

# 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!)

TS	Select the language to use during the installation.	
	English	~
	OK Cancel	-

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

nse Agreement lease read the following important information before continuing.	6
	1
lease read the following License Agreement. You must accept the terms of this agreement before ontinuing with the installation.	
人机界面编辑工具软件最终用户许可协议	^
重要须知: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	
装、复制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	
和条件的约束。如果您不同意这些条款和条件,请不要安装、复制或使用	
本软件。	
软件产品许可协议	
本"软件产品"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	
护。	~
I accept the agreement	
] I <u>d</u> o not 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 ver	sion 1.0.2.22071	6R —	
Select Destination L	ocation			
Where should Touc	hWin Pro be installed?			
) Setup will in	nstall TouchWin Pro into the following f	older.		
To continue, click N	lext. If you would like to select a differe	nt folder, click Browse.		
C:\Program Files ()	x86)\TouchWin Pro		Brov	vse
At least 728.7 MB o	f free disk space is required.			

(4) Choose whether to add shortcuts.

Setup - TouchWin Pro version 1.0.2.220716R 🛛 🗕 🔀
Select Additional Tasks Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing TouchWin Pro, then click Next.
Additional shortcuts:
Create a gesktop shortcut
Back Next Cancel

(5) Click Install to finish the installation.

Setup is nov	all v ready to begin	installing Touc	hWin Pro on you	ur computer.		7
Click Install	to continue with	the installation	, or click Back if	you want to rev	ew or change ar	y settings.
Destination						^
C:\Pro	gram Files (x86)	)\TouchWin Pro				
Additional	asks:					
	nal shortcuts:					
Crea	te a desktop she	ortcut				
						~
<						>



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  $\frac{1}{2}$  wait for special characters.

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

1. Find out "unins000.exe" <sup>13</sup> 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.

✓ ➡ TS3 Series	
<ul> <li>TS3-400-M(4*, 480 x 272)</li> <li>TS3-400-E(4*, 480 x 272)</li> <li>TS3-700-M(7*, 800 x 480)</li> <li>TS3-700-F(7*, 800 x 480)</li> <li>TS3-700-M(7*, 800 x 480)</li> <li>TS3-1000-M(10*, 1024 x 600)</li> <li>TS3-1000-E(10*, 1024 x 600)</li> <li>TS3-1000-M3(10*, 1024 x 600)</li> <li>TS3-1200-M(12*, 1024 x 768)</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) 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

Ts									×
75		COM1 COM2 Net0	信提 信捷 西门子 Modbus_通用 三菱 <mark>台达</mark> 基恩士 产电 丰炜 欧姆龙 汇川 永宏 松下 AB 光洋					<b>₩</b>	×
	75	COM1 COM2 Net0	信捷 XC系列 Eq 信捷 XD/XL/XG系列 ( Modbus RT Eq Seri Int	quipm uipm al com terfac Baud	Comm formation 個證 XC系列 備證 XC系列 munication informatio RS232 19200 v Parity check v	n Data bit Stop bit	ngs 8		
			New equipment Serial Equipment name Equipm 0 本地设备 本地		n 120 -	ters Retry count Interval time Maximum	3 0 120	• Confirm	

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.

75		
COM1	西门子	
COM2	信捷	
Net0	西门子 Modbus_通用	
	三菱	
	台达基恩士	
	产电	
	丰炜	
	欧姆龙	
	永宏	
	松下 AB	
	光洋	

75						Com	munication setti	ings	×
	COM1 COM2	信捷	(D/XL/XG系列(Mo		Essential infor		( Modbus TCP )		
	Net0	日定人	U/XL/XG系列(Mid	babus (CP)			( Modbus TCP )		
					Network port	communication	information		
					space 19	92 . 168 .	7	-	
					50.			1	
					Timeout and p Communicat	backaging paran	Retry count	2	
					Delay time		Interval time	JU 642	
					Maximum	120		120	÷
		New	equipment		Communic	ation status regi	ster		
		Serial	Equipment name	Equipment	PSW	100			
		0	本地设备	本地设备	Do n	ot export comm	unication status i	nformatio	
					Communic	ation shield add	ress		
					PSB				
					Do n	ot use communi	cation mask add	ress	
						-			
					Advanced				Confirm

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)

75		×
COM1 COM2 Net0	信捷 信捷 XD/XL/XG 系列(Modbus TCP) 信捷 XS 系列(CodeSys)	~
		tion D
	Previous Ok Cancel He	elp

- 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 key 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.

		12	ley	
asic proper	tie Appearance	Function bin	di Security settin	Position
Control	ID BTO			
Describe	e			
Write add	dress			
Equipm	信捷 XD/XL/XG	i系列(Modb	us RTU )	✓ Set up
Address	Y	~ (	) 1	
		I	ndirect designatic	on
Action				

Text: enter reverse Y0.

		Кеу	/		
Basic properti	Appearance	Function bindi	Security set	tin: Position	]
		5	🗸 Use pictu	res	
			Status	0	~
reverse Y0			Name	button_05_a	
			Categor	rsvg	
			Dimensi	80 × 42	
Ch	ange appeara	2000		M	ore
Fill	ange appears	ince		111	010
	Solid colo				
Fill pattern	Solid colo	r Y	Fill color	r	~
State 0		<ul> <li>✓ Display</li> </ul>	Арр	ly fonts to each	1
• Text	O Multilin				
		reverse	Y0		

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.

Basic proper	tie Appearance	Security se	ettin <sub>!</sub> F	Position		
Control Describe						
Read add	ress					
Equipm	信捷 XD/XL/XG	系列(Mod	lbus RTU	)	~	Set up
Address	Y	~	0		1	
			Indirect	designa	ation	
logic						
Po	ositive logic		O N	egative	logic	
- 🗌 twinkl	e					
۰ ا	n status flashes		0	ff <mark>s</mark> tatus	flashes	;
			cy 0.	1秒		

#### Appearance

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

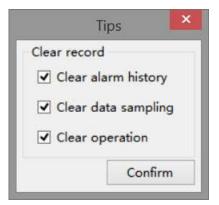


#### 2-3. Offline simulator

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	configuration	×
Device Port No.	Local port No.	Config result	
COM2			
		>>>>	
		~~~~	
	Dette		Castle a
	Dete	ermine Cancel App	olication

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 of	configuration	×		Comm port o	configuration	×
COM1 COM2 1	Local port No.	Config result		Device Port No.	Local port No.	Config result (COM1, COM4) 4 ~~~~	
	Dete	ermine Cancel Appli	cation		Dete	rmine Cancel Applicat	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 following 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.

	Tips	×
Clear recor	d	
Clear a	larm history	
Clear d	lata sampling	,
Clear o	peration	
	Confirm	,

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



OFF status

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".

1

Click the menu File/download or the download icon to show the	Click the men	ı File/download	l or the download	con Download	to show the following window.
---------------------------------------------------------------	---------------	-----------------	-------------------	--------------	-------------------------------

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

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 se	ttings	
Connection	USB	
	USB	Communic

**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	~
O 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	IP	DevID	Model
Hmi	172.31.0.55	417-036-024-7885-1350	TS3-700-E
Hmi	172.31.0.1	314-127-180-D7AF-7974	TS5L-1500-E
Hmi	172.31.1.223	023-255-053-562C-5941	TS5L-700-E
Hmi	172.31.0.136	409-009-238-FBBA-7365	TS5L-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 Remote	~
Device ID 110191008F9187089	~
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.

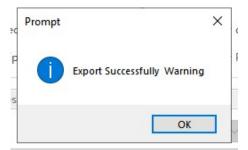
The operation steps are as follows:

- 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		

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.

し 重更新	选择更新文件
更新Hmi工程	Show: *.dat  Favorites  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)	)	x
Communication settings			
Connection LAN	~		
Device IP discovery	~		
O Device ID lookup	~		
Scan	IP Communic		
Upload Download			-1
Downloa	Ø		
☑ Allow project upload	✔ Upload pa 1111	11	
User defined boot scre	ee∏ Use the default boot s	creen	
Synchronize PC time	🗌 Hide menu system	Enable installment	
✓ Clear alarm record	Clear operation	✓ Clear data acquisition	
<ul> <li>Overwrite recipe data</li> </ul>	<ul> <li>Download fonts to</li> </ul>	☑ Clear PFW/SPFW data	
	1		
Download Upload		Close	

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 settings	Download (PC - > HMI)		
Connection USB	~	1	
Connection 03B		n er	ntry
		• x	:
USB刷新	f Communi	^	1
Upload and download			
Download password	۲		
Allow project upload	✓ Upload p 11111	١.	
	Browse For Folder		×
User defined boot scree	n 请选择文件夹		
	A 😹 TXB	^	
Synchronize PC time	android		
Clear alarm record	.ms-ad		
	Contacts		
<ul> <li>Overwrite recipe data</li> </ul>	Desktop     D		
	Documents save the upload file		
	Downloads		
	Favorites      Intel		
	Vinks	~	-
	Make New Folder OK Car	icel	
			-

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)

请输入密码		x
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.

连接方式	USB	~		
		1 I <u>1</u>		
	USB刷新	通信测试	连接成功!	
上传下载				
☑ 下载密码	123456	۲		
☑ 允许工程上	传 🗹	上传密码 123456		]
		1		
	1740			
□ 用户自定义	升机画面			
□ 同步PC时间	目至HMI □	隐藏系统菜单	□ 启用分期付	款
☑ 清除报警证	录 🗹	清除操作记录	☑ 清除数据采	集记录
2 亜美配合料	堀 2	下载字体至HMI	☑ 法险DE\A/#	対早
192 He m Hu/J \$	ua El	T-RETURE INVI		
文件正在上传	请稍候			
文件上传成功				
1				
Tto	1.1+-		i	2027
下载	上传			关闭

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.

+

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(RS232/RS485)</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     direction

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 information
Net0	Xinje XC RTU	Device Xinje XD RTU
		Equipm Xinje XD RTU
	Xinje XD RTU	Serial communication information
		Interfac RS232
		Baud 19200 V Data bit 8
		Check Parity check ~ Stop bit 1
		Station 1
		Timeout and packaging parameters Communicat 1000 Retry count 3
	New equipment	0
	No. Device name Equ	Maximum 120 🗣 Maximum 120
	0 Local Device Loca	Advanced
	the second se	Previous Ok Cancel He

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.

1	75		0					× I
	COM1	Xinje	Communicat	ion s	ettings			
	Net0	Xinje XD TCP	Essential in Device	-				
		Xinje XS CodeSys			e XS CodeSys			
		Xinje CAD	Equipm	Xinj	e XS CodeSys			
				ort o	communication in	formation		
			IP space	192	2.168.6	, 6		
			End	484	0	Station	1	
			Timeout a	nd pa	ackaging parame	ters		
			Commun	icat	1500	Retry count	3	
		New equipment	Delay t	me	0	Interval time	0	
			Maximu	m	120 🜻	Maximum	120	
			Comm	unica	tion status regist	er		
		0 Local Device	PS	w	100			
			C	o no	t export commur	ication status in	nformatio	
			Comm	unica	ition shield addre	55		
			PS	в	100			
			C	o no	t use communica	tion mask addr	ess	
			-					
		/	Advance	3	i			Confi
			Advance	a	3 80.		- 24 - 22	Conti
			Previo	us	Ok	Cancel	ŀ	lelp
L								

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).

COM1	Xinje
Net0	Xinje XD TCP
	Xinje XS CodeSys
	Xinje CAD
	Local IP x
	O Automatically obtain IP
	Use custom IP address
	IP address 192 . 168 . 6 . 2
	Subnet 255 . 255 . 255 . 0
	No. Default Gateway 192 . 168 . 6 . 1 rt type Communication Stati
	DNS 0.0.0 PCUA 192.168.6.6 : 4840 1
	Ok Cancel

- 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
La 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	配置结界	Ę	
COM1	COM4	>>>>		
	确 <sup>2</sup>	取消	<u>h</u>	用

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		? ×	通讯口配置		? ×
设备端口号	本机端口号	配置结果	设备端口号	本机端口号	配置结果
COM1	COM4				(COM1,COM4)
1	2	>>>>			
		3			
		~~~~			~~~~
	确定	1 取消 应用		确定	取消应用

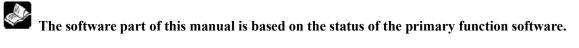
Device port	Select the HMI port number, which is the COM port selected when creating a new project or
number	adding a device. This can be viewed by clicking on "File/System Settings - Device".
Local port	Select the port number for connecting the PLC to the computer, which can be viewed through
number	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
		1. 山王王王王王王王			
object a	Outp	out window	S	tatus bar	
Project area	1	acia anaratia	ne cuch as ara	ating deleting com	ying and cutting pictures and
rioject area		-		ocks and libraries	and county pictures and
Menu bar				rt, Mapping, Tool, Vie	ew, Help
Tools bar		on tools, incl	-		tting, searching, downloading,
Screen tools bar				-	the screen editing, including
	-		width, equal he	ight, combination, etc	
Screen editing	Project screen	n editing area			
area					
Function area	1 1	switching of	function window	v can be freely set, i	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:

	Engineering tree	口 A A A A A A A A A A A A A A A A A A A
	Page properti	es
Page info Page		1
1075) Alam	Page2	
Page	2	
Page backgro	· ·	
Picture si	ze	
Width	\$00	
Height	480	
Overlay v	vindow	
Top floor	无	~
Bottom	无	~
Screen pe	ermission	
Required	user per 权限1	*
Switch	to the permission range whe	n the screen / window is clos
	权限2	~

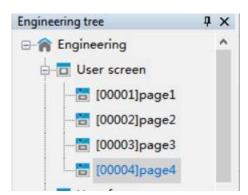
Page name	Customize the name of this screen	
Page no.	Set the number of the screen, which is incremented by default. After clicking "OK", the screen	
	number cannot be changed	
Page	Set the background color of the project screen	
background		
Picture size	Set the width and height of the screen. If it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

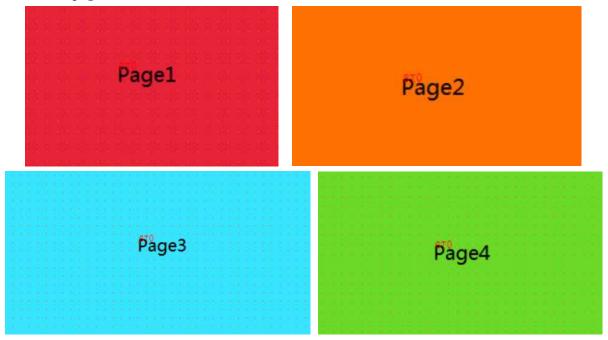
When the screen properties needs to be modified, select "Project Area/Object Screen Number", double-click the mouse left button directly, or click the mouse right button to select "properties".

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

(1) Add 4 screens



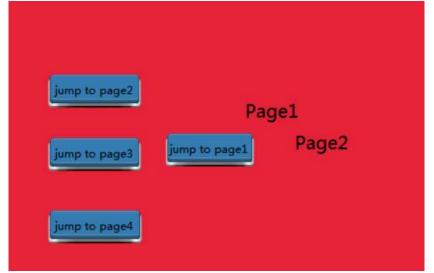
The four pages are shown as below:



(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 properties	×	
Page info Page	Prmation Page1		
Page	1		
Page backgro			
Picture si	ze		
Width	800		
Height	480		
Overlay v	vindow		
Top floor	[00002]Page2	~	Page1
Bottom	无	~	Page1 Page2
Screen p	ermission		Page2
Required	user per 无	~	전 이 명기는 것 같아요. 독신 이 명기는 것 같
Switch	n to the permission range when the s	creen / window is clos	
			in a share an in a she and a same

(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.

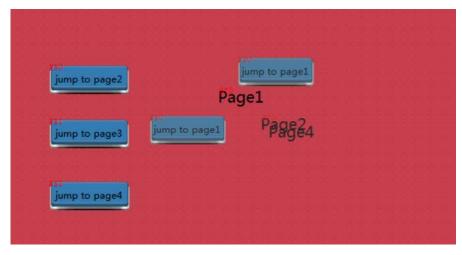
If you click the function key of "Jump to page 1" on page 3/4, the superimposed page 1 will be displayed.

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.

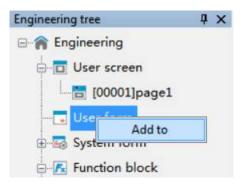
If the top layer and bottom layer are set at the same time, the superposition order of screen elements

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 p	properties	
Page info	ormation		
Page	Forms5001		14
Page	5001	Used as keyboa	rd display
Page backgro	<b>~</b>		
Picture si	ze		
Width	800		
Height	480		
Overlay v	vindow		
Top floor	无		~
Bottom	无		~
Pop up w In the Show i	middle of the screen	'n	
Required	ermission user per 无 1 to the permission rai	nge when the screen /	v window is clo
		Determine	Cancel

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	

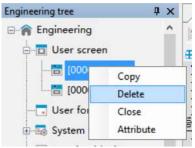
#### 3-2-2. Copy paste

- 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	ųΧ	[0			
Engineering			Engineering tree	д	x
User screen		<b>#</b>	⊡- <b>A</b> Engineering		^
User form	Сору		User scree		
i i i i i i i i i i i i i i i i i i i	Delete		[00001	Add to	
🕀 🔜 System form	Close			Paste	
E Function bloc	Attribute	i		gez	

### 3-2-3. Delete

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



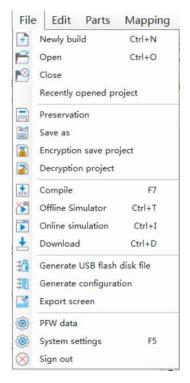
The operations of adding, copying, pasting and deleting "user window and function block" are the same as above.

#### 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.

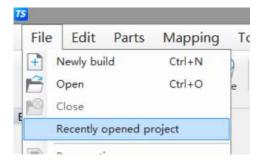
	Friendly tips
	The project has been modified. Do you want to save it
	Yes No Cancel
Yes	Save the project. Then exit project editing
No	Do not save. Then exit project editing

#### 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 Preservation. 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

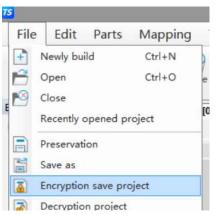
This operation is different from Save. Save uses a new file to replace the old one based on the original project. Save As saves the current project as a new project. After the Save dialog box pops up, select the storage path, enter the file name, and click Save.

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

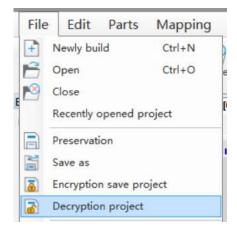


(5) The encrypted file can only be opened for decryption, download, online simulation, offline simulation, compilation and other operations, and the project content cannot be modified in any way.

#### 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.

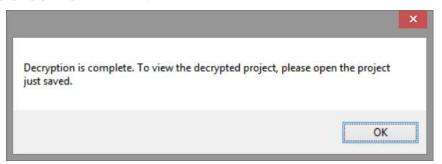


(2) Enter the password set during encryption and click OK.

请输入密闭	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
	Compile	e window25014 e window25900 er of compiled resource files:32
Compiling	Compil	ation succeeded. • Owarning • ONews

#### 10. Offline simulation

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 offline Simulator 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.

日本月刊北北 合位		×
<u>∎</u>	(111)11111 ← → → ↑ ■, 此电脑 >	、 C 在 此电脑 中搜索 の
	組织 ▼	8: * 0
- ' <u>Mak</u>	→ 🏊 WPS网盘 🗸 文件夹 (6)	-
导出U盘文件	※ ● 此电脑	國片
导出U 盘选项 导出文件路径	→ 2 祝娘 ···· → 西片	「数
	□ 文档 □ □ 音乐	
₽ x	> 坐 № > ④ 音乐 > 公 设备和驱动器	(5)
	文件名(N):	~
1 -	保存类型①: dat文件 (*.dat)	~
012 9-	▲ 隐藏文件夹	保存⑤ 取消

②After 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 succee	ded
	ОК

(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.

し盘更新	选择更新文件
	Show: *.dat Favorites V 💽
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

(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

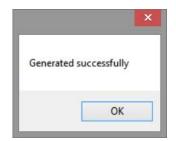
The SCADA generation let the computer replaces the HMI and communicates directly with PLC and other external communication devices. The difference between its function and the online simulation function is: when the online simulation function is implemented, the user needs to install TouchWin Pro editing 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 ✓ Clear alarm record	<ul> <li>Clear operation record</li> </ul>	<ul> <li>Clear data acquisition</li> </ul>	
<ul> <li>Overwrite recipe data</li> </ul>	✓ Clear PFW/SPFW data	Enable installment	
file name scada test			
保存路径 C:\Users\TXB\	Desktop		
		Export	

(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
121	SCADA.exe

C:\Users\xinje\Desktop\组态.exe			- 0 )
· 通讯口 设备端口号		- ロ × 配置结果	
	СОМ11	(COM1,COM4)	
「保存費記	5		



#### 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:

	E	xport screen		×
Export Type	• Picture		O PDF	
Storage location				
Format Selectio n	PNG v			
Width	800	Height	480	-
Export				
i □ Sj	ages ser screen ystem picture ystem form			
				Export

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	ļ		x
PFW	Start	0	End	29999999	
	FW[2999999]				
	8 - <u></u>	_			
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

	<b>0</b>	PFW data 🦳 🗆									
		+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
	PFW[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] PFW[00000640]	0	0	0	0	0	0	0	0	0	0
	PFW[00000650]	0	0	0	0	0	0	0	0	0	0
	PFW[000000660]	0	0	0	0	0	0	0	0	0	0
	PFW[00000670]	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[000000700]	0	0	0	0	0	0	0	0	0	0
	PFW[000000710]	0	0	0	0	0	0	0	0	0	0
	PFW[000000720] PFW[000000730]	0	0	0	0	0	-	-	0	0	0
	PFW[000000740]	0	0	0	0	0	0	0	0	0	0
	Display format Decimal syste He ta display in decin	o cadecima mal fo	0 Set 0	0 Set FF	-		0	0	0	-	
Hex: data di	Display format Display format Decimal syst Here ta display in decin splay in hex form	adecime nal fo at	set 0	0 Set FF	-	0	0	0	0	0	0
Hex: data di	Display format Decimal syste He ta display in decin	adecime nal fo at	set 0	0 Set FF	-	0	0	0	0	0	0
Hex: data di Set 0: set all	Display format Display format Decimal syst Here ta display in decin splay in hex form	adecime mal fo at g segr	set 0	o Set FF to 0	0	0	0	0	0	0	0
Hex: data di Set 0: set all Set FF: Set	Display format Decimal systs He ta display in decin splay in hex form data in the setting	adecime mal fo at g segr ting s	set 0	o Set FF to 0	0	0	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.

Paramete Monitor Interacti	User righ Clo	ck Fauipme Engineer	
	in ober high jele		
[Screen]			
Startup 6		~	
screen			
[Screen saver]			
Waiting time 1	~	Minute	
O Display		~	
Turn off the backlight	t		
[Mouse cursor]			
✓ Hide mouse cursor	Mouse	20X20(黑) V	
	cursor size	20/20()	
[Sound]			

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		×
Paramete Monitor Interactiv User righ	Clock Equipme Engineer		
[Model] Mo del TS5-700-E v	<ul> <li>Horizontal - normal</li> <li>Vertical - rotate 90</li> </ul>	<ul> <li>Horizontal - rotate 180 de</li> <li>Vertical - rotate 90 degre</li> </ul>	
[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/RS422			
Ethernet : 1			
SD卡:无			~
[Zoom mode]			
Constant     Constant     Constant	Î.		
○ Small ○ Large proportion			
Component width and height unchan	nged		
Parameter			
	D	etermine Cancel Ap	plication

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 ad						
	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:

				Sys	stem settings 🛛 🐱
aramete N	Monitor Int	teractiv User	righ	Clock Eq	uipmeiEngineer
Cont	rol picture	exchange			
Equip	本地设备			~	Set
Addre	PSW	4	0	0	
Data	Word 🗸	Unsignec \vee		signation	
type			ct ues	signation	
🗌 Repo	ort current 本地设备	screen numl	per	~	Set
Addre	PSW	~	0	0	
Data	Word $\lor$	Unsignec 🗸			
type			ct des	signation	

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.

		Syste	m settings			×
Paramete M	Ionitor Interactiv Us	er right Clock Equip	me Engineer			
Number	User name	Default password	Us	er rights	Flag bit	1
0 ad	lmin	666666	管理员			
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
						- 11
	Delet	e A	dd to	modify		- 11
						- 11
			E	Determine Can	cel Application	n

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		- I have	
name	User1	Password 123456	
elect all	Scope of authority	Describe	
~	权限1	权限1	
~	权限2	权限2	
<ul><li>✓</li></ul>			
	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		
	权限27		
	权限28		
	权限29		
	权限30		

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:

	Function key	
unction Appearance Securit	ty set Location	
Control ID FB0		
Description		
Action Press Status	~	
Start		
Functions		Optional functions
调用窗口[25001]		设置线圈
	Add	设置数据
	-	四则运算 数据传输
	Delete	
		调用窗口
-	Call window	关闭窗口
Basic Attributes Security settin		CSV CSV
Switch [25001]Us		 配方
		10/5
○ Рор up		调用
		FTED
Pop up the password	window automatically. (If th	ne target
Deter	rmine Cancel A	pplication

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).

