令						状态信息 联网设置 MQTT服务器配置		置 在线透	6倍 数据发	市		
	測试数据点	~ 通	讯设备:	本地设备	~		· 墨美型:	阿里云縣	誘聯		*	
WEIRING IN	測式数据点 Word	- Ja	加方式:	单个添加	×	6	设备证书:	( *Pro	ductKey*: *j	10zjnFXFxn*,	^	
数据对象:	PSB		始地址:	0 0						"TS5-1000",	v	
	130	* &	CALHDHIL!			1.000	统方式: 管定域名:	只发布-	-次		~	
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AC\$1063961+1	(#1)#C)		100 U 100		•	指令名称	通讯设	12 12	掴令地址	数据个数	1	备注
最大值:		+	发布间隔:		S	制成数据机	本地设	210	PSBO	1[DWord]		
备注:					p							
				确定 取	消	一建发布					确定	取消

# 8-6-5. MQTT Data Explanation

- \*Chinese characters in Json format: UTF-8
- Client ID name: IDPWDUserdata

#### ■ TOPIC

Function name	Туре	Topic	Explanation
Report Configuration	release	ID+PWD/pub configlist	Retain type, click on the application to publish once
List		1 _ 0	
Data reporting	release	ID+PWD/pub_data	The device actively reports real-time data
Data control request	subscribe	ID+PWD/write_data	Platform side initiates data point control request
Data control reply	release	ID+PWD/write_reply	Device side reply data control result
Proactively obtaining	subscribe	ID+PWD/access data	Obtain data
data		_	

### Report configuration list

Title	ID+PWD/pub_configlist
Release conditions	The client clicks "Apply" once to publish it; Retain type.
	Add system data tables by default.
payload instance	{
	"Unix": "1614576888000",
	"Version": "V1.0",
	"Configlist": {
	"Device 1": [{
	"Order_name": "temperature",
	"Order_ID": "43912342299231234+0",
	"Order_type": "INT8S"
	}, {
	"Order_name": "length",
	"Order_ID": "43912342299231234+1",
	"Order_type": "Float"
	}, {
	"Order_name": "yield[6]",
	"Order_ID": "43912342299231234+2",
	"Order_type": "Float"
	}],
	"Device 2": [{
	"Order_name": "temperature",
	"Order_ID": "43912342299231234+3",
	"Order_type": "INT8U"
	<pre>}, {     "Order name": "length",</pre>
	"Order_ID": "43912342299231234+4",
	"Order_type": "Float"

		<pre>}, {     "Order_name": "yield[6]",     "Order_ID": "43912342299231234+5",         "Order_type": "Float"     )1</pre>		
		<pre>}],     "Localghost": [{ //system information list     "Order_name": "GPS latitude ",     "Order_ID": "43912342299231234+6",</pre>		
		"Order_type": "Float" }, { "Order_name": "GPS longitude ",		
		"Order_ID": "43912342299231234+7", "Order_type": "Float" }, {		
		"Order_name": " System runtime [4]", "Order_ID": "43912342299231234+8", "Order_type": "INT8S"		
		}] } }		
parameter	Unix	The time of publication, formatted as a millisecond level UNIX timestamp (in milliseconds since 1970).		
	Version	Protocol version number, the current protocol version is fixed to "V1.0".		
	Configlist	Root node of device list.		
	Device 1, device 2	The name of the added device in data publishing.		
	Order_name	The instruction name, if followed by "[6]", indicates that the instruction is batch added, and the length is the number of batch additions.		
	Order_ID	Instruction ID, unique, is a unique identifier used to bind data to the cloud platform.		
	Order_type	Data type (Pay attention to distinguishing between uppercase and lowercase letters) Bool/INT8U/INT8S/INT16U/INT16S/INT32U/INT32S/INT64S/Float/Double/Char[]		

∎ D	ata reporting
-----	---------------

- Dum reporting	
Title	ID+PWD/pub_data
Report real-time data	{
	"Variant": [{
	"Unix": "1614576888000",
	"Version": "V1.0",
	"Pub_Data": {
	"Device 1": {
	"temperature": 23,
	"humidity": 50.23,
	"yield[6]": [12, 32, 43, 53, 15, 53]