▲ 用户登录	×	▲ 用户登录		0	×
USEF 用户名 User1	0	user 用户名 [	User1	<u>0</u>	
passwo <b>례</b> 碼		password			
login successful 音录成功 音录	赶出	logout successful 注情成功	登录	IEB	
登录成功 登录 login	logout	5T336060	login	logout	

(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

	Indicator button	>
Basic prope Appearance F	unction bi Security set Position	
Operation confirmation	on delay	
Confirmation bef	ore	
🗌 Key delay		
Display control		
🗌 Enable		
Enable control		
– User rights		
	vill be cancelled after the operation is completed	
	as no permission range, a prompt window will pop up	
Hide the compo	nent when the user has no permission range	
Required user	权限2 🗸	
	Determine	Cancel

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

权限提示	Ŧ			×
	<b>揭作纲</b> 显	直修	吸没有此权限	
	1米11-400	910), 70	WX HIMIXIK	
	用户登录		确定	
	ser 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
Disable clock setting	
Clock source	
HMI internal	
○ Peripheral	
Write HMI clock to external device	
Write mode 连续 ~	
Clock display format	
Decimal system	
Number of o	
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		
	O HMI internal Clock display format		
	Peripheral     Decimal system      Hexadecimal		
	Addr		
	ess PSW0		
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.		

	<ul> <li>✓ Write clock to periphe</li> <li>Write mode</li> <li>Read</li> <li>PSB0</li> <li>✓ Write clock to periphe</li> <li>Write mode</li> <li>Cycle</li> <li>Cycle</li> </ul>	✓ Mode Rising edge ✓ Tral ✓ 0.1 secor ✓ ✓ Pagister DSW0		
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 devices can also be set here. The number of rows corresponding to the number set here will appear in			
	the table below, and the first address 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 th	e 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 Net0		信捷 XC系列				
		信捷 XD/XL/X(	, re <del>s</del> t		, ,	
Serial	Equipment name	New equipm Equipment type	Port	Port type	Communication	Station
0	本地设备 信捷 XD/XL/XG系列	本地设备 信捷 XD/XL/XG	- 1	- RS232	- 19200,8,偶校验,1	0

New equipment	Add different device types. Select 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 located is automatically generated by the system, no need to set		
Port type	The interface type selected when creating a new device is generally RS232, RS485, RS422 or Net		
Communication	When it is on the serial port, the baud rate, data bit, parity mode, stop bit and other parameters		
protocol	are displayed here.		
	When it is on the Ethernet port, the IP address and port number of the device are displayed		
	here. Double click to modify the parameters.		
	Communication settings       Communication settings         Essential information       Essential information         Equip (請求 XD/XL/XG茶利 ( Modbus RTU )         Serial communication information         Interfa R5232         Baud 19200 ×       Data bit 8 ×         Check Parity check ×       Stop bit 1         Timeout and packaging parameters         Communi 1000       Retry 3         Delay 0       Interval 0         Delay 0       Interval 0         Maximum 120       Maximum 120         PSW 100       Do not export communication status i         Communication shelid address       PSB 100         Do not use communication mask addr       Advanced		
~ .			
Station no.	Device station number. When multiple devices are added to the same serial port, the station		
	number cannot be duplicate		

#### 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	×
Paramete M	onitor 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:

Ed	it Pa	arts	Mappin								
	Сору		Ctrl+C								
×	Shear	2	Ctrl+X								
ŵ	Paste		Ctrl+V								
	Delete	e	Del								
€	Revok	œ	Ctrl+Z								
<₽	Recov	very	Ctrl+Y								
0	Looku	ıp	Ctrl+F		<₽		X	Ē	Ū	0	
	Font s	ubsti	tution	Revoke	Recovery	Сору	Shear	Paste	Delete	Lookup	
Сору	S	Select	the target of	component	and copy th	e compo	onent. T	The diff	erence be	tween the	cutting
	c	operat	ion and the c	utting opera	tion is that th	ne origin	al comp	onent n	o longer e	xists, but a	after the
	с	copy c	peration, the	original con	nponent still e	exists. Th	ne shortc	ut key i	s Ctrl+C		
Cut	S	Select	the target obj	iect cut it to	the clipboard	1 shoreu	t keys C	trl+X			

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 a	nd replace	×			Find and re	eplace	×
(	Lookup	🔘 Replace			🔿 Lookup		Repla	ce
– Lookup Search range	全部	~		Lookup Search range	全部		~	
Equipme	Bit address	O Word		Equipme	Bit address			
nt	本地设备	× 🗌 🤅	System register	nt	本地设备			System register
Address type	PSB 🗸		Custom label	Address type	PSB	~		Custom label
Exten	0			Exten	0			
Format (ra	ange) : DDDD[范围 : 0 - 9999]			Format (r	ange) : DDDD[范围	围:0 - 9999]		
Replace Equipme nt Address type Address Format (ri	本地设备 PSB V 0 2 ange):DDDD[Extent:0-9999] Lookup		System register Custom label Replace all	▶ 窗□:1	D 0 ange):DDDD[Exte	num	dress	Y System register Custom label Pplace Replace all 排助 \$8:0
		Determine Cancel	Application			De	termine C	ancel Application

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:

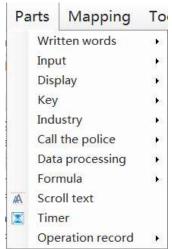
	Find and r	replace		Find and replace
(	🔿 Lookup	• Replace	🔿 Lookup	Replace
Lookup Search range	全部 <ul> <li>Bit address</li> </ul>	✓ ○ Word	Lookup Search range ④ Bit address	✓ ○ Word
Equipme nt	本地设备	✓ Usid	Equipme nt 本地设备	✓ 🖓 🖓 🗸 🗸 🗸 🗸 🗸 🗸 🗸
Address type	PSB ¥	Custom label	Address type	✓ Custom label
✓ Exten	0 🗘 ~	0	✓ Exten 0	÷ ~ 0
Format (ra	ange) : DDDD[范围 : 0 - 9999]		Format (range) : DDDD[范围 :	0 - 9999]
Replace Equipme	本地设备	🗸 🗌 System register	Replace Equipme 本地设备	✓ □ System register
	本地设备 PSB v	<ul> <li>✓ □ System register</li> <li>□ Custom label</li> </ul>	E and a second se	✓ System register     ✓ Custom label
Equipme nt Address	本地皮留 PSB ✓		Equipme nt Address	✓ Custom label
Equipme nt Address type Address	中地设督 PSB v	Custom label	Equipme nt Address type	✓ Custom label

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  $a \sim b$  and the replacement target is c, the replacement result is  $a \sim b$  replaced by c. For example, if the search range is set to  $0x0 \sim 0x10$  and the replacement addresses is 1x0, then all  $0x0 \sim 0x10$  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.

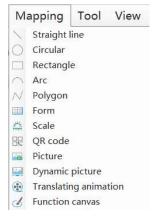
#### 3-3-3. Parts

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.

Tool		View	Help
	Ad	dress tag	library
•	Ad	vanced fe	ature settings
民	Hir	e purchas	e
6	Pre	ferences	
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	Add	d to Delete I	Delete all Copy	Import e	export				
	Label name	Equipment	Station	Address type	Address	Data type	Reading and	Power off	Function	
	用户权限	本地设备	0	SPSB	0	Bit	ReadOnly	False	工程默认值	
	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	工程默认值	
	存储空间	本地设备	0	SPSB	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	
	下载后第	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	False	工程默认值	
	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	工程默认值	
	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	工程默认值	
	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	
	MQTT服	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   Ouery method: Press picture slash window	Addres	
	Dopy Import export	
Label name Equipment Station Address ty	pe 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					
	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	Select whether the address is a bit address or a word address				
	Description	Set description information for the current address tag, which is optional				
	Equipment	Select the device where the address is located. You can select the local device or				
	the new device for the communication port					
	Address         Set the address corresponding to the current label					
	Data type	Set the data type of the current address				
Delete	Delete the speci	fied address label				
Delete all	Delete all added address labels					
Сору	Copy the specif	ied address label				
Paste	This item will b	e displayed only when there is copied content. It is used to paste the copied				
	address label at	the specified location				
Import	Import the addre	ess table in CSV format of the path specified by the computer into HMI				
Export	Export the curre	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
1	Part
	✓ Show Component ID ✓ Display part address
	Text size 8 V Number of display 3 V
	Text color Show Snap Lines
	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:
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

#### ■ 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
<b>D</b> ! 1 ! 1	
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
•	•			•		•	
						•	

#### Backup

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

play	Grid	backups	memory	
ximum tempo	ran	15 (T	his item cannot take	e effect until t
Enable sched	ule <mark>d b</mark> ackı	ips ackup		
heduled backı	Jp 5	🗘 Minu	1	
			1	
				Applicatio

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

He	elp	
1	About	
2	Help	

About	Version descri	ption and copyright description of HMI editing software
	75	Editing tools for HMI 🛛 🗖 🗾 🔀
	- HMI editin	ig tool
	TS	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.

+	B		1	◆	¢	h	X	Ê	III		*		<b>*</b>	\$	0	2	<b>1</b>	<b>Z</b>
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

¢	When the screen editing area is enlarged or reduced, the default size can be restored by
Full size display	pressing this key
F	Set the display font and size of the specified object
S 0 -	Select different states for multi state controls such as indicators, dynamic text strings, multi
	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.

#### 

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

<del>d</del>	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
Ŧ	Move down one unit, where one unit is the vertical spacing of the grid in the preferences
→	Move right one unit, where one unit is the vertical spacing of the grid in the preferences
<b> </b>	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
<b>2</b>	Combination
<u>r</u>	Ungroup
+[]+	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
Ø	Move the specified part to the top
8	Move the specified part to the bottom
đ	Move the specified part to the previous layer
<b></b>	Move the specified part to the next layer
***	Rectangle arrangement, multiple selected components are arranged according to the set
	rectangle
9-53	Point arrangement
	Rectangle linear arrangement
0	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:

9 745		NAS MAS I									ry		-		
	Attribute	2		В	0	tte	or	n s	se	ett	in	g			
	Arrangement	Ø	1	Т	0	pp	Dir	ng							
æ	Locking				+				-		į,	+			+
	Delete	Del		1 I 		-	ă.	10	19		- 21			1	4
	Сору	Ctrl+C	154			1		Vi	NG)		1			7	
š	Shear	Ctrl+X	1		+			•	+		ť.	Ť.	-		+
	Component co		1546			1	5	Vie Vie	19		- 7	1		1	
	Batch copy				* +			-			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	Preview	4	×		
Patter	Word	×		Outline	ąχ
Equip	Equip 信捷 XD/XL/XG系列(\		Outline		×
Statio	1				£ 💿
Addre	D	~	Ĩ	[00001]页面1	
Addre	Addre 0			[指示灯按键]-LB0	£ 💿
	012345	67	~	[指示灯按键]-LB1	<b>f</b> 💿
000000	00			[指示灯按键]-LB2	<b>f</b> ()
000000				[指示灯按键]-LB3	<del>d</del> 💿
000000				[指示灯按键]-LB4	f 💿
000000	7.6			[指示灯按键]-LB5	<b>f</b> •
000000	50			[指示灯按键]-LB6	f 💿
000000				[指示灯按键]-LB7	rf 💿
000000	70				treat .

#### 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	<b>→</b> # X
Output window Output ErrorILisi	
Output window	• ‡ ×
Output window Output ErrorIList	
Error A warning 1 News	
Cate Explain	

#### 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: TS5-700-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 🕘 \ominus 📗

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

## 3-10. System setting

#### 3-10-1. Parameter

Parameter	Monitor	Interaction User perm	ni Clock	Device	Printer	Project				
[Screen]	-									
Start	· INNAL	1]Page <mark>1</mark>		~						
scree	n Ľ			10						
- [Screen Waiti										
time	No S	creensaver 🗸 🗸								
O Displ	ay			$\sim$						
Close	backlight									
[Mouse										
⊡ Hide		Mouse cursor size	X20 (black)	4						
10		cursor size								
[Sound]										
⊡ lurn	Turn off the buzzer									
[control	display]									
🗌 Refre	sh before	communication								
[Unicod	e font]									
Use o	ustom text	t								
Pe court	ul. After ch	ecking use custom font	- Multiple for	ete disalari a	on he colori	ad in Chinese e	-			
Be caret	ui: After ch	lecking use custom font	s, iviuitiple to	nts display c	an de select	ed in Chinese c	ontro			

Screen	Enter the startup screen number, which is the screen that runs first when the HMI downloads the
Streen	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.

Resolving power : 1024 x 768 COM1 : RS232/RS485 Network interface:1	rameter M	lonitor	Interaction	User permi	Clock	Device	Printer	Proje	ect
Mo       PC-1024x768 <ul> <li>Wertical - normal</li> <li>Horizontal - rotate 180°</li> <li>Vertical - rotate 90°</li> <li>Vertical - rotate 90°</li> <li>Vertical - rotate 90°</li> </ul> [Description]       HMI model : PC-1024x768           Resolving power : 1024 x 768           COM1 : RS232/RS485           Network interface:1           [Zoom mode]           Image: Size         Equal proportion           Image: Size         Equal proportion           Component width and height unchanged	[Model]								
del       PC-1024x768         (Description)         HMI model : PC-1024x768         Resolving power : 1024 x 768         COM1 : RS232/RS485         Network interface:1         Zoom mode]         • Size       Equal proportion         • saml       large proportion         Component width and height unchanged				Hor	izontal - no	ormal C	) Horizonta	I - rotate	180°
[Description]         HMI model : PC-1024x768         Resolving power : 1024 x 768         COM1 : RS232/RS485         Network interface:1         [Zoom mode]		)24x768	~	() Var	tical - rotat	- 00° C	Vartical	rotate 00	0
HMI model : PC-1024x768 Resolving power : 1024 x 768 COM1 : RS232/RS485 Network interface:1				O vei	irear rotat	c	/ vertical	rotate 50	
Size     Equal proportion     samll     large proportion Component width and height unchanged	[Description]								
COM1 : RS232/RS485 Network interface:1  [Zoom mode]  ③ Size  ○ Equal proportion ○ samll  ○ large proportion Component width and height unchanged	HMI model	PC-102	4x768						
COM1 : RS232/RS485 Network interface:1  [Zoom mode]  ③ Size  ○ Equal proportion ○ samll  ○ large proportion Component width and height unchanged	Resolving po	ower:10	024 x 768						
[Zoom mode]									
[Zoom mode]	COM1 : RS2	32/RS48	5						
Size     Equal proportion     samll     large proportion Component width and height unchanged	Network inte	erface:1							
Size     Equal proportion     samll     large proportion Component width and height unchanged									
Size     Equal proportion     samll     large proportion Component width and height unchanged									
Size     Equal proportion     samll     large proportion Component width and height unchanged									
Size     Equal proportion     samll     large proportion Component width and height unchanged									
Size     Equal proportion     samll     large proportion Component width and height unchanged									
<ul> <li>samll  large proportion</li> <li>Component width and height unchanged</li> </ul>									
Size     Equal proportion     samll     large proportion Component width and height unchanged									
Size     Equal proportion     samll     large proportion Component width and height unchanged									
Size     Equal proportion     samll     large proportion Component width and height unchanged									
Size     Equal proportion     samll     large proportion Component width and height unchanged									
<ul> <li>samll</li> <li>large proportion</li> <li>Component width and height unchanged</li> </ul>									
Component width and height unchanged	and a constant of the second	Contract 1							
	and a constant of the second	Contract 1	Equal propo	rtion					
	Size	0							
Parameter	<ul> <li>Size</li> <li>samll</li> </ul>	01	arg <mark>e</mark> propoi	rtion					
Parameter	<ul> <li>Size</li> <li>samll</li> </ul>	01	arg <mark>e</mark> propoi	rtion					
Parameter	<ul> <li>Size</li> <li>samll</li> </ul>	01	arg <mark>e</mark> propoi	rtion					
Parameter	<ul> <li>Size</li> <li>samll</li> </ul>	01	arg <mark>e</mark> propoi	rtion					
Parameter	<ul> <li>Size</li> <li>samll</li> </ul>	01	arg <mark>e</mark> propoi	rtion					
Parameter	<ul> <li>Size</li> <li>samll</li> </ul>	01	arg <mark>e</mark> propoi	rtion					
	<ul> <li>Size</li> <li>samll</li> <li>Component</li> </ul>	01	arg <mark>e</mark> propoi	rtion					
Determine Cancel Applicatio	<ul> <li>Size</li> <li>samll</li> <li>Component</li> </ul>	01	arg <mark>e</mark> propoi	rtion					Applicatio

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

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 X					
	Number of I0000 Input range 1-10000 PSW:					
	Number of 3000000 Input range 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.

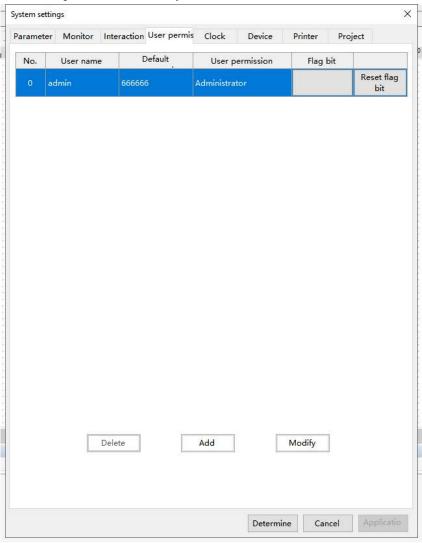
System settir	gs							×
Parameter	Monitor	Interaction	User permi	Clock	Device	Printer	Project	
Contr	ol screen ex	change						
Device	Local Dev	vice			~ Settin	igs		
Address	PSW		~ 0					
Data type	Word	V BCD	V 🗌 Ind	irect				
☑ Repo Device	t the currer	it screen nui	mber		✓ Settin	ıgs		
Address	PSW		~ 0					
Data type	Word	<ul><li>✓ BCD</li></ul>	Ƴ □ Ind	irect				
ontrol screen	Jump to tl	ne screen l	based on the	e current	register va	lue. If the	register va	alue is 10, it indicat
exchange	a jump to	the screen	number 1(	); Use PI	.C register	s to contro	ol screen sv	vitching, and assign

exchange	a jump to the screen number 10; Use PLC registers to control screen switching, and assign					
	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	Page1		
Page No	1 🗘		
Page			
Backgro			
Picture si	ie		
Width	1024 🗘		
11 * 1 -	768 🛟		
Height	/00		
Overlay v	indow		
Top floor	None		~
	interest of		
Bottom	None		~
Screen pe	rmission		
	nission re Permission	1	~
	to the permission r		en (window is sh
jog 3witer			en / window is ch
	Permission	12	~

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	user has no pern	nission range
Hide this compone	nt when the user h	nas no permission	n scope
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:

Function Appearance Security	setting Loca	ition
Control ID FB0		
Description		
Action Press Status		
Action Press Status ~ Functions		
		Optional functions
Call Window [25001]	Add	Set coil
		Set data
	Delete	Arithmetic
	Delete	Data transmission
		Switch screen
	Move up	Call window
		Close the window
all window asic Attributes Security settings		× mport CSV
	1	Export CSV
		pload recipe
) Pop up		vnload recipe
		unction call
] Pop up the password window auto	matically. (If the	e reen printing
Determine Car	ncel Appli	initia I
Determine Car	icei	CHINK .

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.

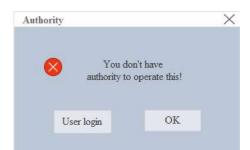
Select the username of User1 from the drop-down list, enter the correct login password 123456, and click the "Login" button to display the login successful (see left figure). At the same time, the password will be cleared. When the login is successful, permissions 1, 2, and 3 will be granted simultaneously; 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).

Luser login X	💄 User login 🛛 📉 🗙
User name user1 O	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:

ic Attribute Appeara	nce Function bind Security setting Location
Operation confirmat	ion delay
Confirm before	
Key delay	
Display control	
Enable	
Enable control	
User permission	
Cancel permission	on after operation
	w pops up when the user has no permission range
Hide this compo	nent when the user has no permission scope
User permission	Permission2

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	
🗌 Disabl	e clock sett	ing					
Clock sou	rce						
HMI in	iternal						
O Periph	eral						
✓ Write d	clock to per	ripheral					
Write	Continuit						
-Clock dis	play forma	t					
		Hexadecimal					
C Decin	an system						
Number	0						
D	evice			Register			
	CVICC			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.
	Write     Trigger     V       Read     PSB0     Mode       Write     clock to peripheral       Write     Cycle
Clock display format	Cycle       100       0.1 sec       Register       PSW0         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
Number of synchronization devices	<ul> <li>be written to the target register in the corresponding format.</li> <li>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</li> </ul>

to D0, D0~D5 will dis occupying 6 register addr		day, hour,	minute,	and second	in sequence
Write clock to periphe Write Continuity Clock display format	~				
Device		Regis	ster		
Device0	-	Setti			
Device1		Settin	ngs		

# 3-10-6. Device

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

rameter	Monitor Interac	tion User permi Clock Device Pr	inter Project
(	COM1	Xinje	~
C	COM2	Xinje XC RTU	
		Xinje XD RTU	
		New equipment	
No.	Device name	Equipment type Port Port type Cor	mmunication Station protocol No.
0	Local Device	Local Device	- 0

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.

	tem settings X
	arameter Monitor Interaction User permi Clock Device Printer Project
	Enable printing   Printer   Printing method   Serial port   model   BRIGHTEK WH-I   Interface   COM1   Baud rate   9600   Check bit   None   Data bit   8 Bit   Stop bit   1 Bit
Printing method	elect the port for connecting the HMI to the printer; You can choose between serial port or USB.
Model	elect the printer brand and model; At present, the USB port only supports the "Brightel
	H-E19" model; The serial port supports two models, "Prind" and " Brightek WH-E19".
Interface	et the COM port for printer connection.
Baud rate	et the baud rate for communication to be consistent with the printer's configuration.
Check bit	et the communication parity bit to be consistent with the printer's configuration
Data bit	et communication data bits to match printer configuration
Stop bit	et 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	
	Control ID PA0	
153	Description	
	Trigger address	
	Device Local Device $\checkmark$ Settings	
179	Address PSB ~ 0	
	ON->OFF V 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.

arameter	Monitor	Interaction	User permi	Clock	Device	Printer	Project	
Name:	Project							
Author:								
Remarks:								

# 4. Components

### 4-1. Drawing

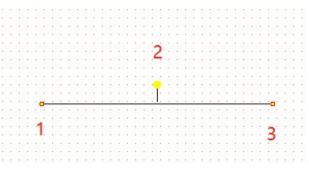
The drawing bar includes line, circle, rectangle, arc, polygon, table, scale, QR code, picture, dynamic picture, translation animation, and function canvas.

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

		Stra	ight line	×
isic propSecu	rity se Position			
Contro	I ID LO			
Descrit	be			
Straight li	ne			
Starting		End		
X:	423	X:	166	
Y:	280	Y:	268	
Arrow	he start arrow	🗌 Dra	w the end arrow	
		Dra     Dra     End a     End w	row	
Draw t		→ Y End a	row	
Draw t Start arro Starting		→ Y End a	row	v.
Draw t Start arro Starting Line		→ Y End a	row	v v
Draw t Start arro Starting Line Type:		→ Y End a	row	<b>v</b> <b>v</b>

Control ID		It is used for system management and cannot be operated by users
Describe		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
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

	Straight line
Basic pror Security se Position	
Display control I Enable When 隐藏 Equip 本地设备	¥ ¥ Set
Addre PSB	✓ 0 0
Enable sta <sup>ON</sup>	✓ ct designation
User rights Hide the compone	ent when the user has no permission range
Required user	权限1 ~
permission range	

Display control	Use bits to control whether to display the part. When the condition is not met, the component		
1 5	will be hidden		
Enable	When checked, display control will be enabled		
When validation	When validation fails, it will hide the component		
fails			
Equipment	Current communication device		
Set	Click "Set" to enter the address setting interface, where you can set system registers and		
	user-defined tags. You can click the address tag 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		
Address	Set the target coil for bit control		
Enable status	Set ON status to be valid or OFF status to be valid		
User rights	Set the component authority level. Set the permission of this component. You need to enter the		
ober fights	password to use this component. When there is no permission for this component, this		
	component 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 prof Security st   Position   X   166   Y   268   (H)     Animation   Lateral movement   Longitudinal movement	
Set the X and Y coordinate values of the line with the upper left point of the screen as the coordinate origin $(0, 0)$	the
	Basic prog Security s( Position       Position       X       166       Y       coord       268       (H)       12

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

Control ID

Describe

	Circular	
Basic propSecurity	e Position	
Control II	co	
Describe		
✓ Line		
Type:		
Color:	· · · · · · · · · · · · · · · · · · ·	
Width:	<b>v</b>	
Transparen		
✓ Fill Fill Gradient Hatch pattern Pattern Transpare	Solid color    Fill color	
s used for s	ystem management component and cannot be o	operated by us
n he used t	o 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	×
Basic pror Security se Position	1
Display control ✓ Enable When 隐藏 ✓ Equip 本地设备 ✓ Set Addre PSB ✓ 0 0 Enable sta ON ✓ ct designation	
User rights I Hide the component when the user has no permission range Required user permission range	

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

asic propSecurity	/ se Position
Control I	D R0
Describe	
Rectangular	angle
Fillet diame	eter: 0
✓ Line	
Type:	v
Color:	×
Width:	
Transparer	nc 100 🌻
Rectangular	area
✓ Fill	
Fill	Solid color V Fill color V
Gradient	从左到右 v End color v
Hatch	
Pattern Pattern	
Transpare	100 🗘 %

Cont	rol ID	It is used for system management component and cannot be operated by users
Des	cribe	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

	Rectangle	
asic pror Security se	Position	
Display contro		
When	隐藏 ~	
Equip	本地设备	✓ Set
Addre	PSB V 0	0
Enable	sta ON v ct designati	on
User rights —		
🗹 Hide the	component when the user has no p	ermission range
Required permission		~

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

sic prop Sector Se	curity se Posi	ition		
Control ID A	0			
Describe				
Arc				
Starting	270	Long side:	86	
Termination	360	Short side	2	
Center				
x :	153			
Υ:	247			
Line				
Туре:				
Color:			×	
Width:			~ ~	
			100	

Co	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 $0^{\circ}$ Start angle $0^{\circ}$
		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	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	0		-11	~	
	Solid color	~	Fill color		
Gradient	从左到右	~	End color	~	
Hatch					
pattern Pattern					
		×			
Transpare			100 🗘 %		
and so the first of		 			

Sector	Select "draw as	sector", and set th	e fill option
Fill	Set the fill color	, fill style, and tra	nsparency of the sector
Pattern	Can be filled wi	th solid colors, gra	adients and patterns
Transparency	Set the transpar	ency of the sector	by sliding the slider (the closer the slider is to the left,
	the lower the tra	insparency percen	tage, and the more transparent the component is)
	Transparency	100%	0%
The set fill st			e 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	d			
✓ Enable				
When	隐藏 >			
Equip	本地设备	~ .	Set	
Addre	PSB v	0		
Enable	sta <sup>r</sup> ON ∨ c	t d <mark>es</mark> ignation		
User rights				
✓ Hide the	component when the us	er has no permissic	on <mark>range</mark>	
Required		~		
	on range			

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

#### Position

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

#### 4-1-5. 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 se Position	Basic propSecurity st Position
Control ID B0 Describe	Control ID B0 Describe
Broken line     Polygon Line	O Broken line
Туре: ———— 🗸	Color:
Color:	Width: V
Width:	Transparenc 100 🚖
	🗵 म्य
Arrow       Image: Organization of the start arrow     Image: Organization of the start arrow	Fill Solid color V Fill color V
	Gradient 从左到右 v End color v
	Hatch pattern
Starting v End v	Pattern V
	Transpare / 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		
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)		
		Transparency 100% 50% 0%		

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

Security setting

Т

	Pol	ygon	
asic pror Security se	Position		
Display control			
When	隐藏 >		
and the second second	本地设备	✓ Set	
Addre	PSB V 0	0	
Enable s	a ON ∨ ct c	lesignation	
User rights			
✓ Hide the c	omponent when the user	has no permission range	
Required permission		Ŷ	

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

F	Form
Basic propSecurity se Position	
Control II TO	
Describe	
Interval Rows : V Contour Colum <sup>3</sup> V Equal width	
Outer frame	
Style V	
Colou	
Grid	
Show row separator	
Style v	Colou
Show column separator	
Style v	Colou
style +	colou
🗌 Fill	
Fill color	
· · · · · · · · · · · · · · · · · · ·	
Line width 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
Interval	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
Outer	Style	Select the style of the outline, including solid line, long dotted line, short dotted line,
frame		and point line
	Color	Set the color of the outer border
Grid	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
Line width		Set the width of table lines

Security setting

ic pror Security se	Position		
Display contro	1		
Enable			
When	隐藏 >		
Equip	本地设备	✓ Set	
Addre	PSB v (	0 0	
Enable	sta ON 🗸 c	t designation	
User rights			
✓ Hide the	component when the us	er has no permission range	
		¥	
Required	on range		
Required permission	_		

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
Bas	sic propSecurity set Position
	Control ID S0
	Describe
5	Style
	Style 水平 ~
	Scale
	Line style V Line width V
	Line color
	Main engraving 10 🖨 Main scale leng 30 🖨
	✓ Sub engravin 1 Sub scale leng 15
	✓ Axis
	Fick marks
	✓ Use
	Integer bi 3 Decimal p0
	Upper lim 100
	Lower lim <sup>0</sup> Register
	Typeface
	Typ 微软雅黑 v 常规 v
	Scale reverse sort
	Determine Cancel Application
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
	$\begin{array}{c} \begin{array}{c} \begin{array}{c} 1 & 0 & 0 & 0 \\ 0 & 10 & 20 & 30 & 40 & 50 & 60 & 70 & 80 & 90 & 100 \\ \end{array} \end{array} \\ \begin{array}{c} \begin{array}{c} 1 & 0 & 0 \\ 0 $
	vertical full circle
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

Set the main scale length

Scale

Main scale length

Sub sca	le Set the sub scale numbers
Sub sca	le Set the sub scale length
length	
Axis	Set whether the axis is displayed
Scale marks	Select it to set the following items
Integer digits	Set the number of integer bits of the scale mark
Decimal digit	Set the number of decimal places of the scale mark
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
Scale Reverse S	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	
asic prop Security se	Position	
- Display contro	[	
✓ Enable		
When	隐藏 >	
Equip	本地设备 v Set	
Addre	PSB ∨ 0 0	
Enable	sta ON v ct designation	
User rights		
<ul> <li>Hide the</li> </ul>	component when the user has no permission range	
Required	user 权限1 V	
permissio		
permissio	and dige	

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 propercurity se Position	
Control ID Q0 Describe	
Type selection • QR code    bar code	
Code selection	
BarcodeType QRCode O UniCode CodingMode AscII	
CalibrationStand L(7%)	
Content O Fixed content   Register assignment	
Equip 本地设备 v Set	
Addre psw v 0 0	
Numb 1 ;tom data type regist	

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       If 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       Image: Common trace of the trace of t	
		PDF417 [It is mainly used for certificate management, report management, etc)	

		Bar code	
	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%) Fixed conte		
		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

asic prop Securi	ty se Position		
Display contro			
Enable			
When	隐藏 >		
Equip	本地设备	✓ Set	
Addre			
Addre	PSB V 0	0	
Enable	sta ON ∨ Ct	designation	
	1999-022		
User rights			
✓ Hide the	component when the use	r has no permission range	
Required	user 权限1	~	
permissio			
Permosi			

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

Picture	
Basic propSecurity se Position	
Control ID G0	
Describe	
Select Custom	
✓ twinkle Flicker fre 0.5 ♀ Second	
✓ Rotate Rotation a0	
Rotation au	
✓ Transparent processing	
Use specified d	
Picture preview	
Determine Cancel Application	

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

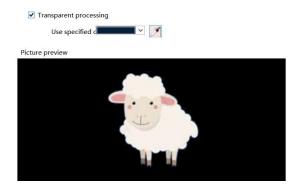


(1) Select gif from the control window to put on the screen

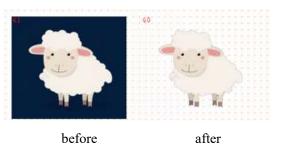
(2) Select the image to be processed from the customized path, click Transparent Processing, use the color picker to select the dark blue of the lamb background for color extraction, or select the same color as the lamb background after using the specified color

	Picture	
Basic propSecurity s	Position	
Control ID	G0	
Describe		
Select	Custom step 1	
twinkle		
🗌 Rotate		
-	ent processing step 2	
Use s	specified c step 3	
Picture preview	1	
	Determine Cancel App	licatior

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



(4) Click OK to display as shown below



Security setting

Transparent processing

	F	Picture	
asic pror Security se	Position		
– Display contro ☑ Enable	1		
When	隐藏		
Equip	本地设备	✓ Set	
Addre	PSB v C	0	
Enable	sta <sup>r</sup> ON V Ct	t designation	
- User rights	manager and the second	100 Jack 10 10 100	
Hide the	component when the use	er has no permission range	
Required permission		~	

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

nimatio Anii	matic Security Positi	on	
Control ID	TA0		
Describe			
	a		
		Desalination	
	Increase		
	Delete		
	Move up	Rotate	
	Move		
	insert		

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	Increase	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         ∩ Rotate       ∩ Rotate         □       □	
Ro	tate	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)	
		□ Desalination   □ Desalination   ☑ Rotate   ☑ Rotate	

### Animation

	Rotate animation	×
nimatic A	nimatioSecurity Position	
Cycle tin	1000 Millis Use addre PSW0	
	nod∈One way ∨ g order: <sub>∋r</sub> ∨	
✓ Start	signal	
Equip	本地设备 v Set	
Addre	PSB 🗸 0 0	
	ct designation	
Trigger	mc上升沿 Y	
End s	ignal	
Equip	本地设备    ✓ Set	
Addre	PSB v 0 0	
	ct designation	
Trigger	mc上升沿 V	

Сус	ele 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	Switching order Set the switching order of the picture, which is specified by the picture number (1-1	
		or randomly set by the user)
(	Drder	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       Statio 0 n         Address       PSB          Address       0         Address       0         Format       Extent : 0 - 9999]         Address tag       Determine         Cancel       Application
	Set the object address of the control start signal and whether it is offset (that is, specified indirectly)
	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 mode	The trigger of rising/falling edge can be customized
End signal	If checked, the animation ends when the specified coil is ON or OFF
End signal trigger mode	The trigger of rising/falling edge can be customized

Security setting

Display contro	Security Position		
✓ Enable			
When	隐藏 ~		
Equip	本地设备	✓ Set	
Addre	PSB v 0	0	
Enable	sta ON 🗸 ct d	designation	
User rights			
✓ Hide the	component when the user	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 Y	97	<ul> <li>端高坐标:X=97;Y=207</li> <li>经历时间:4.1秒</li> <li>端扁坐标:X=304;Y=203</li> <li>经历时间:2.9秒</li> <li>端高坐标:X=97</li> <li>经历时间:2.9秒</li> <li>端点坐标:X=99;Y=208</li> <li>经历时间:1.9秒</li> <li>端点坐标:X=190;Y=233</li> </ul>

1			
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
	Endpoint	Х	Display the horizontal coordinate position of the current end point. After selecting the line
	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

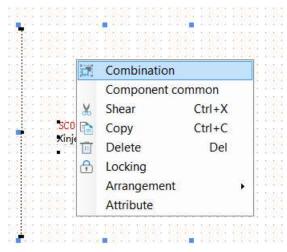
	Translating animation	×
ordinate	Control	
Keep	noving	
Switch	n mode One way v	
✔ Sta	rt signal	
Equip	本地设备 v Set	
Addre	PSB 🗸 0 0	
Trigge	er m ON v	
✓ Re	set signal	
Equip	本地设备 v Set	
Addre	PSB ~ 0 0	
	ct designation	
Trigge	r mi Rising edg 🗸	

Keeping moving	Select whether the animation repeats the action according to the specified track; After			
	checking, the animation will repeat the motion according to the set track. If it is not			
	checked, the action will be performed once			
Switch mode	One way mode: act from the starting point to the ending point according to the drawn			
	Return mode: move back and forth from the starting point to the end point and from the			
	end point to the starting point according to the drawn path			
Start signal	Select whether the action trigger is controlled by the bit signal. When selected, the			
	animation starts when the rising edge of the bit signal comes and remains in the ON state			
	(when the falling edge of the bit signal comes and remains in the OFF state)			
Equipment	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 Y Statio 0			
	Address PSB V User defined label			
	type			
	Address 0 System register			
	Address [Extent: 0 - 9999] format			
	Address tag			
	Determine Cancel Application			
Address	Set the object address of the control start signal and whether it is offset (that is, specified			
	indirectly)			

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	
	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 *sicen 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:

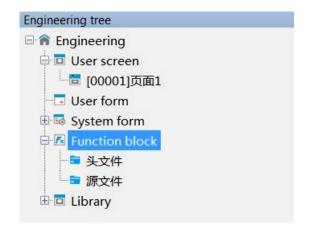
75			Touch Win Pro - 工程 - [00001]页面1		⊟ ×
File Edit F	arts Mapping	Tool View	Help		
Newly build Ope	n Preservation Clos	se Revoke Reco	very Copy Shear Paste Delete Lookup Download Online simulation Offline Simulator Compile System settings Data sampling Alarm entry Rei	Zipe editing 😦	E»
Engineering tree		Ф.		Outline	¢ ×
Engineering			▲ ● 本 四 明 田 田 田 田 田 田 田 田 田 田 田 田 田 田 田 田 田 田	[00001]资面1     [函款画布]-MC0	6 @
User form					
🖶 🔤 System for					
🖶 🖪 Function b	lock				
Control window		ą.			
	Q				
Buzzer	Racklight	Fan	· -		
KII77AF	(Contraction)	-an			
Aditator	Water numn	Valve	20		
Happing			2001		
	()				
Straight line	Circular	Rectangle			
$\cap$	N	<b>IIII</b>	* <u>100 %</u>		
Arc	Polyaon	Form			
24	82				
Scale	OR code	Dicture			
	••••	1			
Dynamic nicture	'ranslating animation	Function canvas			
Data processing					
<b>A</b>	<u>A</u>	1			
∆larm disnlav	Alarm har	Trend chart			
1 AM		H	-		
YV line chart	Report form	Formula table	Output window 💌 🕴 🗴		
		<u>a</u>	Output window • # X Output ErrorlList		
Recine transmission	Territher	XV trend chart	Comple information		
	<u> </u>		Compile window25900		
Data table Special parts	Die chart		Number of compiled resource files:39		
apecial parts	1111	(A)	Compilation succeeded. 0Error , Owarning , ONews		
			× _	📰 Address Preview 🛅 🕻	Dutline
		Touch screen m	odel: TS5-700-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 : 303 Y : 528	Ð, Q, 📃	

(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.

	Function canvas	
	Basic prope Position Control ID MCO Describe Number 0 Backgrou	
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	
Number	Set MacroDCMap function number	
Background	Set Background color properties	

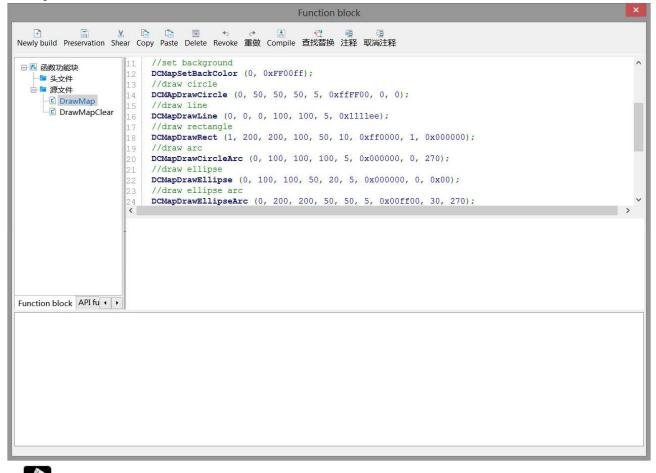
### 2. Add Function Block

(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	※ 🖻 🖻 👘 🚓 🔅 🔝 🤨 🦉 遵 ear Copy Paste Delete Revoke 重数 Compile 查找替换 注释 取消注释	
E 函数功能块 ● ● 关文件 ● ● 涙文件 ● DrawMap ● DrawMapClear	<	× <

#### 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.

			Functio	n key		
unction Ap	pearance Se	curity set	Position			
Control II	FBO					
Describe						
Action	按下状态		~			
□ 启动声音						
Selected					Optional Feat	tures
	调用函数			p 2	· 设置	置线圈
	step 3		A	dd to	设	置数据
		函数	调用		>	算
Basic prope	rties Secur			_		输
	Private reaction of the	·) · · ·		- P.	Function	换
功能函数	DrawMap DrawMap	_	×	Edit	Function	
	DrawMapCl	ear	行			
	step 4					5V
	step 4					5V
		Determine	С	ancel	Application	方
					1.1.1	<del>201</del> 方
				step 1		故调用

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

		Function	key		
unction	Appearance Security set	Position			
		~	Use pictu	res	
ſ			Status	0	~
	DrawMap		Name	button_05_a	
<u> </u>			Catego	ŋ svg	
			Dimens	ic 80 × 42	
	<u>Alexandra and and and and and and and and and an</u>			Maria	atatata
	Change appearance			More	pictures
✓ Fill	<u>.</u>	2			
State 0	•	Display te:	kt Ap	ply fonts to each	
• Tevt	O Multiling				
Tymofac	~	DrawMa	ар		
- Typefac Ty 微	2000 - Contra Cont			~	
+	软雅黑		规	~	

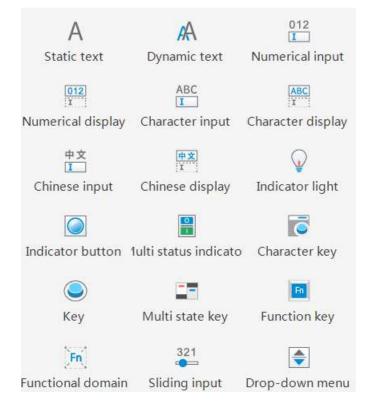
DrawMapClear function key is operated as above.

- 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

			Static text pr	operties		×		
E	Basic propeSecu	rity se Position	n					
r	Control ID	ST0						
	Describe							
	• Tevt	O Multiling						
			text					
	Co Ali Middle_C	New Roman	Size 12	常规    ✓				
	- Frame Thi 无边 Co Io	□ ~	Style	~				
Control ID I	t is used for s	system manag	gement cont	rol and cannot	t be operated by	y users		
Describe C	Can be used t	o comment of	on the purpos	se of this comp	ponent			
Text S	et the text to	be displayed	d. Click/doub	ole click the te	ext to modify it			
Multilanguage S	et up multili	ingual display	y. After sele	cting, you can	n click the "Ac	id" text c	on the right	side or
library tl	ne project tre	ee - library –	label multili	ingual on the	left side of the	project in	nterface to n	nanage
n	nultilingual (	see chapter 4	-7 for the lib	orary descripti	on for specific	use)		
Typeface S	et the text fo	ont, size, colo	or and align	ment (the posi	ition displayed	in the bo	ox); You can	check
tl	ne adaptive s	size, that is, c	drag the mo	use to change	the size of the	e part, and	d the text size	ze will
с	hange accore	dingly						

# 

Frame

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).

Set the thickness, style and color of the border

Static text properties	Static text properties
Basic propeSecurity se Position	Basic propeSecurity se Position
Control ID ST0	Control ID ST0
Describe	Describe
〇 Tevt ④ Multiling 新增	〇 Text ④ Multiling 编辑
Enable	✓ Enable
	Form [[D: 000] v Num 1 v
text	Text1

# Security setting

	Static text properties	
Basic prope Secu	rity set Position	
− Display contro ☑ Enable When	bl 隐藏 ~	
Equip Addre Enable	本地设备 Set PSB V 0 0 sta <sup>ON</sup> V ct designation	
Required	component when the user has no permission range d user 权限1 ~ ion 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

	Dynamic text configuration	×
	Basic prope Display Security se Position Control ID DTO Describe Read address	
	Equip     本地设备     Set       Addre     PSW     0     0       Data     Word     Unsignec     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	

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, Unigne Floating number         Set       Click "Set" to enter the address setting interface, where you can set and use system registe and user-defined tags. You can click the address tag library below or the project tree librar address tag library to set the tags used (see chapter 5-2 Address Tag Library for the use or address tag library and user-defined tags)         Equipment       Address         Equipment       Statio         Address       Ibrary and user-defined tags)
Data type       Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD, Hex, Signed, Unigne Floating number         Set       Click "Set" to enter the address setting interface, where you can set and use system registe and user-defined tags. You can click the address tag library below or the project tree librar 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       Address         Equipme       PSW         Address       Statio         Address       System register         Address       Extent:0-9999]
Floating number         Set         Click "Set" to enter the address setting interface, where you can set and use system register and user-defined tags. You can click the address tag library below or the project tree librar 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)         Image: Click "Set" to enter the address setting interface, where you can set and use system register and user-defined tags. You can click the address Tag Library for the use of address tag library and user-defined tags)         Image: Click "Set" to enter the address setting interface, where you can set and use system register is the tags used (see chapter 5-2 Address Tag Library for the use of address tag library and user-defined tags)         Image: Click "Set" to enter the address setting interface, where you can set and use system register is the tags used (see chapter 5-2 Address Tag Library for the use of address is provided to the tags)         Image: Click "Set" to enter the address setting interface is the tags of tage is the tags of the tags of tage is the tage is th
Set       Click "Set" to enter the address setting interface, where you can set and use system register and user-defined tags. You can click the address tag library below or the project tree libraria address tag library to set the tags used (see chapter 5-2 Address Tag Library for the use address tag library and user-defined tags)         Address       Address         Statio       Image: state of the tags of tags of the tags of the tags of the tags of
and user-defined tags. You can click the address tag library below or the project tree librar address tag library to set the tags used (see chapter 5-2 Address Tag Library for the use a address tag library and user-defined tags)
nt Address type Address Ø User defined label System register 数据类型 Word V Unsigned V Address [Extent : 0 - 9999]
Determine Cancel Application
Indirect Set the current address offset. The current register address changes with the indirect consistent value that is $Dx [Dy] = D [x + Dy value] (x, y=0, 1, 2, 3)$ . For example, the
assignment specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example: the current register address is PSW0, if the indirectly specified address is PSW100; When the value of the current register address is PSW100; when the value of
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 prope Display Security se Position
Control ID DT0
Describe
Read address         Equip       本地设备         Addre       PSW         Data
Searchable address (the address bar of registers involved in the software will have input quer 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.

Dynamic text configuration       Basic prop     Display       Security se     Position       Content     Add to       Serial     Numerical value     Text description string       Add to       0     0       test1       1     1       Delete	
Serial     Numerical value     Text description string     Add to       0     0     test1       1     1     test2	
SerialNumerical valueText description stringAdd to00test111test2	
1 1 test2	
Delete	
Move up	
Move	
State 1 · Apply fonts to each state	
Typeface	
Ty 微软雅熙 学 常规 学	
Ali Middle_Center V Adaptive size	
Frame	
Thi 无边框 v Style v Co	
lo v	
可变字符串1	
Determine Cancel	
Content Set the text to be displayed in each state, click the contents under "Serial Number",	"Numeric
Value" and "Text Description String" to modify it (you can select the context	nts under
"Click/Double click" text description string from the text library, and click	the ""
Text description string	
Text1	
You can enter the multilingual setting	gs, or the
project tree - Library - Label Multilanguage - on the left side of the project	t bar for
management (see chapter 5-1 Label Multilanguage for specific use)	
Item         Add         Increase the number of dynamic text items	
delete Delete the contents of the target option	
Move up Move the target option up one physical location	
Move Move the target option down one physical location	
down	
State You can check the drop-down list to set the font and border corresponding	or to the
corresponding register value (or click the "apply fonts to each state" button behind	-
font and border in all states)	
	oon cha-l-
Typeface Set the text font, size, color and alignment (the position displayed in the box). You	
	ι size will
the adaptive size, that is, drag the mouse to change the size of the part, and the tex	
the adaptive size, that is, drag the mouse to change the size of the part, and the text change accordingly         Frame       Set the thickness, style and 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.

	0	1	2
Variable string	0	1	2



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

	Dynamic text configuration	i 🔽
Basic prop Dis	splay Security se Position	
Display cont	trol	
🗹 Enable		
When	隐藏	
Equip	P 本地设备 V S	Set
Addr	re pSB v 0 0	
Enab	ole sta ON v ct designation	
User rights		
	ne component when the user has no permissio	in range
Requir	red user 权限1 🗸	
	ssion 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

asic prop	ta inn	Scal	0.00	Notice	e Appeara Security Position	
asic propa		Scal		volice	Appeara security Position	
Contr	ol ID	DIO				
Descr	ihe					
Desci	ibe [					
✓ Rea	d / wri	te us	sing di	fferen	nt addresses	
Read ac	Idress					
		uz.			v Set	
Equip	本地设					
Addre Addre				~	0 0	
			Unsigr	ec 🗸		
Addre	PSW		Unsigr	ec 🗸		
Addre Data type	PSW Word		Unsigr	ec 🗸		
Addre Data type Write ad	PSW Word	~	Unsigr	ec 🗸	ct designation	
Addre Data type Write ad Equip	PSW Word ddress 本地设	~	Unsigr	iec ¥	ct designation	
Addre Data type - Write ad	PSW Word dress 本地设	× 洛	Unsign	ec ∨ ∨	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/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 differen	t addr	esses	
Read / v	w <mark>rite</mark> addre	SS			
Equip	本地设备			~	Set
Addre	PSW				
Data type	Word V	Unsignec 🗸	ct des	ignation	

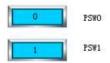
Input 1 to PSW0, and PSW0 displays 1; The number entered is the number displayed.