		}
		}
		}]
		}
parameter	Variant	Root node, array format.
	Unix	The time of publication, formatted as a millisecond level UNIX timestamp (milliseconds
		since 1970)
	Version	Protocol version number, the current protocol version is fixed to "V1.0".
	Pub_data	Data root node.
	device 1, device 2	The name of the added device in data publishing.
	Instruction	If the instruction name is followed by "[6]", it indicates that the instruction is batch
	key value	added, and the value of the data is the actual value of the batch added data.
Penort me	pairs essage cache	
	ata	{     "Variant": [{
	utu	"Unix": "1614576888000",
		"Version": "V1.0",
		"Pub_Data": {
		"device 1": {
		{ "
		temperature": 23,
		"length": 50,
		"yield[6]": [12, 32, 43, 53, 15, 53]
		} It derives 211. (
		"device 2": {     "temperature": 23,
		"length": 50,
		"yield[6]": [12, 32, 43, 53, 15, 53]
		}
		}
		}
		{
		"Unix": "1614576400000",
		"Version": "V1.0",
		"Pub_Data": {
		"device 1": {     "temperature": 44,
		"length": 50,
		"yield[6]": [12, 32, 43, 33, 15, 53]
		},
		"device 2": {
		"temperature": 13,
		"length": 60,
		"yield[6]": [12, 32, 123, 53, 15, 53]

}
}
}
]
}

Data control request

	Fitle	ID+PWD/write_data
payload instance	Write single or multiple pieces of data	<pre>ID+PwD/write_data {     "Unix": "1614576888000",     "Version": "V1.0",     "Write_Data": {         "device 1": {             "temperature": 20,             "length": 16,             "yield[2]": 55,             "yield[4]": 22         },         "device 2": {             "temperature": 20,             "length": 16,             "yield[2]": 55,             "yield[2]": 55,             "yield[4]": 22         }     } }</pre>
Parameter	Unix	The time of publication, formatted as a millisecond level UNIX timestamp (milliseconds since 1970)
	Version	Protocol version number, the current protocol version is fixed to "V1.0".
	Write_data	Root node.
	device 1, device 2	The name of the added device in data publishing.
	Instruction	If the instruction name is followed by "[]", it indicates that the instruction is batch
	key value	added, and "[2]" is offset, referring to the third production data
	pairs	

# ■ Data control request reply

Title	ID+PWD/write_reply	
Payload instance	{	
	"Unix": "1614576888000",	
	"Version": "V1.0",	
	"Write_Reply": {	
	"device 1": {	

		"temperature": "OK",
		"length": "OK",
		"yield[2]": "OK",
		"yield[4]": "OK"
		},
		"device 2": {
		"temperature": "ERROR0",
		"length": "ERROR1",
		"yield[2]": "ERROR2",
		"yield[4]": "ERROR0"
		}
		}
		}
Parameter	Unix	The time of publication, formatted as a millisecond level UNIX timestamp (milliseconds
		since 1970)
	Version	Protocol version number, the current protocol version is fixed to "V1.0".
	Write_data	Root node.
	device 1, device 2	The name of the added device in data publishing.
	Instruction	If the instruction name is followed by "[]", it indicates that the instruction is batch added,
	key value	and "[2]" is offset, referring to the third production data
	pairs	Execution result: OK: Execution succeeded
		ERROR0: Write value failed
		ERROR1: The instruction was not found
		ERROR2: Other errors

# Obtained data

Т	Title	ID+PWD/access_data
Payloa	d instance	{
		"Unix": "1614576888000",
		"Version": "V1.0",
		"Content": "savedata"
		}
Parameter	Unix	The time of publication, formatted as a millisecond level UNIX timestamp (milliseconds
		since 1970)
	Version	Protocol version number, the current protocol version is fixed to "V1.0".
	Content	"savedata": data of saving traffic mode
		"alldata": all the data
		"systemdata": system data

Note: After subscribing to messages on the TS series IoT HMI, the returned data is published through "ID+PWD/pub\_dat a".





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