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

ead ac	Idress		
Equip	本地设备	~	Set
Addre	PSW v	0 0	
Data	Word V Unsignec V		
type		ct designation	
Write a	ddress		
Equip	本地设备	~	Set
Addre	PSW v	1 0	

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

	Leading 0			
Number of digits —				
Integer digit	4	Decimal	0	
Limit				
🗹 Enable input up	per limit	🗌 Enable	input lower	limit
Upper 9999		Lower	0	
limit 🗌 Reg		limit	Reg	
Enable alert col     Upper	or			
limit		✓ twinkle	e	
Lower				
limit Pattern		⊻ □ twinkl	e	
limit Pattern	) Bit co		e	
Iimit Pattern Touch input order Enable input o	) Bit co rder	ntrol	e	
Iimit Pattern © Touch Input order V Enable input o After the input	O Bit co rder : is completed, it	ntrol		
Iimit Pattern  Touch  input order  C Enable input o  After the input Input order	O Bit co rder : is completed, in 1	ntrol		
Iimit Pattern Touch Input order C Enable input o After the input Input order	Bit co rder is completed, it	ntrol		
Iimit Pattern Touch Input order After the input Input order Keyboard setting up Tenable pop-up	Bit co rder is completed, it 1 keyboard	ntrol		×.
Iimit Pattern Touch Input order C Enable input o After the input Input order	Bit co rder is completed, it 1 keyboard	ntrol		₩.
Iimit Pattern  Touch Input order  After the input Input order  Keyboard setting up  Enable pop-up	Bit co rder : is completed, it 1 : keyboard and lower	ntrol		
Iimit Pattern  Touch Input order  Charlen input o  After the input Input order  Keyboard setting up  Enable pop-up Display upper Keyboard number	Bit co rder is completed, it 1 keyboard and lower [25010]KeyBoa	ntrol		

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 and bit control. Touch	n control means to start the input program by touching						
1 utterni	the control. For bit control, start the input program when the specified coil is ON. In bit control							
	state, when the coil is ON, trigger the keyboard to pop up, click ENT to input data, and click ESC							
		it to pop up, enck ENT to input data, and enck ESC						
	to cancel the keyboard pop up	1						
Input order	If it is enabled, the keyboard will jump to the	e corresponding input control in order to set different						
	groups.							
	Example 1 (touch control): The data input controls PSW0, PSW1, PSW2 and PSW3 are set as							
	follows.							
	Input order	Input order PSW1						
	✓ Enable input order	✓ Enable input order						
	After the input is completed, it	✓ After the input is completed, it						
	Input order 1 🗘 🔽 Group 1	Input order 2 🗘 🗹 Group 1						
	nput order	Input order						
	Enable input order	Enable input order						
	After the input is completed, it	✓ After the input is completed, it						
	Input order 1 Group 2	Input order 2 🗘 Group 2						
	DCW/0 + DCW/1 + + +	and an is 1 and 2 means the Lee DCW2 and DCW2 are in						
		order is 1 and 2 respectively; PSW2 and PSW3 are in						
	same group, and the order is 1 and 2 respectiv							
		pop up. 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 (if you c	heck "No more input in sequence after input", the						
	keyboard will not jump to the next component	nt in the same group after completing the input at the						
	selected component. If you want to input, yo	ou need to click the next component again for input);						
	Similarly, enter PSW2 and PSW3.							
	Example 2 (bit control): The data input co	ontrols PSW0, PSW1, PSW2 and PSW3 are set as						
	follows.							
	Pattern	Pattern						
	O Touch   Bit control PSB0	○ Touch						
	Input order PSW0	Input order PSW1						
	Enable input order							
	Input order	Input order 2						
	Pattern O Touch   Bit control PSB1	Pattern O Touch						
	Input order POINT	Input order						
	· PSW2 ✓ Enable input order	Enable input order PSW3						
	Input order 1	Input order 2						
	PSW0 and PSW1 are in same group, which a	re controlled by coil PSB0, and the sequence is 1 and						
		group, which are controlled by coil PSB1 in order of						
	1 and 2 respectively;							
		a DSW0 1.2 and 2 will not non up the boyheard						
		g PSW0, 1, 2 and 3 will not pop up the keyboard.						
		to ON, the keyboard will jump out for PSW0. After						
		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.

	<ul> <li>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 to ON to trigger.</li> <li>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 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> <li>Action</li> <li>Set on</li> <li>Set off</li> <li>Reverse</li> <li>Instantaneous on</li> </ul>
Keyboard	Set whether to pop up the keyboard, keyboard style selection, keyboard pop-up position, whether
setting	<ul> <li>Set whether to pop up the keyboard, keyboard siyle selection, keyboard pop-up position, whether 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 2. Users can also customize the keyboard. (1) Select the project tree - user form, right-click Add to create a new user form. (2) "Used as keyboard display" should be selected for name and size of user-defined system form . Page information Page form the model of the sceen Page form the model of the sceen Page information Page i</li></ul>
	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.

KB0       1       KB2       KB2         KB3       4       S       E         KB3       4       S       E         KB5       7       KB3       E         KB3       6       KB3       E         KB3       6       KB3       E         KB3       6       KB3       E         KB3       6       E       E         KB3       7       E       E         KB3       8       7       E         KB4       7       E       E         KB5       7       E       E        KB5       7       E
(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
<ul> <li>Enable pop-up keyboard</li> <li>Display upper and lower</li> </ul>
Keyboard number [25010]KeyBoard_Num_01 Keyboard po [0500]User Defined keyboard [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
66         1       2       3         4       5       6         7       8       9         0       ESC       ENT

■ 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:

		И	umeric inp	out attribut	te			×		
Bas	ic pro Data	inp Scale cor Notic	e Appeara S	ecurity Pos	itior	ı				
	✓ Input Data source Upper limit	scale conversion 9999 Reg		Conversi on value Upper limit	99	99 Reg				
	Lower limit	0		Lower limit	0	Reg				
	Preview — 设备值	Lower limit of = 0 +(	HMI 0 -	Data source 0	) x	Upper limit 9999 9999 Data source	Lower limit - 0 - 0 Data source			
	<ul> <li>Displa</li> <li>Data</li> <li>source</li> <li>Upper</li> <li>limit</li> <li>Lower</li> <li>limit</li> </ul>	9999 Reg Reg Reg		Conversi on value Upper limit Lower limit	0	99 Reg				
2	Preview HMI	Lower limit of = 0 +(	设备值 0 -	Data source 0	) x	Upper limit 9999 9999 Data source	Lower limit - 0 - 0 Data source			
						Determine	Cancel			
	conversi source a register.	ut data is obtai on. To select thi nd conversion va The data source nto the lower con	s function Ilue. The u is the dat	, you nee upper and a input on	d to low th	o set the up ver limits ca e HMI, and	oper and lov an be consta l the conver	ver li nt or sion v	mits of t specified	he data l by the
	conversi	olay data is obta on. Selecting the nd conversion va	is functior	requires	set	ting the up	per and low	ver li	mits of t	he data

Display egister after conve of the data cified 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

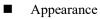
conversion" (as shown in the right figure below) are checked at the same time, the upper and lower limits of data display are the upper and lower limits of scale conversion.

Numeric input attribute	Numeric input attribute
Basic pro Data inpuScale co Notice Appeara Security Position	Basic prc Data inp Scale cor Notice Appeara Security Position
Display Leading 0 Number of digits Integer digit 4 Decimal 0	Input scale conversion     Conversion       Data     Conversion       source     on value       Upper     9999       limit     Reg
Limit  C Enable input upper limit  Upper 9999 Lower 0 limit	Lower 0 Lower 0 limit Reg
Reg    Enable alert color    Upper    Imit    Lower    Imit    twinkle	Preview     Lower limit     Data     Upper limit     Lower limit       设备值     of     HMI     source     9999     0       0     =     0     +(     0     -     0     ) x       9999     -     0     0     Data     Data       Source     Source     5     0     0
Pattern  Touch Bit control  Input order  Enable input order	Image: Display scale conversion       Conversion         Data       Conversi         source       on value         Upper       9999         limit       Reg         Lower       0         limit       Reg
Keyboard setting up         Image: I	Preview HMI of Ught Source Upper limit Lower limit 0 = 0 +( 0 - 0 )x 9999 - 0 Data source Data source
Determine Cancel	Determine Cancel

Notice

	Numeri	c input attri	ibute	
Scale co N	otice App	eara Security	Position	
er writii				
on bit				
		O Write	e off	
5地设备		~	Set	
SB	~ 0	0		
	ct	designation		
ord				
5地设备		~	Set	
SW	<b>∀</b> 0	0		
Vord 🗸 Uns	ignec ∨ ct	designation		
0				
	er writii on bit x地设备 SB ord x地设备 SW Vord v Uns	Scale co Notice Appe er writi on bit SB	Scale co Notice Appeara Security er writi on bit SB V 0 0 ct designation ord SW V 0 0 SW V 0 0	Scale co       Notice       Appeara Security       Position         er writil       O       Write off         SB       V       0       0         ct designation       ct designation         ord       Set       Set         SW       V       0       0         vord < Unsignec

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.



			Les minter		
			Use pictu		
			Status	0	~
	0000		Name	data_01	
			Catego	<b>r</b> ysvg	
				ic 80 × 30	
Fran				Mo	re pictures
orde	ne r style Solid color	~	Dimens	Mo	re pictures
orde oefac	ne r style Solid color		Border	Mo color	
orde	ne r style Solid color	~		Mo	

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

sic pre Data inp	Scale co Notice Appeara Security Position
Operation con	firmation delay
Confirmat	ion before
Display contro	I
✓ Enable	
When	隐藏
Equip	本地设备 v Set
Addre	PSB v 0 0
Enable	sta ON v ct designation
Enable	5
Enable control	
✓ Enable	
Equip	本地设备 v Set
Addre	PSB ¥ 1 0
Enable	sta ON v ct designation
User rights	
The perm	ission will be cancelled after the operation is completed
When the	user has no permission range, a prompt window will pop up
Hide the d	component when the user has no permission range
Required	user 无 v

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.			
	·			

<b>TTI</b>	l combinations when	1		· · · · · · · · · · · · · · · · · · ·	<b>.</b>
I nere are severa	i comningtions when	10001n0 in•	THAP THE USE AT USE	$\mathbf{r}$ rights see ch	anter 1_1_I HILE
	i compinations when	IVEEME III.		/ 1121113. 300 011	abut $3-3-1$ . Find

#### - 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

User rights			
The permission w	ill be cancelled aft	er the operation is completed	
✓ When the user ha	s no permission ra	nge, a prompt window will pop up	2
Hide the compor	ent when the use	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:

权限提	示		×
	▲ 操作级别稿	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

User rights			
The permission w	ill be cancelled af	er the operation is completed	
When the user ha	s no permission ra	nge, a prompt window will pop u	р
✓ Hide the compon	ent when the use	has no permission range	
Poquired user	权限1	~	
Required user	TXPRI	~	

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.

User rights			
The permission w	ill be cancelled at	fter the operation is completed	
✓ When the user has	s no permission r	range, a prompt window will pop up	
Hide the compon	ent when the use	er has no permission range	
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:

权限提示	ŧ		×
Ø	操作级别	扃, 您没有此权限	
	用户登录	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.

be cancelled aft	ter the operation is completed	
o permission ra	ange, a prompt window will pop u	ıp
t when the user	r has no permission range	
权限1	~	
	o permission ra	be cancelled after the operation is completed o permission range, a prompt window will pop u t when the user has no permission range 权限1

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       ✓         Addre       pSW       ✓       0       0         Data       Word       ✓       Unsignec       ct designation         type       ✓       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			
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       、         Address       PSW          Address       0          Address       0          System register       数据类型       Word       V Unsigned         Address       [Extent: 0 - 9999]           Address tag            Determine       Cancel       Application			
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)			

Data display

Displa	y 🗹 Leading 0	
umber o	f digits	
Inte	ger digit 4	Decimal 0
imit		
<ul> <li>Enabl</li> </ul>	e alarm uppe <mark>r li</mark> mit	Enable alarm lower limit
Upper	9999	Lower 0
limit	Reg	limit Reg

		1
	Display	After checking, the user will not see the entered value, and the value will be displayed as "* *"
	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		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

✓ Scale	conversion -								
Data source					Conversi on value				
Upper	9999				Upper	99	99		
limit	Reg				limit		Reg		
Lower	0				Lower	0			
limit	Reg		limit		Reg				
Preview	. P	•••>			<b>.</b>			a serve	1· ·
HMI	Lower lim of	it	设备值		Data source		Upper limit	Low	er limi
0	0			1	0		9999	-	0
V	= 0	+(	0	2	0	) x	9999		0

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 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 data (can be specified by register)

■ Appearance

			Use pictu	ires	
-			Status	0	~
	****		Name	data_01	
			Catego	n svg	
	the second s				
			Dimens	sic 80 × 30	
✓ Frame	Change appearai	nce	Dimens		re picture
	-	nce	Dimens	Mo	re picture
✓ Frame Border st	-			Mo	

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

■ Security setting

	Numeric dis	play properties	
ic pror Data di	pl Scale con Appearan Sec	curity se Position	
Display contro	I	1912 Decempendary	
Enable			
When	Dia city		
	隐藏		
Equip	本地设备	✓ Set	
Addre	PSB v 0	0	
Enable	sta ON 🗸 ct d	lesignation	
User rights			
✓ Hide the	component when the user	has no permission range	
Required	user 权限1	✓	
permissio	on range		

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

	Character display properties
Ba	asic properAppearance Security set Position
	Control ID CD0
	Describe
	Coding rules ASCII ✓ 空字符显示为空格
	✓ Pass ✓ High and Iow
1	Read address
	Equip 本地设备 v Set
	Addre p <sub>SW</sub> v 0 0
	er of stom 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 abcd A abcd C
	select high and low badc B badc 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 bade 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/write address (refer to chapter 4-2-3 Numerical Input for the description of the					
	read/write address)					
	Read address					
	Equip 信捷 XD/XL/XG系列 ( Modbus TCP > Set					
	Addre D v 5000 1					
	Numb 1 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					
	Equipme 信捷 XD/XL/XG系列(Modbus TCP)					
	Address D V User defined label					
	type					
	Address 5000 System register					
	寄存器数 1 DWord ✓					
	Address [Extent: 0 - 16777215] format					
	Address tag					
	Determine Cancel Application					

■ Character input

Pattern <ul> <li>Touch</li> <li>Bit control</li> </ul> Input order <ul> <li>✓</li> <li>After the input is completed, it</li> <li>Input order</li> <li>✓<ul> <li>✓<ul></ul></li></ul></li></ul>	sic pro Character	Notice Appearar Secu	irity Position
After the input is completed, it Input order Kevboard setting up Enable pop-up keyboard Keyboard number [25007]KeyBoard_Asc_01U Keyboard pop-up position Middle_Center		) Bit control	
Input order 1 Group Kevboard setting up Carlot Enable pop-up keyboard Keyboard number [25007]KeyBoard_Asc_01U Keyboard pop-up position Middle_Center		12	
Kevboard setting up Tenable pop-up keyboard Keyboard number [25007]KeyBoard_Asc_01U Keyboard pop-up position Middle_Center	After the inp	out is completed, it	
Enable pop-up keyboard     Keyboard number [25007]KeyBoard_Asc_01U     Keyboard pop-up position Middle_Center	Input orde	er 1	Group
Keyboard number     [25007]KeyBoard_Asc_01U       Keyboard pop-up position     Middle_Center	Keyboard setting	up	
			Asc_01U
Attraction and the product of the state of the state of the	Keyboard	pop-up position Midd	dle_Center
*If an external USB keyboard is used, or the keyboard is located in the direct / indirect window, or the keyboard is in the same window with the current component, do not check "use pop-up keyboard"	located in the dir	rect / indirect window, o v with the current comp	or the keyboard is in

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 inp	ut program when the spe	cified coil is ON. In the				
	bit control state, when the coil reaches ON, trig	ger 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 con	responding input compo	nent, it can set different				
_	groups.						
	Example 1 (touch control): The character input of	component PSW0, PSW1	, PSW2 and PSW3 are				
	set as follows:	1					
	Input order PSW0	– Input order	DOLMA				
	<u> √</u>   · · · · ·	· · · · ·	PSW1				
	After the input is completed, it	<ul> <li>After the input is complete</li> </ul>	d, 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</li> </ul>	l, it				
	Input order 1 Group 2 🔹	Input order 2	Group 2				
	PSW0 and PSW1 are in same group, and the order 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 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 co	· •					
	input at the selected component, and if you want	1 .	ick the next component				
	again for input); Similarly, enter PSW2 and PSW3.						

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

Pattern O Touch   Bit control PSB0 PSW0	Pattern PSW1
Input order	Input order
Input order	Input order 2
Pattern O Touch   Bit control PSB1 PSW2	Pattern Touch  Bit control PSB1 PSW3
Input order	Input order
Input order	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	○ 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

	Before writA				
	<ul> <li>Notifica</li> </ul>	ation bit			
	Write on		○ Write off		
	Equip	本地设备	~	Set	
	Addre	PSB v	0 0		
			ct designation		
	✓ Notice	word		<u> </u>	
- L	Equip	本地设备	~	Set	
	Addre	PSW v	0 0		
	Data type	Word 🗸 Unsignec 🗸	ct designation		

Appearance

		Character	input pro	operties	>
Basic p	ro Charact	Notice	Appearanse	ecurity Position	
				✓ Use pictu	ires
			_	Status	0
		AA		Name	data_0
				Catego	nsvg
				Dimens	sic 80 × 30
	Cha Frame	nge appeara	ance	More pict	ures
	rder style	Solid color	r v	Border color	¥
Тур	eface				
Ту	微软雅黑		~	常规	~
Со		<b>~</b>	Size	12	~
Ali	Middle_Cer	iter 🗸		Adaptive size	

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

Security setting 

Operation cor	firmation de	lay			
✓ Confirma	tion before	Waitin second		1	
Display contro	1				
✓ Enable					
When	隐藏	~			
Equip	本地设备			~	Set
Addre	PSB	~	0	0	
Enable	sta <sup>:</sup> ON	~	ct desig	nation	
Enable contro					
✓ Enable					
Equip	本地设备			~	Set
Addre	PSB	~	0	0	
Enable	sta <sup>:</sup> ON	*	ct desig	nation	
User rights					
The perm	ission will be	e cancelle	d after th	e operati	on is
When the	user has no	permissic	on range,	a prompt	
	component	when the	user has	no permis	sion
Hide the					

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

Basic prope	erAppearance Security set Position	
Contr	rol ID CD0	
Descr	ribe	
Pase Read ac	ddress	
Read ac Equip	ddress 本地设备 v Set	
Read ac	ddress 本地设备 v Set	

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 abcd A abcd 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 hig				
	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) Click "Set" to enter the address setting interface, which can also be used to set system				
Set	registers. Character input/character display temporarily does not support the use of address tag				
	library				
	Address				
	Equipme 本地设备 V Statio 0				
	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				



ic prope Appe	arance Security set Posi	ition		
		✓ Use pictu	res	
		Status	0	~
	AA	Name	data_01	
		Catego	<b>ŋ</b> svg	
		Dimens	ic80 × 30	
Cha	inge appearance		More pict	ures
Cha	nge appearance		More pict	ures
	nge appearance Solid color v	Border		ures
✓ Frame		Border		lures
✓ Frame Border style		Border 常规		ures ■ ~
✓ Frame Border style Typeface	Solid color V	常规	color	

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

Security setting

	Character of	display properties	
sic prope Appe	arance Security sett Pos	sition	
Display contro			
Enable			
When	隐藏		
Equip	本地设备	✓ Set	
Addre			
	130 T		
Enable	sta ON v C	t designation	
User rights			
Hide the	component when the use	er has no permission range	
Required	user 权限1	×	
permissio	Reference and a second second		

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 system management control 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 equipment port for communication
Address	Set target register number
Register number	Setting character input length, different encoding rules, and different Chinese characters that
	can be displayed in one register;
	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 address setting interface, where you can set and use 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
	高存器数 1 Word V
	Address [Extent : 0 - 9999] format
	Address tag
	Determine Cancel Application

Input

	Chinese input
sic prop Input	Notice Appearant Security st Position
When password	$^{\ast}$ is checked, the contents of the register are displayed as "**** "
Pattern Touch	O Bit control
Input order	
Enable input	order
After the inp	ut is completed, it
Input orde	er 1 Group
Keyboard setting	
Keyboard numbe Keyboard	er [25007]KeyBoard_Asc_01U pop-up position Middle_Center
Keyboard preview	
кво кві ква 1 2 3	KB3 KB4 KB5 KB6 KB7 KB7 KB8 KB9 KB40 Backspace
KBID KBIJ KBIZ	المؤسر المباهد المستعد المعتمي المعتمي المعتمي المعتمي المعتمي المعتمي المع
	KB2Î KB2Î KB2Î KB2Î KB2Î KB2Î KB2Î KB2Î
Esc Z X	KB32 KB33 KB34 KB35 KB36 KB45 KB37 KB46 KB48
KB50 KB42 Shift	Space KB38 KB39 KB47

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 corresponding input component, it can set differen groups.         Example 1 (touch control): The Chinese input component PSW0, PSW1, PSW2 and PSW3 are set as follows:         Input order       PSW0         After the input is completed, it         Input order       PSW2         Input order       PSW3         Imput order       Imput order	Password	After checking, the user will not see the entered t	ext, and the text will be displayed as "* * *"				
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 corresponding input component, it can set differen groups.         Example 1 (touch control): The Chinese input component PSW0, PSW1, PSW2 and PSW3 are se as follows:         Input order       PSW0         Mathematical After the input is completed, it         Input order       PSW2         Mathematical After the input is completed, it         Input order       PSW2         Mathematical After the input is completed, it         Input order       PSW2         Mathematical After the input is completed, it         Input order       PSW2         Mathematical After the input is completed, it         Mathematical After the input is completed, it	Pattern	There are touch control and bit control. Touch r	neans to start the input program by touching the				
data, and click ESC to cancel the keyboard pop up.         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 Chinese input component PSW0, PSW1, PSW2 and PSW3 are set as follows:         Input order       PSW0         Input order       PSW1         Input order       Input order         Input order       Input order         Input order       Imput order         Imput order       Imput order         Imput order       Imput order         Imput order       PSW2         Imput order       PSW3         Imput order       PSW3         Imput order       PSW3         Imput order       PSW3         Imput order       Imput order         Imput order       PSW3         Imput order       Imput order         Imput order       PSW3         Imput order       PSW3		component, and bit control means to start the inp	out program when the specified coil is ON. In the				
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 Chinese input component PSW0, PSW1, PSW2 and PSW3 are se as follows:         Input order       PSW0         Input order       PSW0         After the input is completed, it       Input order         Input order       PSW2         After the input is completed, it       Input order         Input order       PSW2         After the input is completed, it       Input order         Input order       PSW2         After the input is completed, it       Input order		bit control state, when the coil reaches ON, trig	ger the keyboard to pop up, click ENT to enter				
groups. Example 1 (touch control): The Chinese input component PSW0, PSW1, PSW2 and PSW3 are se as follows: Input order PSW0 After the input is completed, it Input order 1 * Group 1 * Input order PSW2 After the input is completed, it Input order PSW2 After the input is completed, it Mathematical and a second		data, and click ESC to cancel the keyboard pop u	р.				
Example 1 (touch control): The Chinese input component PSW0, PSW1, PSW2 and PSW3 are set as follows: Input order PSW0 After the input is completed, it Input order 1 C Group 1 C After the input is completed, it Input order PSW2 After the input is completed, it After the input is completed, it	Input order	If it is enabled, the keyboard will jump to the co	rresponding input component, it can set different				
as follows: Input order PSW0 After the input is completed, it Input order PSW2 After the input is completed, it Input order PSW2 After the input is completed, it After the input is completed, it After the input is completed, it After the input is completed, it							
Input order       PSW0         Imput order       PSW1         After the input is completed, it       Input order         Input order       Imput order         Imput order       PSW2         Imput order       PSW3         Imput is completed, it       Imput order         Imput order       PSW3		Example 1 (touch control): The Chinese input component PSW0, PSW1, PSW2 and PSW3 are set					
Input order     Input order     PSW2     Input order     PSW3		as follows:					
Input order 1   Group 1   Input order 2   Group 1   Input order 95W2 After the input is completed, it		Input order PSW0	Input order PSW1				
Input order     PSW2       Imput order     Imput order       Imput order     PSW3       Imput order     Imput order       Imput order     Imp		After the input is completed, it	$\checkmark$ After the input is completed, it				
Image: Stress of the second secon		Input order 1 🐨 🔽 Group 1 🛊	Input order 2 🔹 V Group 1 🔹				
		Input orderPSW2	Input order PSW3				
Input order 1 🗘 🔽 Group 2 🗘 Input order 2 🗘 🔽 Group 2 💭		After the input is completed, it	$\checkmark$ After the input is completed, it				
		Input order 1 Group 2 🗼	Input order 2 🗘 Group 2 🐳				
PSW0 and PSW1 are in same group, and the order is 1 and 2 respectively; PSW2 and PSW3 are in same group, and the order is 1 and 2 respectively.			o 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 O Touch  Bit control PSB0 PSW1
Input order	Input order
Input order 1	Input order 2
Pattern O 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 -

○ Set on ○ Set off

Reverse

Instantaneous on

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

Notice

		Chin	ese input	×
Basic prop Ir	nput Notice	Appearand	Security se Position	
Before wriAf	ter writ			
✓ Notifica	ation bit			
Write	on		○ 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 type	Word 🗸 Unsij	<sup>gnec</sup> ⊻ ct des	ignation	
Write	0			
value				

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

■ Appearance

	Chinese input		
ic prop Input Notice Appe	arancSecurity se Posi	tion	
	✓ Use pictu	res	
	Status	0	~
<b>中</b>	Name	data_01	
	Catego	ŋsvg	
	Dimens	ic 80 × 30	
Change appearance		More	picture
Change appearance Frame Border style Solid color	<ul> <li>✓ Border</li> </ul>		pictures
✓ Frame Border style Solid color Typeface	<ul> <li>✓ Border</li> </ul>		• pictures
✓ Frame Border style Solid color Typeface Ty 微软雅黑	→ Border	color	
✓ Frame Border style Solid color Typeface	常规	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 input
asic prop Inpu	t Notice Appearant Security se Position
Operation con	firmation delay
Confirmat	tion before Waiting time seconds
Display contro	1
✓ Enable	
When	隐藏
Equip	本地设备 v Set
Addre	PSB v 0 0
Enable	sta ON v ct designation
Enable control	[
✓ Enable	
Equip	本地设备 v Set
Addre	PSB 0 0
Enable	sta ON v ct designation
User rights	
	ission 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
Required	user TXBR1 Y

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 GB2312		
	Read address     Set       Equip     本地设备     ✓       Addre     PSW     ✓       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 ✓ Statio 0		
	Address		
	Address 0 System register		
	寄存器数 1 Word ∨		
	Address [Extent : 0 - 9999] format		
	Address tag		
	Determine Cancel Application		

■ Appearance

Chinese	e display
ic prope Appearance Security set Position	on
	✓ Use pictures
	Status 0 V
<b>中</b>	Name data_01
	Category svg
	Dimensic 80 × 30
Change appearance	More pictures
✓ Fill	P
Fill pattern Solid color V	Fill color
✓ Frame	
Border style Solid color 🗸 🗸	Border color
52 · · · · · · · · · · · · · · · · · · ·	
Typeface	
Typeface Ty 微软雅黑 ~	常规 ~
- A Francisco -	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

	earance Security s	Position			
- Display contro					
✓ Enable					
When	隐藏	~			
Equip	本地设备		~	Set	
Addre	PSB	✓ 0	0		
	F 3D		10777 U		
Enable	sta <sup>-</sup> ON 🗸	ct desig	nation		
User rights					
✓ Hide the	component wher	the user has n	o permissi	on range	
	+7100 4				
Required	luser 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.

## 4-2-9. 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	eAppearanceSecurity set Position	
Contr Descr		
Read ac	ddress	
Equip	本地设备 v Set	
Addre	PSB 🗸 0 0	
	ct designation	
logic		
۲	Positive logic O Negative logic	
- ⊻ twir ●	nkle On status flashes Off status flashes	
	Flicker frequency 0.1 秒 v	

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 和地设备       Statio 0 n         nt       N         Address       PSB         type       User defined label         Address       0         Address       [Extent : 0 - 9999]         Format       Interval and the state of the state			
	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

OFF     Status     0       Name     lamp_05_b       Category svg       Dimensic 60 × 60	~
Category svg	
Category svg	
Change appearance More pict	ures
✓ Fill	
tate 0 · ✓ Display text Apply fonts to each	
tate 0 • Jisplay text Apply fonts to each	
Tevt     O Multiling	
075	
OFF	
OFF	

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

Indicator light	×
Basic prope Appearance Security set Position	
− Display control ✓ Enable	
When 隐藏 Y	
Equip 本地设备 V Set	
Enable sta ON v ct designation	
User rights	
Hide the component when the user has no permission range	
Required user 权限1 v permission range	

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

Position

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

### 4-2-10. 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

		Indic	ator button	
ic <mark>prop</mark> e	e Appearance	unction bi Securi	ty set Position	
Contr Descr				
Rea	d / write usin	g different addres	sses	
Read / \	write address			
Equip	本地设备		∨ Set	
Addre	PSB	✓ 0	0	
		ct desig	nation	
Operati	on			
۲	Set on	○ Set off	O Reverse	Instantaneous on
logic —				
۲	Positive logic	5	O Negative lo	gic
🗌 twi	nkle			
۲	On status flas	hes	Off status fl	ashes
		Flicker frequer	ncy 0.1 秒 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/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)

		Address				
		Address       ×         Equipme       本地设备       、         nt       Address       0         Address       0       、         Address       0       、         Address       0       、         Address       (Extent: 0 - 9999)				
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 0, the coll controlling this element is Still 15D0, When the value of PSW100 register is 1, the coll controlling this element is PSB1 (and				
		so on)				
Operation	Set ON	Set the control coil to logic 1 state				
-1	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				
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				
C		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				
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

	Indicator button	
ic prope Appearance Function bi	Security set Position	
	✓ Use pictu	ires
	Status	0 ~
OFF	Name	lampbutton_06_b
	Catego	ŋsvg
	Dimens	sic 60 × 60
Change appearance		More pictures
✓ Fill		More pictures
▼ Fill		() <b></b>
	✓ Display text Ap	oply fonts to each
	✓ Display text Ap	oply fonts to each
tate 0 🔹	✓ Display text Ap	oply fonts to each
tate 0 🔹		oply fonts to each
tate 0 🔹	Display text AF OFF	oply fonts to each
tate 0 🔹		oply fonts to each
tate 0 🔹		oply fonts to each
ate 0		oply fonts to each
vpeface		
tate 0 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	OFF	2

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
c prope	Appearance Function b	irSecurity set Position
Key	When pressed v	
		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	

	_	
	✓ Edit	Function
執行 〇并行	5执行	
Determine	Cancel	Application
	执行 〇 并行 Determine	

Function	Select the function to be called from the drop-down menu
Edit/Function	Click to enter the function editing page
Serial execution	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 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

	Indicator button		
	Basic prope Appearance Function bi Security set Position		
	Operation confirmation delay Confirmation before Waiting time 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 I Enable Equip 本地设备 V Set Addre PSB V 1 0 Enable sta ON V ct designation		
	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 □ Hide the component when the user has no permission range Required user 权限1  v		
	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 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 component will be hidden		
Enable	When checked, display control will be enabled		
When validation	Set the display of the component when validation fails		
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,		
	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, 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 indicat	tor		×
Basic prope	PrAppearance Security set Position			
Contr Descr			]	î
Register	Word register O Multi bit			
Read ac				
Equip		et		
Addre				
Data	Word V Unsigner V			
Numbe of State	es <sup>3</sup>			
State	Condition	twinkle	Frequency	
0	PSW0 == 0		/	
1	PSW0 == 0		/	
2	PSW0 == 0 其他 ( 错误 )		1	
40.00			/	
– Attribut	ent 🔿 Bit	0	Jse r¢	
Illegal	● Display error status 显示空白	Error notific	ation	~
<			>	
		Determin	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 n				
	Address 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				

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 curr	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 o					
	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 lower status display table will synchronously increase or					
Number of state		e the number of statuses	i status uispi	ay able will	synemonously meredse of	
State display table	After se	etting in the lower attribute co	lumn, you c	an directly o	bserve the set status in the	
	status d	isplay table (you cannot modif	y it directly	on the table,	but only through the lower	
	attribute	e)				
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		1		
	3	D0 < 2 And D0 > 1		/		
	4	D0 < 2 Or D0 > 1		1		
	5     其他(错误)     /					
	<ul> <li>范</li> </ul>	□○位				
	读取值	< v A None v A	2	使用寄存器		
☑ 闪烁 频率 0.1 秒 ∨						

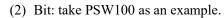
(1) Range: Numerical comparison method: "<", ">=", "<=", ">=", "==", "!=";

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.





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			
	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			
	多状态指示灯 ? ×			
	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 ● 多位组合 读取地址			
	设 备 信捷 XD/XL/XG系列 (Modbus RTU) ∨ 设置			
	地址 M 0 1			
	位数4			
	状态数 5			
	状态         条件         闪烁         频率			
	0         多位组合 == 1         ☑         0.1秒/次           1         分(次) ○         ○         ○			
	1         多位组合 < 2			
	3 多位组合 < 2 And 多位组合 > 1			
	4 多位组合 < 2 Or 多位组合 > 1 / /			
	5 其他(错误) / / 属性			
	· ▲ E ● 范围			
	读取值 < v A And v > v B A 2 回 使用寄存器			
	□ 闪烁 频率 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 1			
	(3) When M2 is on and others are off, it represents the value 2			
	(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 

	Multi s	tatus indicator		×
Basic prope Appearance	Security set Pc	sition		100
		Use pictur	es	
		Status	0 ~	
状态0		Name	multilamp_01_a	
		Categor	) svg	
		Dimensi	<b>c</b> 60 × 60	
Change ap	pearance		More pictures	
Fill	pedianee			
State 0	• • Di	splay text Appl	y fonts to each state	
	>	伏态0		
Typeface				
Ty 微软雅黑	~	常规	-	
Co	✓ Size	12	1	~
			Determine Car	icel

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 the
	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

Display contro	arance Security sett Position	1	
✓ Enable			
When	隐藏 >		
Equip	本地设备	✓ Set	
Addre	PSB v 0	0	
Enable	sta <sup>,</sup> ON 🗸 ct desig	jnation	
User rights —			
✓ Hide the	component when the user has	no permission range	
84 B	user 权限1	~	

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

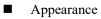
the cursor to the screen, click the left mouse button to place it, click the right mouse button or click ESC to cancel the placement. Modify the length and width of the component through the boundary point.

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

			Кеу		>
Basic prope	Appearance	Function bi Sec	urity set Position		
Contr Descr	ol ID BTO				
- Write ad					
Equip	本地设备		✓ Set		
Addre	PSB	<b>∨</b> 0	0		
		ct de	signation		
Action	Set on	○ Set off	Reverse	O Instantaneous on	
		O obtain	C Abioliz		
启动声	音				

C	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 control		
	te address	Set the write in address		
	juipment	Current equipment port for communication		
	Address			
F		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		
		type PSB v User defined raber		
		Address     0     V     System register       Address     [Extent:0-9999]		
		format		
Address tag		Address tag		
Determine Cancel Application		Determine Cancel Application		
Indired	t assignment	Set the current address offset. The current coil address changes with the indirectly		
	8	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 Secu	rity set	Position		
		~	Use pictu	res	
			Status	0	~
	OFF		Name	button_05_a	
			Catego	ŋsvg	
			Dimens	ic80 × 42	
1					
	Change appearance			More	pictures
2					
] F	Fill			2000 E 11 10 10 10 10 10 10 10 10 10 10 10 10	
	Fill	) isplay t	ext Ap	ply fonts to each	
e	ill ▼ ▼	)isplay t	ext Ap	ply fonts to each	
e	Fill	)isplay t	ext Ap	ply fonts to each	
e	ill ▼ ▼	)isplay t	ext Ap	ply fonts to each	
e	ill ▼ ▼			ply fonts to each	
e	ill ▼ ▼	Display t		ply fonts to each	
e	ill ▼ ▼			ply fonts to each	
e	ill ▼ ▼			ply fonts to each	
e Te	0 V I			ply fonts to each	
e Te	ill ▼ ▼	OFF		ply fonts to each	
te Te	eface	OFF	常规		

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

		Key	×
sic prope	Appearance Function b	Position	
Key	When pressed v		
		Add to	
		Delete	
		Move	
		Move	

Same to chapter 4-2-10 indicator button.

■ Security setting

	Кеу	
isic prope Appea	arance Function bi Security set	Position
<ul> <li>Operation con</li> <li>✓ Confirmat</li> <li>☐ Key delay</li> </ul>		1
Display contro		
When Equip	隐藏 > 本地设备	✓ Set
Addre Enable	PSB V 0 sta <sup>I</sup> ON V ct desig	0 nation
Enable control		
Equip Addre	本地设备 PSB v 0	v Set
Enable	sta ON 🗸 ct desig	nation
1000 C	ission will be cancelled after the user has no permission range,	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
	component when the user has r	
Required	user	×

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	ert Appearance Fi	nction bin Security sett Position
Contr Descr Register – Read ac	ibe	ter <ul> <li>Multi bit</li> </ul>
Equip	本地设备	✓ Set
Addre	PSB	✓ 0 0
Number of States Curren state	3	✓ 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;

G 1 ID	
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)

Word register         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         Reside propertAppearance Function bin/Security sett         Position         Control ID         Modifiess         State of states         State set         State         State <t< th=""><th></th><th>Address</th></t<>		Address
Determin       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       Image: Control ID MB0       Image: Control ID MB0         Describe       Register       Word register       Multi bit         Register       Word register       Multi bit       Set         Addre PSW       Set       Set       Addre PSW         Number of States       3       Set value       1         1       2       PSW0E1       1       2		nt     n       Address     PSB       type     User defined label       Address     0       Address     [Extent : 0 - 9999]
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         #asic propertAppearanceFunction binSecurity sett         Position         Control ID         MB0         Describe         Register         Word register         Multi bit         Read address         Equip         State         Set value         1         2		
Multi state key       ×         Basic propert Appearance Function bin Security sett Position         Control ID       MB0         Describe         Register       Word register         Word register       Multi bit         Read address       Equip         Equip       Addre         PSW       0       0         Data       Word       Unsigned         Vurnet of       3       Current         State       Set value       Action         0       1       PSW0%1         1       2       PSW0%2	Word register	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
Control ID MB0 Describe Register ● Word register ● Multi bit Read address Equip 本地设备    Set Addre pSW    0 0 0 Data Word   Unsigner   ct designation Number of States Current 0    Set value 1 State Set value Action 0 1 PSW0置1 1 2 PSW0置2		
Equip       本地设备       ✓       Set         Addre       PSW       0       0         Data       Word       ✓ Unsigned       Ct designation         Number of States       3       ÷         Current state       0       ✓         State       Set value       1         State       Set value       Action         0       1       PSW0         1       2       PSW0		Control ID MB0 Describe
Addre       pSW       0       0         Data       Word       Unsigner       ct designation         Number of       3       •         Current       0       •         State       Set value       1         State       Set value       Action         0       1       PSW0         1       2       PSW0		
Number of States       3         Current state       0       ✓         State       Set value       1         State       Set value       Action         0       1       PSW0置1         1       2       PSW0置2		Addre pSW v 0 0
0         1         PSW0置1           1         2         PSW0置2		Number of States 3 Current 0 Set value 1
1 2 PSW0置2		
		1         2         PSW0直2           2         4         PSW0置4

■ Appearance

-					
ic pi	roper Appearance Func	tion bin Se	curity sett Posi	tion	
			✓ Use pictur	es	
			Status	0	
	(( 状态0 ))		Name	lampbutt	on_24_a
			Categor	svg	
			Dimensi	80 × 80	
	Change appeara	nce			More picture
~	Fill	7			
ate	0	• V Dis	play text Ap	oly fonts to	o each
ate		• 🗹 Dis	play text Ap	oly fonts to	each
ate ) т.		• 🗹 Dis	play text Ap	oly fonts to	o each
		• 🗹 Dis	play text App	oly fonts to	o each
		• Dis	play text Ap	oly fonts to	o each
			play text App 伏态0	bly fonts to	o each
				bly fonts to	o each
				bly fonts to	o each
) т.	evt 🔘 Multilina			oly fonts to	o each
) т.	evt O Multilina		状态0	oly fonts to	o each
) т Гур Ту	evt O Multiling				o each
) т.	evt O Multiling	~	状态0	1	o 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
asic proper	Appearance Function	on bincSecurity sett Position
Key	When pressed v	
		Add to
		Delete
		Move
		Move

Same to chapter 4-2-10 indicator button.

Security setting

Multi state key
Basic proper Appearance Function bin Security setti Position
Operation confirmation delay          Image: Confirmation before       Waiting time         Image: Confirmation before       Image: Confirmation before         Image: Confirmation before       I
Display control ✓ Enable When  陰範  ✓
Equip 本地设备 v Set Addre PSB v 0 0
Enable station v ct designation
✓ Enable
Equip     本地设备     Set       Addre     PSB     0     0
Enable sta <sup>®</sup> ON v ct designation
User rights 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 Hide the component when the user has no permission range Required user

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  $\boxed{c}$  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

sic prope App	earance Security set	Position	
Control ID			
Describe			
Keyboard entr Input ASCII ()	-		
启动声音			

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 set Position
	Image: Status   Image: Status <tr< th=""></tr<>
	● Text ● Multilion 1 Typeface Ty Arial ● 加粗 ● Co ● Size 24 ● Ali Middle_Center ●
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
asic prope Appea	arance Security set Position
Operation con	firmation delay
✓ Key delay	Delay time: 01s 1
– Display contro ☑ Enable When	同義
Equip Addre	本地设备     V     Set       PSB     0     0
Enable Enable control	
✓ Enable	
Equip Addre	本地设备 v Set PSB v 1 0
Enable	sta ON v ct designation
✓ When the	ission will be cancelled after the operation is completed user has no permission range, a prompt window will pop up component when the user has no permission range user 权限1 v

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 FB0 Describe Action 按下状态	Fu	inction key		
Describe Action 按下状态 ~ 自动声音 Selected Optional Features 设置数据 PSW0 Add to 位置数据 PSW0 Add to 回则运算 Delete 國面切换 调用窗口 Move up 关闭窗口 导入CSV 导出CSV 上传配方 下载配方	Function Appearance Security set Pe	osition		
Describe Action 按下状态 ~ 自动声音 Selected Optional Features 设置数据 PSW0 Add to 0 位置数据 PSW0 Add to 0 位置数据 Delete 回面切换 调用窗口 More up 关闭窗口 导入CSV 导出CSV 上传配方 下载配方	Control ID FB0			
Action 按下状态 自动声音 Selected ひ置鉄眉PSB0 设置鉄眉 PSW0 Add to ひ置鉄圈 Delete 画面切换 调用窗口 Move up 手以2 大闭窗口 号入CSV 号出CSV 上传配方 下载配方				
□ 启动声音 Selected ジ電线圏P500 ジ電鉄圏 ジロック クロ別运算 Delete 回面切換 週用窗口 外部の 単分での のの の	Describe		2	
Selected Optional Features	Action 按下状态 v			
Selected Optional Features	□ 启动素音			
设置数据 PSW0 Add to Delete の の の の の の の の の の の の の の の の の の				
PSW0 PSW0 PSW0 PSW0 PSW0 PSW0 PSW0 PSW0				
Delete     数据传输       回面切换     调用窗口       個用窗口     明日窗口       Move up     关闭窗口       号入CSV     导出CSV       Move down     上传配方       下载配方		Add to	-	
Delete 画面切换 调用窗口 Move up 关闭窗口 导入CSV 导出CSV 和ove down 上传配方 下载配方				
画面切換 调用窗口 Move up 手闭窗口 导入CSV 号出CSV Move down 上传配方 下载配方		Delete	A. 1. 200 A. 1. 200 A.	
Move up     关闭窗口       导入CSV       号出CSV       Move down     上传配方       下载配方			10 100 cm	
			调用窗口	
Move down         导出CSV           上传配方         下载配方		Move up	关闭窗口	
Move down 上传配方 下载配方			导入CSV	
下载配方			导出CSV	
		Move down	上传配方	
函数调用			下载配方	
			函数调用	
		Move down	下载配方	

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	Move the target option function up for one physical location
	up	
	Move	Move the target option function down for one physical location
	down	
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

		Set coil	
	Bas	sic Attributes Security settings	
		Operation Set on O Set off O Negate	
		Write address Devic 本地设备 v Settin Addre PSB v 0 □ Indirect	
		Determine Cancel Application	
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 ad	dress	Set the write in address	
Equipm	nent	Current equipment port for communication	
Addre	ss	Set target coil address	
Indirect assi	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	SPSW100; When the
		value of PSW100 register is 0, the coil controlling this element is s	still PSB0; When the
		value of PSW100 register is 1, the coil controlling this element is PS	B1 (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 nt Address	<b>平地反</b> 會	✓ Statio 0 n	1	
type	PSB	User defined label		
Address format	[Extent : 0 - 9999]			
		Address tag		
	Determine	Cancel Application		
	user's permission range	and whether to pop	up a prompt win	dow when there is no
permis		coil	×	
Basic A	ttributes Security settings			
[ Us	r permission ] When the user has no authority, a p er Required None missions	rompt window will pop up		
		Determine Cancel	Application	

# (2) Set data

Basic Attribut	es Security settings					
– Operati ම	on Set Constant		O Plus		ON	/linus
Write ad	idress					
Devic	本地设备		~	Settin		
Addre	PSW	- 0				
Data type	Word V Unsigner	n 🗌 In	direct			

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
Equij	pment	Current equipment port for communication
Ado	dress	Set the target coil address
Data	ı type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,
		Unigned value, Floating number
S	let	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 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
	Determine Cancer Appication
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
	Set data
	Basic Attributes Security settings
	User permission User permission When the user has no authority, a prompt window will pop up
	Permissions None V
	Determine Cancel Application

# (3) Arithmetic

		Arithmetic	×
Basic Attri	butes Security settings		
– Operati ම		○ × ○ ÷	
Left ope	101 Data (102 Data (102 Data)	Right operand	
Enal	ble upper limit	Enable lower limit	
Write ad	ddress		
Devic	本地设备	✓ Settin	
Addre	PSW V 0		
Data type	Word V Unsignec V	ndirect	
– Preview		W0 = 0 + 0	
		Determine Cancel Applic	ation

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 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,
	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
	Basic Attributes Security settings
	User permission
	When the user has no authority, a prompt window will pop up
	User Required None
	Permissions

# (4) Data transmission

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

	Data transmission	×
Basic Attribut	utes Security settings	
Transmis sion type	Word     Bit register	
Register	r 1	
Source ad	ddress	
Devic	本地设备 v Set	ttin
Addre	PSW Y 0	
Data type	Word Vunsignec V	
	on address	
Devic	本地设备 v Set	ttin
Addre	PSW Y 0	
Data type	Word Vunsignec V	
type		
	Determine	Cancel Application

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
	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 Vser defined label
	Address 0 System register
	数据类型 Word v Unsigned v
	Address [Extent: 0 - 9999] format
	Address tag
	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
	1

Basic Attributes Security settings	
Dasic Autobiles Coounty Security	
User permission When the user has no authority, a prompt window will pop up User Required Permissions	

# (5) Screen switch

Jump to the specified screen.

	Switch s	creen	×
Basic Attributes	Security settings		
Start			
○ Screen			
Pop up th	e password window	automatica <mark>l</mark> ly.	(If the target
	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			
	Determine Cancel Application			

(6) Call window

Switch or pop-up the specified window.

	Call wir	dow	×
Basic Attributes	Security settings		
Switch	[25001]User login	~	
🔘 Рор ир			
Pop up th	e password window	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 None			
	Determine Cancel Application			

# (7) Close window

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

	Close the window			
Basic Attributes	Security settings			
Close all v	vindows			
Close the	[25001]User login 🗸			
	Determine Cancel Applic	ation		

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	

	Clos	se the wind	dow	
Basic Attributes	Security setting	js 🛛		
User permi Wher User Requ Permission	ired None		ty, a promp v	t window
	Deterr	mine	Cancel	Application

# (8) Import csv data

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

		导入C	SV数据			×
Basic proper	ties Security setting					
源文件 File location	• USB drive					
文件名称	R CE.csv					
	● 固定文件名	○ Date spe	cifies the 🛛	Register		
数据块首	that					
	本地设备		<ul> <li>Set</li> </ul>			
Addre	PSW	✓ 0 0				
Numb	1	type	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> <li>✓ 执行结</li> </ul>	PSW0	Delete	Move up	Move dov	vn	
			Determine	Canc	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 director	
		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	ldress	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		
		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.

数据源首地 Equip z	5山 本地设备		✓ Set			
Addre p		¥ 0 0	✓ Set			
Numb 1						
	s D	typ	e			
目标文件						
File location	USB drive					
文件名称	CE.csv					
又计台标						
	● 固定文件名	🔘 Date spe	ecifies the	Register		
Data capacity	100					
capacity						
Data cont	ent					
Data cont Serial	ent Title	Data type	Data format	个数	Integer	Decin
		Data type	Data format	个数	Integer	Decin
		Data type	Data format	个数	Integer	Decin
		Data type	Data format	个数	Integer	Decin
		Data type	Data format	个数	Integer	Decin
		Data type	Data format	个数	Integer	Decir
	Title					Decir
Serial	Title Add to	Data type Delete	Data format	个数 Move dow		Decin
	Title Add to					Decin
Serial	Title Add to					Decir
Serial	Title Add to					Decin
Serial	Title Add to					Decin
Serial	Title Add to					Decir

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 ca	apacity	Data capacity to be exported each time (maximum data capacity 65535)
Data c	ontent	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	p/down	Change the order of added lines
Executio	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 None
		Permissions

# (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 add	lress				1	
Addre	本地设备		0	~	Settin		
	PSW	¥	0				
Data type	Word 🗸	Unsignec V	🗌 Ind	lirect			
🛄 кес	ipe transte	r completio	n tiag				
				Determin	1	Cancel	Application

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 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,			
		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				

Set the user's permission range and whether to pop up a prompt window when there is a permission
Upload recipe
Basic Attributes Security settings
User permission
User Required Permissions

# (11) Recipe download

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

Recipe source	data Download object register address (click Recipe Configuration to set relevant		
	information about recipe)		
Register 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		
	数据类型 Word VUnsigned V Address [Extent:0-9999]		
	Address [Extent: 0 - 9999] format		
	Address tag		
	Determine Cancel 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:		
	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		
completion flag			
Security setting	Set the user's permission range and whether to pop up a prompt window when there is no		

Download recipe
When the user has no authority, a prompt window will pop up

# (12) Call function

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

	function cal		
Basic Attributes	Security settings		
Function	······································	Edit	Function
di	2. J		and the second s
	erial execution Parallel		
	erial executior() Parallel		

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 Permissions None Y		
	Determine Cancel Application		

Appearance

unction Appearance Security set Position  OFF OFF OFF Change appearance Change appearance Fill State 0 OFF OFF OFF Typeface Ty 微软雅黑 文 第規 文 Size 12 文	unction Appearance Security set Po	nction key	
OFF       Status       ●       ▼         Name       button_05_a       Category svg       Dimensic 80 × 42         Change appearance       More pictures         ♥ Fill       ✓       Display text       Apply fonts to each         ● Taxt       ●       Multiling         OFF       OFF         Typeface       ¶       ∰         Typeface       ¥       ¥         Typeface       Y       Y         Typeface       Y       Y		sition	
OFF Name button_05_a Category svg Dimensic 80 × 42 Change appearance More pictures ✓ Fill State 0 ✓ Display text Apply fonts to each ● Text Multiling OFF Typeface Ty 微软雅黑 ✓ 第规 ✓ Co ✓ Size 12 ✓		Use pictures	
Category svg Dimensic 80 × 42 Change appearance More pictures ✓ Fill State O OFF Typeface Ty maxma y size 12 v		Status 0	~
Category Svg Dimensic 80 × 42 Change appearance More pictures ✓ Fill State 0 ✓ Display text Apply fonts to each ● Text Multiling OFF Typeface Ty 微软雅黑 ✓ 常规 ✓ Co ✓ Size 12 ✓	OFF	Name button_0	5_a
Change appearance       More pictures         ✓ Fill       ✓ Display text       Apply fonts to each         ● Taxt       Multiling         OFF         Typeface         Ty       微软雅黑       ×         Size       12       ×		Category svg	
Fill State ○ · ✓ Display text Apply fonts to each ● Text ○ Multiling OFF Typeface Ty 微软雅黑 · 常规 · Co Size 12 ·		Dimensic 80 × 42	
Fill State ○ · ✓ Display text Apply fonts to each ● Text ○ Multiling OFF Typeface Ty 微软雅黑 · 常规 · Co Size 12 ·	Change appearance		More pictures
● Text O Multiling OFF Typeface Ty 微软雅黑 V 常规 V Co Size 12 V			10000000000000000000000000000000000000
● Text O Multiling OFF Typeface Ty 微软雅黑 V 常规 V Co Size 12 V		Apply fonts t	o each
OFF Typeface Ty 微软雅黑 v 常规 v Co Size 12 v		splay text Apply long t	Jeach
Ty     微软雅黑     常规     ✓       Co     Size     12     ✓			
Co Size 12 v	the sec		
		<u>مە</u> بىر	
	Ty 微软雅黑 ~		
	Ty 微软雅黑 v Co Size		
	Ty 微软雅黑 v Co Size		
	Ty 微软雅黑 v Co Size		
	Ty 微软雅黑 v Co Size		
	Ty 微软雅黑 v Co Size		
	Ty 微软雅黑 v Co Size		
	Ty 微软雅黑 v Co Size		

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 sett Position	
Cor	on confirmation delay nfirmation before Waiting time y delay	
Display	control	
✓ Ena	ble	
When	隐藏	
E	equip 本地设备 v Set	
4	Addre pSB v 0 0	
E	Enable sta ON v ct designation	
Enable c		
E	quip 本地设备 v Set	
ŀ	Addre pSB v 1 0	
E	nable sta ON v ct designation	

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					
delay       or "Cancel" within the set writing 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         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 is pSW100; When the value of PSW100 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 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)         Image:       Image: <th>Operation</th> <th>The waiting time (s) can be set. If this option is checked, a pop-up window "Are you sure to</th>	Operation	The waiting time (s) can be set. If this option is checked, a pop-up window "Are you sure to			
operation will fail; If you click "OK" within the waiting time, the operation is successful. 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 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       Extent: 0 - 9999]         Address tag       System register format	confirmation	execute this operation" will pop up when operating components. If you do not click "Confirm"			
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 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)         Image:       Image:         Click "Set [Etemt: 0-9999]       Image:         Address tag       Address tag	delay	or "Cancel" within the set waiting time, the pop-up window will disappear by itself and this			
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 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)         Equipment model       Kedress         Maddress       Statio         Maddress       Statio         Maddress       System register         Address       System register         Address       System register		operation will fail; If you click "OK" within the waiting time, the operation is successful.			
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 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)         Equipment address       Equipment address         Equipment address       Equipment (better is 0-9999)         Address       Extent: 0-9999]         Address tag       Address tag		Clicking "Cancel" is invalid			
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 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)         Image: PSB (Dimensional Content is the indirect of the indirect	Key delay	The operation will not take effect until the set delay time is long pressed			
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 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)         Image: PSB = P	Display control	Use bits to control whether to display the part. When the condition is not met, the compon-			
Address       Set the coil address for bit control         Indirect       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)         Image: PSB		will be hidden. It is hidden by default and cannot be modified			
Indirect       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)         Image: Address Interface in the indirection of the project interface in the indirection of the project tree - library - address is provide the tags (see chapter 5-2 Address Tag Library for the use of address tag library and user-defined tags)         Address       Image: Image	Equipment				
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)         Equipme #W28       Address         Statio       n         Address       Statio         Ibrary and user-defined tags)       System register         Address       Statio         Ibrary and user-defined tags)       Ibrary for the use of address tag library for the use of address tag library and user-defined tags)	Address	Set the coil address for bit control			
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)         Image: the tagg set of tagg set of the tagg set of the tagg set of t	Indirect	Set the current address offset. The current coil address changes with the indirectly specified			
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)         Image: the system register is 0, the system register is 0, the system 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 and user-defined tags)         Image: the system register is 1, the coil controlling this element is PSB1 (and so on)         Set       Image: the system register is 1, the coil controlling this element is PSB1 (and so on)         Image: tag library to set the tags (see chapter 5-2 Address Tag Library for the use of address tag library and user-defined tags)         Image: tag library and user-defined tags         Image: tag library is proved to the system register is 1, t	assignment	register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example, the current			
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       Address         Equipme       #B@@@ view in the state is ended to be address tag library and user-defined tags)         Address       Image: Statio Image: Statio Image: State Image: Stat		coil address is PSB0, if the indirectly assigned address is PSW100; When the value of			
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       Address         Fquipme       Address         Yppe       User defined label         Address       System register         Address       System register         Address       System register         Address       System register		PSW100 register is 0, the coil controlling this element is still PSB0; When the value of			
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)		PSW100 register is 1, the coil controlling this element is PSB1 (and so on)			
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 I User defined label Address I User defined label Address I Extent : 0 - 9999] I User defined label Address I Extent : 0 - 9999] I User defined label Address tag I User tag I U	Set	Click "Set" to enter the address setting interface, where you can set and use system registers			
tag library and user-defined tags)  Address  Equipme 本地设备  N Address  PSB  User defined label  Address  (Extent:0-9999]  Address tag		and user-defined tags. You can click the address tag library below or the project tree - library -			
Address       ×         Equipme 本地设备       、 Statio 0 n         Address PSB       User defined label         Address 0       、 System register         Address format       [Extent: 0 - 9999]         Address tag       Address tag		address tag library to set the tags (see chapter 5-2 Address Tag Library for the use of address			
Address         Equipme       本地设备         nt       n         Address       PSB         type       User defined label         Address       O         Address       System register         Address       [Extent: 0 - 9999]         format       Address tag		tag library and user-defined tags)			
nt Address type Address format Fixed and a set of the set of		Address			
nt Address type Address format Fixed and a set of the set of		Equipme 本地设备			
type   Address   0   Address   format     Image: Address tag     Address tag		nt n			
Address format [Extent: 0 - 9999] Address tag		type			
format Address tag					
Determine Cancel Application		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 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 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	
	─ Picture source ● Display cur	rent O Register assignment O Specify Window	
Picture source	ce Current d	Determine Cancel Applicat	io

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.

	Functional domain	
Pattern	Function Position	
Control	ID FF0	
Describ	e	
Action r	node	
۲	Screen	
0	Screen	
0	Coil	
○ Continuo		
0	First scan after	
It is u	used for system management control and cannot be operated by use	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
Continue	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 set to
	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.
	寄存器设置 ? ×
	地 业 PSW V 0 0
	数据类型 DWord → Float → □ 间接指定
	确定 取消 应用
	● 数值逻辑条件 PSW0 小数位数 0
	== 🗸 0

# ■ Function

Pattern	Function	Position		
Selecter	d function		0	ptional 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 location
Optio	nal 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

Operati Set		○ Set off	○ Negate	
Write ad	ldress			
Devic	本地设备		✓ Settin	
Addre	PSB	✓ 0		
		Indirect		

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			
Equipn	nent	Current equipment port for communication			
Address		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)			
		Address			
		Equipme 本地设备 v Statio 0			
		Address type User defined label			
		Address 0 System register			
		Address [Extent : 0 - 9999] format			
		Address tag			
		Determine Cancel Application			

# (2) Set data

Operati	on				
•	Set Consta	nt		us	O Minus
Write ad	ddress			1.0	1
Devic	本地设备			✓ Settin	
Addre	PSW	~	0		
Data	Word 🗸	Unsignec 🗸	······································		
type			Indirect		

	111111			
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 a	address	Set the write in address		
Equip	pment	Current equipment port for communication		
Add	lress	Set the target coil address		
Data	ı type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,		
		Unigned value, Floating number		
S	et	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 Vser defined label		
		Address 0 System register		
		数据类型 Word V Unsigned V Address [Extent:0-9999]		
		format		
		Address tag		
		Determine Cancel Application		
		Determine Carcer Appication		
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

	A	rithmetic	×		
Operati		O × O ÷			
Left ope		Right operand			
🗌 Enal	ble upper limit	Enable lower limit			
Write ac Devic	ddress 本地设备	✓ Settin			
Addre	PSW V 0				
type	Data Word V Unsignec V Indirect				
Preview		/0 = 0 + 0			
		Determine Cancel Application	on		

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 🗸		v S	Statio 0		
	Address type	PSW		~	0	User defined label	
	Address	0	]			System register	
	数据类型	Word ~	Unsigned	~			
	Address format	[Extent : 0 - 9	999]				
	Address tag						
				Determine	Cance	Application	
Address	Set the ta	et the target register address					
Data type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,						
	Unigned value, Floating number						
Indirect assignment	Set the	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 l	PSW100 re	egister is 1	l, the coil cont	rolling	g this element is	PSB1 (and so on)

# (4) Data transmission

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

Transmis	Word (	) Bit register
Register	1	
Source ad	dress	
Devic	本地设备	✓ Settin
Addre	PSW 🗸	0
Data type	Word 🗸 Unsignec 🗸	☐ Indirect
Destinatio	n address	
Devic	本地设备	✓ Settin
Addre	PSW v	0
Data type	Word V Unsignec V	Indirect

Transmission type	You can choose whether to transfer word register (register value) or bit register (con	
	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	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 V Unsigned V						
	Address [Extent:0-9999] format						
		Address tag					
	Determin	ine 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	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, t	the coil controlling this element is PSB1 (and so on)					

(5) Screen switch

Jump to the specified screen.

	Switch	screen		×
<ul> <li>Start</li> </ul>				
O Screen				
Pop up the p	assword wind	dow automati	cally. (If the	
D	etermine	Cancel	Applicatio	on
				_
stem startup disp	lay screen			

	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
	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 lo	ogin	~	
O Pop up				
🗌 Pop up tł	ne password wind	dow autom Cancel	atically. (If the Application	1

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	ne window		×
	O Close all w	indows			
	Close the	[25001]User	login 💉	-	
		Determine	Cancel	Application	n
Close all the window	All windows of	f the current sci	een can be clos	sed	
Close window	The window nu	umber to be clo	sed can be set		

(8) Import csv data

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

Source file File location	🖲 U disk					
File name	CE.csv					
name	• Fixed file	🔿 Date spe	ecify the file	Register		
	first address					
	地设备		✓ Settin			
Addre pe	SW	✓ 0 Word	l_String ∨			
Regist 1						
Data conte No.	Title	Data type	Data format	number	Integer	Decim
		Data type	Data format	number	Integer	Decim
		Data type	Data format	number	Integer	Decim
		Data type	Data format	number	Integer	Decim
	Title					Decim
No.	Title Add	Data type Delete	Data format	number Move dor		Decim
No.	Title					Decim
No.	Title Add					Decim
No. Executio	Title Add on status on results					Decim
No. Executio	Title Add on status					Decim

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
Ad	ldress	Set target register number
Custom Data Type If it is not checked,		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 forma		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 en	
	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	×			
	- D	ata source fist address				
		Devic 本地设备 v Settin				
		Addre pSW V 0 Word_String V				
	F	Regist 1				
	F	arget File File The Date specify the file Register				
		Data capacity 100				
		lata content				
	1	No. Title Data type Data format number Integer Decir	mal			
		Add     Delete     Move up     Move down       Execution status       Execution results				
		Execution process				
		Determine Cancel Application	nc			
Data sou	rce start	Set the data type and first address of the export data, which is gen	erally set as the internal			
add	ress	register PSW or PFW of the HMI				
Equip	oment	Current equipment port for communication	-			
Add	ress	Set the target register address				
Custom I	Data Type	If it is not checked, the default type is Word, and you can also sele	ect Dword or DDword;			
	• •	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD for	rmat, Hex, Signed value,			
		Unigned value, Floating number	, , , , ,			
Target file	File	Only the USB flash disk position can be selected for export.				
, in the second s	location		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)
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.

			Opr	bad recipe	7	
配方	原		~	Recipe	Register	
Word numbe per line	e					
Recipe	upload add	ress				
Devic	本地设备			¥	Settin	
Addre 199	PSW	~	0			
Data	Word 🗸	Unsignec 🗸				
type				irect		
LIDEL		r compieuo				
	Pe dunine	. compictio				
				Determine	Cancel	Application

Recipe source Data upload object register address (click recipe configuration to set relevant		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 accord		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 nt nt Address
-	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	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)
Recipe t	transfer	The indicator lights up when the recipe transfer is completed
completi	ion flag	

# (11) Recipe download

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

配方	源 V Recipe Specified
Word numbe per lin	
Recipe	download address
Devic	本地设备 v Settin
Addre	PSW V 0
Data type	
	ipe transfer completion nag
	· · · · · · · · · · · · · · · · · · ·

Recipe	Recipe 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 too library and user defined toos)
		the use of address tag library and user-defined tags) Address
		Equipme 本地设备 v Statio 0 n
		Address PSW V User defined label
		Address 0 System register 数据类型 Word V Unsigned V
		Address format
		Address tag
		Determine Cancel 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:
		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	

## (12) Call function

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

	function call
	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.

Picture source	0.0.1.	0.0 10 100 1
Display current	Register assignment	O Specify Windo

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

力能域					?	×
模式	功能	安全设置	位置			
使能控制 ☑ 启用验证						
设备	本地设备			~	设置	
地址	PSB	~	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

	Sliding	g input	×
Basic pro <mark>r</mark> A	ppearar Scale and Notice Security	Position	
Contro Descri			
Read add	ress		
Equip Addre Data type	本地设备		
Attribut	3		
Maxim um	100	Minimu m value	
	Register	Registe	r control
Directi on	Show right v	Minimu m scale 1	<b>.</b>
	ase or 1 🖨 Multiple	scale 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 V User defined label
	type
	Address 0 System register 数据类型 Word v Unsigned v
	数据类型 Word V Unsigned V 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

		otice Security Po			
			Appearance of	slide rail	
			Height	lanes of	
			setting Width	30	
			setting	260	
			51	tyle selection	
			Backgroun d color		¥
			1		~
			Border	-	~
			Fill color		~
-Slider appea	rance				
Width		11-1-1-1			
setting	30	Height setting	50		
	St	yle 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

	Sliding inp	ut	×
Basic Attı Appearar Scale and Notice	Security Locatio	n	^
✓ Display scale			
Scale position		〇下方	
Major scale	Major sca	le	
equal fraction Minor scale 3	length Minor sca	10	*
equal fraction	length	9	
Line			
Scale mark colc	Scale ma	rk s	_~
Scale mark wid 1	*		
✓ Show numeric marks			
Integer c3	Deci	mal 2	
Fo Times New Roman	✓ Ger	neral 🗸	
	Size 12	$\checkmark$	
Display percentage			
<ul> <li>Show axis</li> </ul>			

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

asic pro Appe	earar Scale and Notice Security Position	
Notice		
Before writ	After writing	
✓ Notifica	ation bit	
• Write	on 🔿 Write off	
Equip		
Addre		
	ct designation	
_	2 minute	
✓ Notice	word	
Equip	本地设备 v Set	
Addre	PSW ~ 0 0	
Data	Word v Unsignec v ct designation	
type		
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 Appearar Scale and Notice Security sLocation	1
Display control	
✓ Enable	
When 隐藏 v	
	n
Addre PSB v 0	
Enable Sta ON 🗸 🗌 Indirect	
Enable control	
Devic 本地设备 v Sett	n
Addre pSB v 1	
Enable Sta ON 🗸 🗌 Indirect	
W	
User permission	
Cancel permission after operation	
A prompt window pops up when the user has no permiss	on range
Hide this component when the user has no permission sc	ope
User permission Permission1 V	

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 Statio 0 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

c d

1000			Drop-down menu		×
B	asic AttribAppearan	Notice Security se Lo	ocation		^
	Control ID	DM0			
	Description				
	Mode D	orop-down m⊢ ∽			
	Read address		1		
	Devic 本地设备		∨ Settin		
	Addre pSW Data Word	✓ 0			
	Data Word type	VUnsignec V	ndirect		
	• Ec	dit	() c	ommand mode	
	Number <sup>3</sup>	✓ Pop u	ıp m∢Down	Label content is multilingu	Jal
	Index	corresponding value	label content	Move up	)
	► 0	0	0		
	1	2	1	Move	
	2				
	3(error)	其他	2		
trol ID		其他		not be operated by users	
	It is used for	其他 system manager	nent control, and can		
cription	It is used for Can be used	其他 system manager to comment on t	nent control, and can he purpose of this co		
cription	It is used for Can be used two modes: d	其他 system manager to comment on t drop down menu	nent control, and can he purpose of this co , list box style		
cription	It is used for Can be used to two modes: d drop down m	其他 system manager to comment on t drop down menu nenu: click to sho	nent control, and can he purpose of this co , list box style ow all the options	ntrol object	
cription	It is used for Can be used to two modes: d drop down m	其他 system manager to comment on t drop down menu nenu: click to sho : it can show all	nent control, and can he purpose of this co , list box style ow all the options the options without c	ntrol object	
scription	It is used for Can be used to two modes: d drop down m list box style:	其他 system manager to comment on t drop down menu henu: click to sho : it can show all	nent control, and can he purpose of this co , list box style ow all the options	ntrol object	
ontrol ID scription mode	It is used for Can be used to two modes: d drop down m	其他 system manager to comment on t drop down menu henu: click to sho : it can show all	nent control, and can he purpose of this co , list box style ow all the options the options without c	ntrol object	

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 tag library and user-defined tags  Address PSW					
	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					
	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)					
edit	That is, determine the setting value and text corresponding to each drop-down option through the					
	egister address ● Edit ○ Command mode					
	Number3       Pop up mc Down       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 multilingual	selected this item, click the label content, then click the <b>u</b> to set multi-language. Or manage it in the project tree - Library - Label Multilingual - on the left of the project interface (see 5-1 Label Multilingual for specific usage)					

	Nun	nber <sup>3</sup>	✓ Pop u	ıp m∢Down v	✓ Label c	content is multilingual	
		Index	corresponding value	label content		Move up	
	•	0	0	0			
		1	1	1		Move	
		2	2	2			
		3(error)	其他				
move up	Move	the specifie	ed option up				
move down	Move	the specifie	ed option down				
command mode			-		vill display the	user list set in System Settin	<u>σs</u> -
		-				-	-
					-	gray and cannot be set; Note	ınaı
	this ite	m is only f	for display purp	oses and does not	affect the use	of operating permissions	
	12 8	a 10					
	- Read	address 本地设备		✓ Settin			
		e PSW	~ 0	* Setun			
	Data	Word V U	Insignor M				
	type	inora i o	Indirec	t			
		🔘 Edit		<ul> <li>Comm</li> </ul>	and mode		
		Device <sup>S</sup> 地ì	<u></u>		~		
		Command	ser list)		~		

■ Appearance

	Drop-down menu	×
Basic Attri Appearand Notice Security s	Location	
	Name     category     Size	menu_01_a svg 16 × 16
Status 0 Arrow Style Status 1 Arrow Style Arrow background		
Color Selected Item Conc. Background cc	▼ ▼ Border	
Font settings	Copy this property to each	h

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

			Drop-	down menu		
E	Basic Attril App	earan Notice	Security se Location			
- 1	Error messa	ige				
	✓ Notifi	ication bit				
	• Write	e on	C	Write off		
	Devic	本地设备		✓ Settin		
	Addr	e <sub>PSB</sub>	✓ 0			
- 1			Indire	ct		
	✓ Notic	e word				
	Devic	本地设备	1.112 A.	✓ Settin		
	Addr	e PSW	~ 0			
	Data	Word 🗸 U	Unsignec 🗸 🗌 Indire	ct		
	type					
	Write	2+3.99514 00987				
		1 • 1 1	1 1 1 1	C.(1 1 11 '	s an unset corresponding	1 (1 (
error messag						
					will write ON or OFF to	-
	not take		to the target regis	aer; II Enable is not	checked, the notification	i function will
	not take	e effect				
	Nun	nber <sup>5</sup>	Y Pop u	ip mcDown 🗸 🗸	Label content i	s multilingual
		Index	corresponding value	label content		Move up
		0	0	0		
		1	11	1		Move
		2	22	2		
		3	33	3		
		4	4	4		
		5(error)	其他			

#### Security setting

Drop-down menu	
Basic Attril Appearan Notice Security se Location	
Operation confirmation delay	
Confirm before Waiting time second	
Display control	
When Pa藏 V	
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 0	
Enable Sta ON V Indirect	
User permission	
Cancel permission after operation	
✓ A prompt window pops up when the user has no permission range	
Hide this component when the user has no permission scope	
User permission Permission1 v range	

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  $x_{430\%}$  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

文件浏览						×	
基本属性	外观	安全设置	位置				
控件ID	FBC0						
描述							
显示文件类型	뀓					- 1	
后缀	名						
				添	加		
				H	除		
				215			
			Г	确定	取消		
			L				

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: 						
	后缀名						
	CSV PDF doc						
	冊除余						
	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	
	颜色	
	背暴色 ~	
	选中项目颜色	
	字体 字体 微软推黑 ダイン 常規 イ	
	新色 大小 12 ~	
	对齐 Middle_Center V	
	确定 取消 应用	
Color	The background color of the control and the color of the selected item can be set.	
00101	The subaptound color of the control and the color of the selected item can be set.	

00101	The succession of the control and the color of the selected form of set.
Font	The font, glyph, size, color, and alignment can be set by using the numbers on the dropdown
	index label (you can click "Copy this property to each state" to format the font for all states).

# Security setting

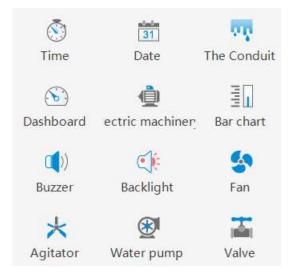
Same as chapter 4-2-3. Numerical input in the safety settings section.

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 Appeara Security Location
Cor	ntrol ID TEO
Des	cription
- Tim	ne format
0	12 hour system   24 hour system
	Format HH:MM:SS v
control ID	It is used for system management control, and cannot be operated by users
	Can be used to comment on the purpose of this control
-	Set the time format, including "12 hour system" and "24 hour system", with 4 formats

Appearance

\_\_\_\_

			🗹 Use pictu	res	
		1	Status	0	~
			Name	data_01	
			catego	<b>y</b> svg	
		in the second	Size	80 × 25	
	Change appea	arance		More	pictures
Border		arance		More	pictures
			Border co		
Border			Border co		
Border sty	le Pure colo		Border co General ∽		

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

oisplay contro	1	
<ul> <li>Enable</li> </ul>		
When	隐藏	
Devic	本地设备	Settin
Addre	PSB V 0	handbacking in the order of the
Enable	Sta ON 🗸 🗌 Indirect	
Jser permissio	n	
✓ Hide this	component when the user has no permis	sion scope
	mission Permission1	
User per	mission Permission1 🗸	

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

#### Location

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

## 4-3-2. 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

	Date
Basic Att Appeara Se	ecurity Location
Control ID DEC	5
Description	
Date format Forma t M/D/Y Display 4-d	
ntrol ID	It is used for system management control, and cannot be operated by

d	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 picture	es	
		Status	0	~
		Name	data_01	
		category	svg	
		Size	80 × 25	
Cha	nge appearance		More	pictures
Border				
B <mark>ord</mark> er style	Pure color	✓ Border co	lor	~
ıt				
t 微软雅黑	~	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

sic Att Appeara Display contro	Security Location	
Enable		
When	隐藏 >	
Devic	本地设备 v Settin	- Charles
Addre	PSB v 0	
Enable	Sta ON 🗸 🗌 Indirect	
User permissio	n	
✓ Hide this	component when the user has no permission sco	ре
User peri	nission Permission1 🗸	

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

#### Location

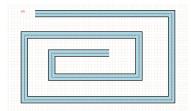
Same to chapter 4-1-1 straight line location part.

## 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	×
Basic Attrit Appearan Security se Location	_
Control ID P0	
Description	
Action mode	
Always flowing	
Direction	
Speed Constant speed 1 Register assign PSW0	
control ID It is used for system management control, and cannot be operated by	y us
lescription Can be used to comment on the purpose of this control	
ction mode Set the action mode of the fluid, including always flow and bit limit	ted
vays flowing the fluid will always flow	
Action mode     Always flowing     Dit limited	

always flowing	the fluid will always flow
	- Action mode
	Always flowing     O Bit limited
	Direction Forward
	<ul> <li>Speed</li> <li>O Register assignment</li> </ul>
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)
	Always flowing     It limited
	Flow conditions     OFF
	Read address Devic 本地设备 V Settin Addre PSB V 0
	Direction Forward O Reverse
	Speed  Constant speed  Register assignment
device	Device port currently communicating
address	Set target coil number

setting	Click "Se	ttings" to enter	the address sett	ing interface. This interfac	e allows you to set
	-	•		l tags. You can click the ad	<b>c</b> .
	- ·	•	•	y below to set the tags use	ed (see 5-2 Address
	Tag Libra	ry for the use of	address tag libra	ary and user-defined tags)	
			Address	×	
	Device	本地设备		✓ Statio n No.	
	Address type	PSB	*	User defined label	
	Address	0		System register	
	Address format	[range : 0 - 9999]			
	Tormat				
				Address Label	
	20		Determin	e Cancel Application	_
Indirect designation	Set the c	urrent address o	offset. The curr	ent coil address changes	with the indirectly
	specified	register value, th	nat is, Dx [Dy]=	=D [x+Dy value] (x, y=0, 1	, 2, 3). Example:
	The curre	nt coil address i	s PSB0, if the i	ndirectly specified address	is PSW100; When
	the value	of the PSW100	register is 0, the	coil that controls this elen	nent remains PSB0;
	When the	value of the PS	W100 register i	s 1, the coil that controls th	is element is PSB1
	(and so or	n)			
flow condition	Select the	action mode of	the fluid to be C	N or OFF (only available v	vhen bit limited)
read address	Set the co	ontrolled coil ad	ldress and set v	whether there is an offset (	this option is only
	available	when bit limited	)		
direction	Set the flo	w direction of the	ne fluid, includi	ng forward and reverse dire	ctions
speed	Set the flo	w speed of the f	luid. You can m	anually set a constant speed	d or set a register to
	control the	e speed.			
	(When the	e speed set in the	e register is "0,	flow at the lowest speed o	f 1, when set to 25,
	flow at the	e highest speed o	of 25.)		

## ■ Appearance

Basic Attri <mark>l</mark> Appeara	ncSecurity se Location	20 M 20	^
		The Conduit Height Border 20 + Backgrou	]
Slider Style Rec	tangle v Heigh	Inter	

height	Set the height of the pipe
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
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
	border (%) background border style width height space state

# (height\*border width%) / 2.

Security setting

Basic Attril Appearan Security se Location Display control ✓ Enable When Devic Addre PSB ✓ 0	
✓ Enable   When 隐藏   Devic 本地设备   Addre PSB   0	
Addre PSB V 0	
Enable Sta ON v Indirect	
User permission Hide this component when the user has no permission scope	
User permission Permission1 v range	

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

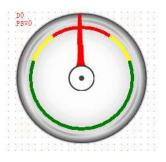
## Location

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

# 4-3-4. 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.



			Dashbo	ard	
asic Attrib	range App	pearan Securit	yse Location		
Control	ID D0				
Descrip	tion				
Read add	本地设备			✓ Settin	
	本地设备	~	0	<ul><li>✓ Settin</li></ul>	
Devic	本地设备		0	✓ Settin	

contr	ol ID	It is used f	or system n	nanagement	control, and canno	ot be operated by users		
descr	iption	Can be use	ed to comm	ent on the pu	rpose of this cont	rol		
read	device	Select the	device port	currently co	mmunicating with	1		
address	setting	Click "Set	ting" to ente	er the addres	s setting interface	. This interface allows you to set and		
		use syster	n registers	and user-de	fined tags. You	can click the address tag library or		
		project tre	e – library	- address tag	g library below to	b set the tags used (see 5-2 Address		
		Tag Librai	Tag Library for the use of address tag library and user-defined tags)					
				Ad	ldress	×		
		Device	本地设备		*	Statio 0 n No.		
		Address type	PSW	Ŷ		User defined label		
		Address	0			System register		
		数据类型	Word ~	Unsigned V				
		Address format	[range : 0 - 99	99]				
						Address Label		
					Determine Can	cel Application		
	address	Set the mo	onitoring ad	dress of the	instrument, and s	set whether to offset the address (i.e.		
		indirectly	specify)					
	data type	Byte-8Bit	Word-16B	Sit; DWord-	32Bit; DDWord	-64Bit; BCD; Hex format; Signed;		
		Unigned;	Floating 1	number				
	indirect	Set the cu	irrent addre	ess offset. Th	ne current registe	er address changes as the indirectly		
	specify	specified a	egister valu	ue changes,	that is, Dx [Dy]=	D [x+Dy value] (x, y=0, 1, 2, 3).		
		Example:	The curren	t register ad	dress is PSW0, i	f 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)

# Range

	Dashboard	×
Basic Attril range Appearan Security se Lo	cation	
Range Maximum ra 100	Minimum ranç 0	
✓ Use PSW0	Use	
Display color:	Fan ring widti 4	
Fan ring radit <sup>50</sup> 🖨		
- ✓ Alarm interval		
Upper limit of al: 80	Lower limit of al 20	
Use PSW0	Use	
Upper limit color		
Color beyond lo		
✓ Danger zone		
Upper hazard vi 90	The following he 10	
Use PSW0	Use	
Display color:		

range	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
interval	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
danger	upper hazard	Set the maximum dangerous value of the instrument. You can set a constant or
zone	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
asic Attril range AppearancSecurity s	( Location
	Dial style:
(( 🔿 ))	Directio Clockwise
	Starting ang <sup>0</sup>
	End angle: 360
0	Transpare 100
	Syncopation dial
Needle style	
Needle style	V Interior color:
Axis Pivot style:	Interior color:
Scale	e Y Scale color
Display apple Casta as 1 Outrid	
✓ Display scale Scale positi Outsid	
Main engravii7	Major scale leng7 🚔
And the second sec	
Main engravii7	Major scale leng7 🚔
Main engravii7	Major scale leng7 🚔

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 co		
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

		Dash	board		×
Basic Attril ra	nge /	opearan Security se Location			^
— Display co ☑ <mark>☑</mark> Enab					
When		隐藏			
De	evic	5地设备	~	Settin	
Ac	ddre	SB v 0			
En - User perr	nable S	a on v	ndirect		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		omponent when the user l	has no permise	sion scope	
	r pern	-	<b>•</b>	ion scope	

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

Location

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

## 4-3-5. 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.



	MO	
Control ID	MO	
Description		
Read address		
Devic 本地i	设备	✓ Settin
Addre PSB	~	0
	1	
logic	<u></u>	Indirect
logic Positive lo	gic	Indirect Negative logic
	gic	

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 tag library and user-defined tags)					
			Address		×	
	Device	本地设备		~	Statio n No.	
	Address type	PSB	~		User defined label	
	Address	0			System register	
	Address format	[range : 0 - 9999]	1			
					Address Label	
			Determine	Car	cel Application	
address	Set the m	onitoring address	of the motor and	d set v	whether the address	s is offset (i.e. indirectly
	specified)	e				
indirect specify	Set the cu	rrent address offs	set. The current re	egister	address changes a	s the indirectly specified
	register va	alue changes, tha	at is, Dx [Dy]=D	[x+D	y value] (x, y=0, 1	1, 2, 3). Example: The
	current re	gister address is	PSW0, if the in-	directly	y specified address	s is PSW100; When the
	value of t	he PSW100 regis	ster is 0, the regi	ster th	at controls this con	mponent remains PSW0;
	When the	value of the PSW	/100 register is 1,	the re	gister that controls	this component is PSW1
	(and so on	ı)				
logic	Select pos	itive or negative l	logic when display	ying m	otor status	
flash	Select wh	ether to blink and	d whether to blinl	c in a	certain state, such	as ON state flashing and
	OFF state	flashing				
flicker frequency	Set the fre	quency of blinkir	ng			

# ■ Appearance

9	🕑 Use pictu	res	
	Status	0	~
	Name	motor_03_a	
	catego	<b>ry</b> svg	
	Size	100 × 100	

Set display appearance
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
Set border style and color

Security setting

	Electric machinery	
- Display contro Enable When Devic	隐藏 v 本地设备 v Settin	
Addre Enable – User permissio		
✓ Hide this User perr range	component when the user has no permission scope mission Permission1	

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

#### Location

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

## 4-3-6. 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.

sic Attrib	Appeara	n ra	ange So	cale ar	nd Security	se Locatio	n		1
Control	ID	BCO							
Descrip	tion	1							
Descrip									
Descrip									
		盗				~	Settin		
Read ad	dress 本地设	备		~	0	~	Settin		

contro	ol ID	It is used for system management control, and cannot be operated by users
descri	ption	Can be used to comment on the purpose of this control
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 type Vsw V User defined label
		Address 0 System register
		数据类型 Word v Unsigned v
		Address [range : 0 - 9999]
		format
		Address Label
		Determine Cancel Application
	address	Set the monitoring address of the bar graph and set whether to offset the address (i.e.
		indirectly specify)
	data type	Byte-8Bit; Word-16Bit; DWord- 32Bit; DDWord -64Bit; BCD code; Hex format;
		Signed; Unigned; Floating number
	indirect	Set the current address offset. The current register address changes as the indirectly
	specify	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)

■ Appearance

	Bar chart	×
asic Attril Appearance ra	nge Scale and Security se Location	
	Appearance StraightBar A sector Direction Show up Show down Show Left Show Right	
Style	自定义 、	
style:		
Border     Backgroun     d	· ·	
Fill Fill color:	v	
Pattern filling		
Style:	Foregrou nd color:	

ani	pearance	Select the appearance of the bar graph, and you can choose between straight bars or			
۳PI	peurunee	sectors			
	. 1.4				
	aightbar	The style of a regular bar chart			
di	irection	Set the bar graph indication direction, including up, down, left, and right display			
а	a sector	Displayed as a fan, starting angle and coverage angle can be set			
proportion of	of inner and outer	Change the display radius of the sector by changing this value (scale range: 1-99)			
	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: Transparency:	From	n left to right ∨	Foregrou nd color: 39		<b>~</b>
Using a gradier		_	an exampl	e to set trans	sparency (0-255)
transparency:	0	255			

Range

range Maximum: 100 Register Minimum: 0 Register Minimum: 0 Register Target interval Target value: 50 Register Error range (±) 10 Register Target interval color  ✓ Alarm range Alarm upper 90 Register Imit: Exceed the upper limit Fill color:		Bar chart	>
Maximum: 100 Register   Minimum: 0 Register   I Target interval 50 Register   Error range (±) 10 Register   Target interval color ✓     I Alarm range   Alarm lower 10   Imit: 90   Register   Exceed the upper limit Fill color:    Exceeding the lower limit	asic Attril Appearan	range Scale and Security se Location	
Minimum: 0   Register     Minimum:     0   Register     Target interval   Target interval   10   Register     Target interval   v     Color     V     Alarm range     Alarm lower   10   Register     Exceed the upper limit      Fill color:	range		
Immunum: U     Immunum: U     Immunum: Immunum:     Immunum: Immunum:   Immunum: Immunum:     Immunum: Immunum:     Immunum: Immunum:     Immunum: Immunum:     Immunum: Immunum:     Immunum: Immunum:     Immunum: Immunum:     Immunum: Immunum:     Immunum: Immunum:     Immunum: Immunum:     Immunum: Immunum:     Immunum: Immunum:     Immunu: Immunum:     Immunu: Immunum:     Immunu: Immunum:     Immunu: Immunum:     Immunu: Immunum:     Immunu: Immunum: <td>Maximum:</td> <td>100 Register</td> <td></td>	Maximum:	100 Register	
Target value: 50 Register   Error range (±) 10 Register   Target interval color ✓     Alarm upper 90   Register     Alarm lower   Imit:     Exceed the upper limit   Fill color:   Exceeding the lower limit	Minimum:	0 Register	
Error range (±) 10   Register     Target interval     color     Alarm upper   g0   Register     Imit:     Alarm lower   Imit:     Register     Exceed the upper limit      Fill color:	Target interval		
Target interval   color     Alarm upper   imit:     Alarm lower   10     Register     Exceed the upper limit   Fill color:	Target value:	50 Register	
color   Alarm range   Alarm upper   imit:   Alarm lower   10   Register   Exceed the upper limit Fill color: Exceeding the lower limit Exceeding the lower limit	Error range (±)	10 Register	
Alarm upper 90 Register Imit: Alarm lower 10 Register Exceed the upper limit Fill color:		×	
Iimit:     30     Construction       Alarm lower     10     Register       Iimit:     10     Register       Exceed the upper limit     Y       Fill color:     Y	Alarm range		
Imit:     10       Exceed the upper limit       Fill color:       Exceeding the lower limit	Alarm upper limit:	90 Register	
Fill color:		10 Register	
Fill color:	Exceed the upper	limit	
	Fill color:	~	
	Exceeding the low		
	Fill color:	V	

	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	
asic Attril Appearan	range Scale	and Security se Location	
Scale			
Scale position:	• 外	〇内	
Main engraving	12	Major scale 12 length:	
Secondary engraving	5	Sub scale 5 length:	
Scale style			
Scale mark color		✓ Scale mark ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	
Scale mark width		v	
Integer bits:	3 Place	imal pes: 0 🖨	
Integer bits: Fo 微软雅黑 Co	3 🛊 plac	ees: 0 🗘 General V	
Fo微软雅黑		ves: 0 🔹	
Fo 微软雅黑 Co	3 🗘 plac	ees: 0 🗘 General V	
Fo 微软雅黑 Co Display percen	3 🗘 plac	ses: 0 General  Size 12  V	
Fo 微软雅黑 Co Joisplay percen Fo 微软雅黑	3 🗘 plac	ees: 0 🗘 General V	
Fo 微软雅黑 Co Display percen	3 🗘 plac	ses: 0 General  Size 12  V	
Fo 微软雅黑 Co ✓ Display percen Fo 微软雅黑	3 Department	ves: 0 General v Size 12 v General v	
Fo 微软雅黑 Co Joisplay percen Fo 微软雅黑	3 Department	ves: 0 General v Size 12 v General v	
Fo 微软雅黑 Co Joisplay percen Fo 微软雅黑	3 Department	ves: 0 General v Size 12 v General v	

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

Bar chart	×
range Scale and Security se Location	
)	
隐藏 ~	
本地设备 v Settin	
PSB v 0	
Sta ON V Indirect	
on component <mark>w</mark> hen the user has no permission scope	
mission Permission1 v	
	range       Scale and Security se Location         隐藏          本地设备          PSB       0         Sta ON          Indirect         on         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.

# 4-3-7. 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	×
asic AttribSe	ecurity se Location	
Cont	rol ID BU0	
Desc	ription	
- Enabling	g conditions	
	Word     O bit	
Read ac	ldress	
Devic	本地设备 v Settin	
Addre	PSW V 0	
Data	Word V Unsignec V	
type	Indirect	
Trigge	r conditions 🖌 0	
Ring mo	ode	
	Make a sound	

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"				
read address	enabling condition is word	Enabling conditions ● Word				
	enabling condition is bit	Enabling conditions Word ● bit Read address Devic 本地设备				
	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 n No.
		Address type	PSW		~		User defined label
		10 10 10 10 10 10 10 10 10 10 10 10 10 1	0				System register
		数据类型	Word ~	Unsigned	*		
		Address format	[range : 0 - 99	99]			
						_	Address Label
					Determine	Can	cel Application
	address	Set the obj	ect address of	f the buzze	r and whether	it is off	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 cur	rent address	offset. The	e current regist	er addr	ess changes as the indirectly
	specify	specified register value changes, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3).					
		Example: 7	The current r	egister add	ress is PSW0,	if the in	ndirectly specified address is
		PSW100; V	When the val	ue of the F	SW100 registe	er is 0,	the register that controls this
		component	remains PSV	W0; When	the value of th	ne PSW	100 register is 1, the register
		that control	ls this compo	onent is PS	W1 (and so on)	)	
trigger condition		If the ena	abling cond	ition is "	Word", the s	etting	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 is n	nade	
	continuous	Keep ringi	ng when con	ditions are	met		
	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 wh	nen
	the enabling conditions are met can the component be used normally (as shown in the fig	ure
	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 s	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.

	curity se Location	
Cont	rol ID BL0	
Desc	ription	
Enablin	g conditions	
	Word     Dit	
Read ac	dress	
Devic	本地设备 v Settin	
Addre	PSW V 0	
Data	Word V Unsignec V	
type	Indirect	
Trigge	conditions V 0	
55		
Decklink	nt action	

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    Settin Addre PSB    0
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
uuuress	setting	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
		Statio
		Address PSB V User defined label
		Address 0 System register
		Address [range : 0 - 9999]
		format
		Address Label
		Determine Cancel Application
		Determine Cancer Appreador
	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	Set the current address offset. The current register address changes as the indirectly
	specify	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
· ·	11.1	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 1 1.	-1-44	"OFF" or "ON" is valid
backlight action		Set the backlight actions, including turning off and waking up

Security setting

		Backlight			×
Basic Attril Security se Enable control ✓ Enable					
Devic	本地设备	wa	~	Settin	
Addre	PSB	0			
Enable	Sta ON 🗸	🗌 Indirect			
control The bit limit ca	in be set (the enabl	ing state of th	e ena	abling control ca	n be custom
the enabling co	onditions are met	can the comp	oner	nt be used norm	ally (as sho

ble 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 S 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 AttribApp	earan Security st Location	
Contro	ol ID FA0	
Descri	iption	
Action m	ode	
0	Keep rotating       O Controlled by register	
- Enabling	● Word ○ bit	
Read ad	dress	
Devic	本地设备 v Settin	
Addre	PSW V 0	
Data type	Word VUnsignet Indirect	
Trigger	conditions V 0	
Directior	n of rotation	
۲	Forward 🔘 Reverse	
Rotation	al speed	
۲	Constant (%) 10 v	
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	Set the action mode of the fan to be controlled by the register			
register	Action mode <ul> <li>Keep rotating  <ul> <li>Controlled by register</li> </ul> </li> <li>Enabling conditions <ul> <li>Word</li> <li>bit</li> </ul> </li> <li>Read address <ul> <li>Devic 本地设备</li> <li>Addre PSW <ul> <li>0</li> <li>Data Word <ul> <li>Unsignec <ul> <li>Indirect</li> </ul> </li> </ul></li></ul></li></ul></li></ul>			
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)			

	Address		
	Device       本地设备       Statio 0         Address       PSW       User defined label         Address       0       System register         数据类型       Word       Unsigned       System register         Address       [range:0-9999]       Address Label         Determine       Cancel       Application		
address	Set the monitoring address of the fan and set whether to offset the address (i.e. indirectly		
	specify)		
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 "Controlled by Register" is selected		
	If the enabling condition is "word", the setting meets certain conditions >,<,<=,>=,==, != a		
	certain value is valid; If the enabling condition is "bit", setting "OFF" or "ON" is valid;		
rotation direction	Set the rotation direction of the fan, including forward (clockwise) and reverse		
	(counterclockwise) directions		
rotation speed	Set the rotational speed of the fan, 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

15 - 2 <sup>1</sup>	🗹 Use pictu	res	
	Status	0	~
	Name	fan_05_a	
	catego	<b>ry</b> svg	
	Size	100 × 100	
Change appearance		More	pictures
✓ Border			

 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	2
asic Attril Appearan	Security se Location	
Display contro	2	
When	隐藏 >	
Devic	本地设备 v Settin	
Addre	PSB V 0	
Fnable	Sta ON v Indirect	
LINDIC		
User permissio	on	
User permissio	on component when the user has no permission scope	
LINADIC		

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	×	
	Ba	sic Att Appeara Security Location		^	
		Control ID RA0			
		Description			
		Read address Devic 本地设备	✓ Settin		
		Addre pSB v 0	J		
	- 11		lirect		
		logic			
		Positive logic	O Negative logic		
		Direction of rotation <ul> <li>Forward</li> </ul>	O Reverse		
		Rotation speed			
		<ul><li>Constant (%)</li></ul>	10 ~		
		Controlled by register	1999 (1997) 1997 - 1997 (1997)		
		Controlled by register			
cor	ntrol ID	It is used for system managem	ent control, and ca	annot be operated by users	3
des	cription	Can be used to comment on th	e purpose of this c	control	
read	device	Select the device port currently	y communicating	with	
address	setting	Click "Settings" to enter the a	address setting int	terface. This interface allo	ows you to set and
		use system registers and use	r-defined tags. Yo	ou can click the address	tag library or the
		project tree - library - address			e 5-2 Address Tag
		T 1			
		Library for the use of address	tag library and use	er-defined tags)	
		Library for the use of address	Address	er-defined tags)	
		Device 本地设备		× Statio 0	
		Device 本地设备 Address PSR		×	
		Device 本地设备 Address type PSB		✓ Statio 0 n No. User defined label	
		Device 本地设备 Address type Address 0		✓ Statio n No.	
		Device 本地设备 Address type PSB		✓ Statio 0 n No. User defined label	
		Device 本地设备 Address PSB Address 0 Address [range:0-9999]		✓ Statio 0 n No. User defined label	
		Device 本地设备 Address PSB Address 0 Address [range:0-9999]		✓ Statio 0 n No. User defined label	
		Device 本地设备 Address PSB Address 0 Address [range:0-9999]		✓ Statio 0 n No. User defined label	
		Device 本地设备 Address PSB Address 0 Address [range:0-9999]	Address	<ul> <li>Statio 0</li> <li>No.</li> <li>User defined label</li> <li>System register</li> </ul> Address Label	
		Device 本地设备 Address PSB Address 0 Address [range:0-9999]		<ul> <li>Statio 0</li> <li>No.</li> <li>User defined label</li> <li>System register</li> </ul>	
		Device 本地设备 Address PSB Address 0 Address format [range:0-9999]	Address	<ul> <li>Statio 0</li> <li>No.</li> <li>User defined label</li> <li>System register</li> </ul> Address Label       Cancel     Application	
	address	Device 本地设备         Address psB         Address 0         Address format         [range:0-9999]         Set the coil address that control	Address	<ul> <li>Statio 0</li> <li>No.</li> <li>User defined label</li> <li>System register</li> </ul> Address Label       Cancel     Application	er there is an offset
	T	Device 本地设备         Address         PSB         Address         O         Address         Grange:0-9999]         Grange:0-9999]         Set the coil address that control (i.e. indirectly specified)	Address	Statio 0     n No.     User defined label     System register      Address Label      Cancel Application      he agitator, and set whether	
	indirect	Device 本地设备         Address         PSB         Address         O         Address         Irange: 0 - 9999]         format         Set the coil address that control         (i.e. indirectly specified)         Set the current address offset.	Address Address Determine ols the action of th The current registe	Statio 0     n No.     User defined label     System register      Address Label      Cancel Application      ne agitator, and set whether er address changes as the	indirectly specified
	T	Device 本地设备         Address         PSB         Address         O         Address         Grange: 0 - 9999]         Grange: 0 - 9999]         Set the coil address that control         (i.e. indirectly specified)         Set the current address offset.         register value changes, that is	Address Address Determine Determine Dols the action of th The current registe , Dx [Dy]=D [x+1]	X Statio 0 n No. User defined label System register Address Label Cancel Application ne agitator, and set whether er address changes as the Dy value] (x, y=0, 1, 2, 3	indirectly specified 3). Example: The
	indirect	Device 本地设备         Address         PSB         Address         O         Address         O         Address         Irange: 0 - 9999]         format         Irange: 0 - 9999]         Set the coil address that control         (i.e. indirectly specified)         Set the current address offset.         register value changes, that is         current register address is PS'	Address Address Determine Determine Ols the action of th The current registe , Dx [Dy]=D [x+1) W0, if the indirect	<ul> <li>Statio 0</li> <li>No. 0</li> <li>User defined label</li> <li>System register</li> </ul> Address Label Cancel Application The agitator, and set whether The address changes as the provide of the set of the	indirectly specified 3). Example: The SW100; When the
	indirect	Device 本地设备         Address         PSB         Address         O         Address         Grange: 0 - 9999]         Grange: 0 - 9999]         Set the coil address that control         (i.e. indirectly specified)         Set the current address offset.         register value changes, that is	Address Address Determine Determine Dols the action of th The current register , Dx [Dy]=D [x+1) W0, if the indirecc is 0, the register t	<ul> <li>Statio 0 n No. 0 User defined label</li> <li>System register</li> <li>Address Label</li> <li>Cancel Application</li> <li>me agitator, and set whether</li> <li>er address changes as the Dy value] (x, y=0, 1, 2, 3)</li> <li>withy specified address is P that controls this component</li> </ul>	indirectly specified 3). Example: The SW100; When the ent remains PSW0;

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 action	
	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			^
a	Use pictu	res	
	Status	0 ~	
	Name	agitator_04_a	
Sec.	categoi	<b>y</b> svg	
	Size	90 × 180	
BoChange appearance	Border	color	

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 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

	Agitator	×
Basic Att Appear	a Security Location	^
─ Display contr ✓ Enable When Devic Addre	隐藏 v 本地设备 v Settin	
User permiss	e Sta ON V Indirect ion s component when the user has no permission scope ermission Permission1 V	

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

Location

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

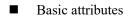
#### 4-3-11. Water pump

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.





c Att Ap	peara Security Locatio	n	^
		3	
Contro	ol ID WP0		
Descr	iption		
Read add	drace		
H	WENT HERE DON'T LONG	✓ Settin	
	本地设备 PSB v		
Addre	PSB V	0	
		Indirect	
ogic			
	Positive logic	O Negative logic	
Directior	1		
۲	Forward	O Reverse	
Speed			
۲	Constant (%)	10 🗸	
	Controlled by registe		

con	ntrol ID	It is used for system management control, and cannot be operated by users		
dese	cription	Can be used to comment on the purpose of this control		
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	
	U	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 type Vser defined label		
		Address 0 System register		
		Address [range : 0 - 9999] format		
		Address Label		
		Determine Cancel Application		
	address	Set the controlled address of the water pump, and set whether there is an offset	(i.e.	
		indirectly specified)		
	indirect	Set the current address offset. The current register address changes as the indirectly speci	fied	
	specify	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 PS	W0;	
		When the value of the PSW100 register is 1, the register that controls this component	nt is	
		PSW1 (and so on)		
1	ogic	Select the pump action state to be 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 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

	<ul> <li>Use pictu</li> </ul>	res		
	Status	0	~	
	Name	pump_01_b		
N.O.Z	categoi	<b>y</b> svg		
	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	×
sic Att Appeara Security Location	^
Display control I Enable When 隐藏 V Devic 本地设备 V Addre PSB 0 Enable Sta ON V Indirect	
User permission Hide this component when the user has no permission scope User permission range	

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

# Location

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

## 4-3-12. 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 📓 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.



- 		Valve	×	
Basic Att	Appeara Security Location			1
Co	ntrol ID V0			
	scription			
✓ R	ead / Write use different addres	s		
De David				
5 (**2.3) **72.5	address 本地设备	✓ Settin		
	e psg v 0	v Settin		
	Ind	irect		
	address			
	<ul> <li>本地设备</li> <li>PSB v 0</li> </ul>	✓ Settin		
Audi				
	Ind Ind	irect		
Actio				
	Conduction O Close	On / off	On when pressed	
logic				
	Positive logic	O Negative logic		
- Direct				
	Forward	Reverse		
- Speed				
	Onstant (%)	10 ~		
	Controlled by register			
ontrol ID It is used	for system management	nt control. and can	not be operated by	 v users
	sed to comment on the			
-	check whether to u			Juriting (not
while use frou can	check whether to u	se a different ad	diess for reading	/whiting (ref

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 PSW0;
	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.S.	Status	0	~
20	Name	valve_05_b	
	categor	<b>y</b> svg	
	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	×
asic Att Appeara	Security Location	
Operation cor Confirm I Key delay		
Display contro	J	
✓ Enable		
When	隐藏 ~	
Devic	本地设备 v Settin	
Addre	PSB V 0	
Ena <mark>bl</mark> e	Sta ON v Indirect	
Enable contro	I	
Devic	本地设备 v Settin	
Addre	PSB V 0	
Enable	Sta ON 🗸 🗌 Indirect	
User permissio	on	
	ermission after operation	
A promp	t window pops up when the user has no permission range	
	component when the user has no permission scope	
Use <mark>r pe</mark> r		

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 0[2]:Grou	p0 v Edit alarn	n group int English	^
•		ine english	
Add Modify Insert Delete Delete	all Copy Paste Import Expor	t	
	aency Triager conditions	Alarm content	Sound
✓ Group 0:Gr 0 Low ✓ Group 0:Gr 1 Low	PSB0 ON	tempearture high	Disable
Group 0:Gr 1 Low	PSB0 ON	overvoltage	Disable
Historical event saving			
Storage location			
●н ○∪			
Export Control			
File			
File alarmEdit			
Fixed file      Date	Register		
Storage capacity			
65535 🗘 Count 🗸			
When the storage space is insufficie	ent		
Stop saving Overwrit	e old records		
✓ Data retention days			
Retention c1			
Save			_
Select	Project	Move up	
	No. Alarm Trigger Date		
	Alarm Trigger Time	Move down	~
<			>
		Determine Cancel	Application

■ Alarm group

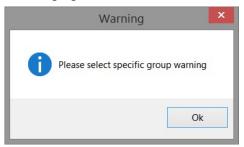
alarm group	Set the group of the alarm group, and select the corresponding group display in the alarm
	display
edit alarm group	Click to set the name of each alarm group
name	

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 group 0 serial	
serial	Name Emergency Low V
Trigger condition	○ Word register
Read address	
Devic 本地设备	✓ Settin
Addre <sub>PSB</sub>	✓ 0
	Indirect
Conditions ON	v
Conditions UN	
Alarm content	
	Multiling
	overvoltage
	Insert monitoring
Sound	Insert monitoring
Sound Enable	Insert monitoring Buzzer timeout (1 ~
Enable	Buzzer timeout (1 v
	Buzzer timeout (1 v
Enable	Buzzer timeout (1 🛛 🗸
Enable	Buzzer timeout (1 🛛 🗸
Enable	Buzzer timeout (1 🛛 🗸
Enable	Buzzer timeout (1 🛛 🗸
Enable	Buzzer timeout (1 🛛 🗸
Enable	Buzzer timeout (1 🛛 🗸

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 v Statio 0 n No.
	Address type VSB V User defined label
	Address 0 System register
	Address [range : 0 - 9999]
	format
	Address Label
	Determine Cancel 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
	alarm content.

		Inserted content – 🗆 🗙						
		Category Monitoring address v						
		value 1 Monitor address setting						
		value2 Variable value3 name value1						
		Address Value ~						
		Devic 本地设备 v Settin						
		Addre     pSW     0       Data     Word     V Insignet						
		type Indirect						
		Data format						
		digits 4 🗘 Decimal digits 0 🗘 Leading 0						
		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.						
		Alarm content						
		Tevt     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							
	rm pop-up	When checked, the selected window will be displayed on the touch screen when the alarm is						
	window	triggered						
		✓Alarm pop-up window						
		Pop up wir[20002]Local informa v						
		Pop up cycle						
		O Pop up cycle						
		✔ Close the window after the alarm						

	рор	up	Select the window to pop up, and it will pop up on the touch screen after the
	window		alarm is triggered
	pop up c	ycle	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	1	

# Historical event saving

● H ○ U			
Export Control /0	Control address information		
ile			
File alarmEdit			
● Fixed file ○ Date	○ Register		
torage capacity			
65535 Count	~		
/hen the storage space is i	nsufficient		
	Overwrite old records		
Stop saving O C			
	Day		
Data retention days Retention c	Day		
Data retention days	Day Project	_	Move up
Data retention days Retention c1		^	Move up

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	The stored file name is named with a date, such as the file exported on May 29, 2021, with
Name Dynamically specify	the file name 20210529 Set a majster address, and the stored file will be named after the contents of the majster
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
The name	such as character input and Chinese input. (File names support up to 200 characters)
storage capacity	Set the total amount of collected data information
storage capacity	Maximum storage capacity 65535 pieces
when the storage	Stop saving or overwriting old records when the storage space is insufficient
space is insufficient	stop saving of over which got records when the storage space is insumerent
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 Disp	olay Appearance	Alarm query Sec	urity set Locat	ion	
	Description	0 × ~	254 🗸	Alarm entry		
	✓ Use title					
	Tevt	O Multiling				1
	Table title	List title L	.ist Data	Synchronize	language font styles	
	A Statistics Control of	12				
	Fo Times New	v Roman	✓ General	~		
	Fo Times New Co		General ze 12	~		
	Times New	Siz		<b>~</b> 30	÷	
1 ID	Co Ali Middle_Cent	v Siz ter v	ze 12 Row h		cannot be operate	d by users
	Co Ali Middle_Cent	v Siz ter v	ze 12 Row h			

-				
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

			Alarm display	×
Ba	sic Attribi	Display Appearance Alarn	n query Security set Location	
	Alarm mode	<ul> <li>Real time</li> </ul>	○ History	
	Number of a	larms		
	Total		Number of entries per page 10	( )
	Use	Auto-fit column widt	th	
	Select	Project	Title Title Description	Column width
	~	No.	No.	56
		Trigger date	Trigger date	108
		Trigger time	Trigger time	111
		Alarm information	Alarm information	48
	✓	Alarm times	Alarm times	104
	Date time fo	Date YY/MM/DD	Y Time HH:MM:SS	~
alarr	n mode	Select whether the inf	formation displayed in the curre	ent table is real-time or historical.
rea	l time	When checked, the a	alarm information displayed i	n the table is real-time alarm informatio
		display, that is, only t	he information currently in the	alarm state is displayed, and the complete
		1 57 7 5	ntent will not be displayed.	1 2 7 1
hi	story		1 2	display real-time alarm information, but als
	5	_	tion for the history of ended al	
nber	total		of alarm messages displayed.	
	number			
ms		Set the number of ala	rms displayed on the current pa	age.
	entries per			s than the total number of pages, buttons of
	-			
	page			lick or scroll to view information that is no
		displayed on the curre		
info	rmation	use After che	ecking, click "" below the s	setting bar (see the figure below) to enter
		multiling	ual settings, or the project	tree - Library - Label Multilingual for
		managem	nent (see 5-1 Label Multilingua	l for specific usage).
			Title Description Settings	
		No.		
		Trigger o		
		Trigger t		
		Alarm in	formation	

auto-fit When checked, column widths cannot be customized, and the software will

	column	automatica	ally adjust to the most suitable size based on the project image.		
	width		······································		
		splayed information content, and you can select serial number, alarm trigger date,			
	trigger time, alarm information, confirmation time (only available in history mode), alarm tim and alarm recovery time (only available in history mode).				
	project	-	splay items for each column of the table.		
	1 5	No.	Displays the number of the table column.		
		trigger	Date when the alarm was generated.		
		date			
		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	le 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	Set the co	plumn width for each column, which can only be modified if Auto-fit		
	width	Column W	/idth is not checked.		
time sort	Set the info	rmation dis	play mode and select whether the latest alarm is displayed before or after.		
chronological order	According	to the sequ	ence of alarm time generation, the first After selecting "Display		
	generated a	alarm infor	mation is displayed at the top and the Unrecovered Alarm		
	following	generated	alarm information is displayed at the Information at the Top", the		
	bottom of	the table.	That is, the latest alarm information is unrecovered alarm		
	displayed at	t the bottom	n of the table. information will be displayed		
reverse	In contrast	to the chror	nological order, the alarms generated first centrally at the top of the table		
chronological	are displaye	ed at the bo	ottom, and the alarms generated later are regardless of the time		
	displayed a	it the top,	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,		
			e will be generated.		
double click			comatic confirmation will be generated when you double-click an alarm		
	-		nation time will be generated.		
long press			rm message will be automatically confirmed when long pressed, and a		
	confirmatio	n time will	be generated.		

control 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 History).						
	as					
History).						
✓ Enable Confirm						
Mode   Single click  Double-click  Long press						
Information hiding control						
Bit0 (hide confirmed information); Bit1 (hide recovered information); Bit2 (hide unrecovered information)	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 the	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 confirm	ied					
information;	information;					
Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recover	Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered					
information;	information;					
Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered	red					
information;						
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
Basic Attrib	Display Appearance Alarm query Security set Location
Table	
Backg	grou V Title descript V
- ✔ Outer	frame
i i i	ine style Y Line color
Li	ne width 1 v
Show	grid
L	ine style Y Line color
Li	ne width 1 ~
When the	e alarm is triggered
	Backgr
Alarm	confirm
	Backgr
Alarm	recovery
t	Background V
table Set th	ne color of the table border and background.
ackground Set th	he background color of the entire table.
e background Set th	he background color of the table header row. If the header is not checked, the

	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 whether 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 alarm 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

Alarm display						×
Basic Attribute:	Display	Appearance	Alarm query	Security setting	Location	
Picture	PSB0	Export conditio ON-	>OFF ~	Export Format	~	
Use the que	ry function					
Select Pictur	e, you can i	use picture expoi	rt function. Mee	ets export condition	ons, export form	at is PNG.
		共家 查若 图片工具 < Temp > Run > storage > udisk > ☆ ^	png v ð P i	E png 中搜索	~ (	
	!3年TS欽何 3 副帯PLC用 Drive 騎		321 P1_TC0_202321 P1_TC0_1 0184927 P1_TC0_1	02321 P1_TC0_202321 937 0185524 P1_TC0_202		

# 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.

Alarm display						3
Basic Attribute:	Disp <mark>la</mark> y	Appearance	Alarm query	Security setting	Location	
<ul> <li>✓ Picture</li> <li>✓ Use the que</li> </ul>	PSB0	Export conditio ON-:	>OFF ∨	Export Format	~	
Query method		) Query by time	perio() Query	by group Quer	y by numt⊖ Q	uery by level
○ Register	control que					

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 settings	
Query control	
PSBO	
Query date	
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.

ery se	ttings		
Quer	y control		
	PSB0		
Query	date		
	hursday , March $\vee$	✓ Register control	PSW0
	PSW0:年(无符号	数方式输入,YYYY格式,依	列如2004)
	PSW1 : M	Ionth (input in unsigned	d number format, MM for
	PSW2 · D	av (input in the form of	unsigned number in DD f

(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.

Query tim	e period					
From	Thursday ,	March ∨	10	Hol <sup>0</sup>	Minute	Second
То	Thursday ,	March ∨	11	Ho 0	Min 26	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 $\vee$ 10	Ho(0	Minute	Second
O Thursday , March ∨ 11	Hot	Min26	Second
Register contro	PSW0		
PSW0 ~ PSW5 Represe	nt start time	e Year/Month	/Day Ho

### (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

### (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.



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

No.	0	*	<ul> <li>Register conti</li> </ul>	PSW0

(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.

Low	~	Register control
		Register value(0~3) represent alarm level low, normal, hig
	Low	Low ~

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	~	Register conti PSW0
			Register value(0~3) represent alarm level low, normal, high

(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.

Query method Query by date	O Query	y by time period $\bigcirc$ Query by group $\bigcirc$ Query by numbe $\bigcirc$ Query by level
• Register control c	PSW0	Register value 0:by date 1: by time period 2:by group 3:by number 4:by le
Query settings		
Query control		
PSBO	1	
Query register		
PSWO	)	
PSW0 ~ PSW1	1:根据不同	的查询方式,最多占用12个字

Security setting

	Alarm display
asic Attribi Dis	olay Appearance Alarm query Security sett Location
Display contro	I
✓ Enable	
When	隐藏
Devic	本地设备 v Settin
	PSB V 0
Enable	Sta ON V Indirect
Enable control	
✓ Enable	
Devic	本地设备 v Settin
Addre	本地反音 ✓ Setun PSB ✓ 0
Addre	
Enable	Sta ON V Indirect
User permissio	nn
	ermission after operation
57-00	
	window pops up when the user has no permission range
Hide this	component when the user has no permission scope
	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.

		×			
	Basic Attr Displa	ay Security Location			
	Control ID	DAO			
	Description				
	Alarm source	3			
	Display group range	0 ~ 254 ~	Alarm entry		
	Use				
	Select	Project	Title Title Description		
	✓	No. Trigger date	No: Trigger date		
		Trigger time	Trigger time		
	~	Alarm information	Alarm information		
		Alarm times	Alarm times		
control ID description		M/DD V Time HH:MM:	ss v nd cannot be operated by	users	
alarm source		e of the alarm and select a group		f the selecti	ion range is 0-0
		•	• • •		
	only the alarm information for the selected group 0 will be displayed, and other groups will no be displayed)				groups will not
use		bar displays content in multipl	le languages check this o	option to di	rectly launch an
multi-language		tilingual library or add a new	6 6	1	2
		e of multilingual libraries)			generation and the second s
project		lay items for each column of th	e table		
No.		equence number of the table co		If you nee	ed to adjust the
trigger date	Date when the alarm was generated order of items,			•	
trigger time	Time when the alarm was generated     click the "Move Up				"Move Up,
alarm		nt in alarm entry		Move Do	wn" button. If
information		5		you need	to restore the
alarm times	Display the t	otal number of times this alarm	occurred	default so	orting, you can
	1				tore Default"
time sort	Set the inform	nation display mode and select	whether the latest alarm i		
chronological	-	the sequence of alarm time ge			
order	-	ay generated later is displayed			
	at the end		· · ·		1 2
reverse		he chronological order, the ala	rm generated first is displ	aved at the	bottom. and the
chronological	-	ted later is displayed at the top		-	
order	front of the a		s, and is, the facest afallif	mormanol	
oruci	I nom or the a	1a1111 Ual			

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	Settings
✓	No.	No.	
✓	Trigger date	Trigger date	
✓	Trigger time	Trigger time	
✓	Alarm information	Alarm information	
✓	Alarm times	Alarm times	

# Display

ic Att Display Security Lo	ocation			 
Outer frame color	<b>`</b>			
<b>F</b> ill				
Fill color	<b>↓</b>			
Fill color Font settings Fo 微软雅黑	<b>▼</b>	General	~	
Font settings	↓ Size		<b>v</b>	

outer frame		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	y 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)	
	for	nt 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		means that dragging the mouse changes the size of the component, and the text size changes		
			accordingly)	

■ Security setting

c Att Display	/ Security sLocation	
Display contro	5	
Enable		
When	隐藏	
Devic	本地设备 v Settin	
Addre	PSB V 0	
Enable	Sta ON V Indirect	
Jser permissio	on	
<ul> <li>Hide this</li> </ul>	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.

# 4-5.Data processing

# 4-5-1. Data sampling

Click "Parts/Data Processing/Data Sampling" in the menu bar or click <sup>Data sampling</sup> in the toolbar to enter the 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.

Z

		Data s	sampling		×
Sampling Group 0[1]:1	~	Name 1	New	Delete Edit s	ampling group nam
Add Modify Insert Delete	Delete all Copy	Paste Import Export			
Sampling group No.	Address		Cycle trigger address	Acquisition control	Clear address
Group 0:1 0	PSW0	Periodic	0秒		
L;					-1
				Determine Cancel	Application

# ■ 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 a	
	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	×
Basic AttributesChannel setting	
No. 1 Descrij	^
Acquisition control	
Collection me Periodic acquisition Trigger acquisition Fixed mode Sampling 1 0.1 seconc v Register assignment	
▼ Sampling continuous address of acquisition object	
Read address	
Devic 本地设备 v Settin Channel Channel	
Data Word VUnsignec V type	
Export Control File File nam simpleFile	
Fixed file name      Date specify the file      Dynamically specify the file name	
Storage capacity 80000 🗘 Coun 🗸 About0.20MB	
Mining full treatment mode <ul> <li>Loop cover</li> <li>Stop when full collection</li> </ul>	-
Collection full notification Clear Data	
✓ Data retention days limit Retention 7	
Save	
Select Droiert Mausure >>	~
Determine Cancel Application	n

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	Acquisitio OFF V			

	After checking, set a co	bil address and start collecting data only when the coil meets the collection
	conditions (can be set t	to ON/OFF)
acquisition	select on or off	
condition	Acquisitio OFF	~
	ON	
	on Trigger	n
collection		gger 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 🗸
		✓ 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 ◯ 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
		Collection m Periodic acquisition Trigger acquisition  Fixed mode
		Time from 16 $\clubsuit$ Ho <sup>33</sup> $\clubsuit$ Minute <sup>16</sup> $\clubsuit$ Ho <sup>34</sup> $\clubsuit$ 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 continuous address of acquisition object Address is not continuous, you can uncheck "sampling continuous address of 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

13		Data sampling
Basic Attribute	e Channel setting	
		New Inser Dele Mov Mov
Channel	Address	Type Format word number Name Description
1	PSW0	Word • Unsigned • 1 Channel1
2	PSW0	Word Unsigned 1 Channel2
read	device	Device port currently communicating
address	addres	s Set Target Register Number
	data typ	The default value is Word unsigned and cannot be modified. To modify the
		channel data type, click "Channel Settings" to change it
		Click "Settings" to enter the address setting interface. This interface allow 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 librar and user-defined tags)
		Address
		Device 本地设备 v Statio 0 n No.
		Address type VSW V User defined label
		Address 0 System register
		数据类型 Word V Unsigned V
		Address [range : 0 - 9999] format
		Address Label
		Determine Cancel Application
operation	new	add sampling channel
items	insert	Insert a new channel below the selected channel
	delete	delete the selected channel
	move up	Move the selected channel up
	move	Move the selected channel down
	down	
channel	channel	Incremental by default and cannot be modified
setting	address	You can customize settings only if "Sampling continuous address of
		acquisition object" is not checked. If it is checked, the system will
		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 selected	data type,	the system will au	tomatic	cally increment and
		number	cannot be 1	nodified				
		description	Custom de	scription te	xt			
storage	set the mod	le of data sto	rage					
	storage cap	acity	is "count"	al amount o or "MB".	of collected Regardless		elected	The selectable unit l, the software will
	loop cover					ter reaching the se lected data to store	-	city, and the touch
	mining ful mode	l treatment	When the a	acquisition i III treatment cover Ste ction	reaches the t mode	e set storage capacity Il collection ModeON->OFF		
			collection notice	Set a coil, the coil	and when	the acquisition reac	hes the	set capacity, set on
			clear data	are met, tl	he collecte	•		n the set conditions e conditions can be
save	storage loc. is HMI; WI Save Storage loc • HMI Export File	ation. For ex nen PSW=3, ation Control npleFile	ample, if ye the storage	ou set the r location is	egister PS' a USB flas	W0, then when PSV h drive		ister to specify the the storage location
	<ul> <li>Loop co</li> <li>Collecti</li> <li>Clear Date</li> </ul>	ata PSB0 tention days limi Proj No. Date Time	n full collection Mode ON it Retention	י ->OFF ❤	Day	Move up Move down 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
	Control address information
	3:U disk insufficient storage
	4:路径文件名错误
	5:导出文件失败
	Note:
	1. This function only takes effect when the storage location is selected as HMI or specified as HMI vaine "Degister Specified Storage Location"
	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 xidb 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	Na	ne	De	es <mark>cr</mark> iptio	n	11 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1	PSW0	Word	+	Unsigned	•	1	Cha	nnel1				
2	PSW1	Word	*	Unsigned	٠	1	Cha	nnel2				
3	PSW2	Word		Unsigned	*	1	Cha	nnel3				

# 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 free trend 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.

_			Trend chart cor	niguration		×
sic Attribute	Display S	cale display Qu	ery Security settin L	ocation		
Contro <mark>l</mark> II	D TCO					^
Descriptio	on					
)isnlav m	no <ul> <li>Real time</li> </ul>	e 🛛 🔿 Histo	00/			
Data capa	P					
17	ay points per	10	*			
	period displa					
Data sour	rce					
Samplin		✓ No.	~	Data		
nformati	on					
Acquisiti	on M0 (on sta			ull, Stop samplin	Clear acquis M0 1: ng	
	on Cycle acqu	isition 1s Pre	servatio SD card			
Channel s	selection					
Select	Channel	Address	Data type	word number	Description	
Curve			✓ curve style		~	
			<ul> <li>✓ curve style</li> <li>✓</li> </ul>		~	
color			Cuive style	,	~	
color Line width Data			Cuive style		*	, v
color Line width			Cuive style			> Vication

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 O History
	Data capac 100
	O Display points per
	● Time period displa 1
data source	Select the data group to display as a curve from the data sampling
	Data source
	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
	Acquisition M0 (on state) Storage mc Collecting full, Stop samplin Clear acquis M0 1: ng
	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
selection	Channel selection
	word
	Select Channel Address Data type number Description
	Curve curve style
	Line width
	Data
	Max value
	Min Desister estimate
	value 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 Display Scale display	Query Security settin Location
Trend chart v background	Scale area background
✓ Grid	
X-axis grid equal fraction	Thi ck ne
Y-axis grid equal fraction	ss St v
Zoom (%) PSW0	For 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		前值
display *	67 - 时间 s 13:1	3.12
Display the		
coordinates of		
.1 1 . 1		
the selected	2022/05/12 2022/05/12 202	)//5/12
the selected point	13:13:08 13:13:11 13	z/ds/12 :13:14
	13:13:08         13:13:11         13           show items         13:13:11         13	Set the items to display. Such as date, time, channel, etc
	13:13:08 13:13:11 13	:13:14
	13:13:08     13:13:11     13       show items       content description       select	Set the items to display. Such as date, time, channel, etc
	13:13:08     13:13:11     13       show items       content description	Set the items to display. Such as date, time, channel, etc Customizable display content
	13:13:08     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
	13:13:08     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
	13:13:08     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
	13:13:08     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
	13:13:08     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
	13:13:08     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	13:13:08     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	13:13:08       13:13:11       13         show items	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	13:13:08       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         ✓ Zoom (%)       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 zoom	13:13:08       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         ✓ Zoom (%)       PSW0         ✓ Page turnin       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	13:13:08       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         ✓ Zoom (%)       PSW0         ✓ Page turnin       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

				Trend chart o	onfiguratio	n	×
Basic Attribu	te Display	Scale display	Query	Security settin	Location		
Scale di ✔ X-sca							
Axis / se	cale col		<b>~</b>				
Majo	or scale equ	l <mark>a</mark> 3	*	Main engravir			
✓ Min	or scale equ	u <mark>1</mark>	•	Sub engraving	1 <sup>6</sup>		
🖌 Use	timescale						
🗹 Dis	olay date YY/	/MM/DD	× <b>×</b>	Display tim HH	MM:SS	~	
Fo	微软雅黑		~	General	~		
Siz	12	~					
☑ Min	or scale equ		Display n	Main engravir Sub engraving ur) Display pe	<mark>9</mark> 6		
Integ	er digits	Decimal	0	×			
Scale	e range: 🖲 (	Custom 🔾 U	se chann	el max min	O Show all c	hannel ranges	
		x value )		Register contro			
	Min	ı valı 0	<b>F</b>	Register contro	1		
Fo	微软雅黑		~	General	*		
Siz	12	~					

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
time scale	When checked, it will be displayed in the control with a time scale
splay date	When checked, the date will be displayed on the time scale
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
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
	major scale segment main scale length sub scale segment sub scale length time scale splay date splay time font size axis/scale color major scale segment

	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
S	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

Trend chart configuration

Basic Attributes	Display	Scale display	Query	Security settings	Location
Picture	PSB0	Export conditio ON-	> <mark>OFF</mark> ∨	Export Format	IG V

Select | return 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.

		Tren	d chart cor	nfiguration	l .	
Basic Attribute Disp	ay Scale display	Query Sec	urity settin L	ocation		
✓ Pictur PSB0	Export conditi	>OFF Y Exp	ort mat PNG	~		
<ul> <li>Use the query</li> <li>Query method</li> <li>Query by d</li> </ul>		ry by time per		hannal		
		y by time per		namer		
O Register co	ontrol query	y by ante per		namer		
O Register co	ontrol query	y by time per				
O Register co	ontrol query		IO Press C			

You can also select "register control query" to dynamically set the query address. As shown in the following

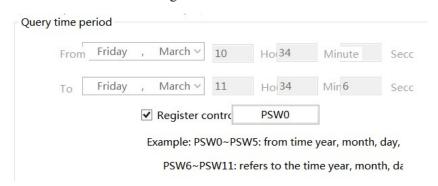
figure, if you set a header address, such as PSW0, the query address will occupy a total of 3 addresses from PSW0 to PSW2, where PSW0 represents the year, PSW1 represents the month, and PSW2 represents the day, all of which are single word unsigned numbers. For example, PSW=2021, PSW2=5, and PSW3=29, the data collection record information on May 29, 2021 will be queried.

Friday ,	March ∨	Register control	PSW0	
For	example: PS	W0: year (unsigned num	per input, YYYY fo	ormat,
For		W0: year (unsigned numl onth (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	۲	Query by t	ime per	io() Press ch	annel	
O Register contro	ol query					
Query settings						
Query control						
Query time period	PSB0					
From Fri	day ,	March $\vee$	10	Hor34	Minute	Secc
To Fri	day ,	March ∨	11	Hoi 34	Min 6	Secc
		Register c	ontrol			

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 method O Query by date	○ Query by time perio Press channe
O Register control	query
Query settings	
Query control	
P	SBO
Query channel	
Channel	✓ Register control

(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.

Query by date	O Que	ery by time perio Press channel
<ul> <li>Register control</li> </ul>	c PSW0	Register value 0: by date 1: by time period 2: by channel
uery settings		
Query control		
F	SB0	
Query register		
PS	WO	
PS	WO	

Security setting

	×
Basic Attribute Display Scale display Query Security setting 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	
Cancel permission after operation	
A prompt window pops up when the user has no permission range	
☐ Hide this component when the user has no permission scope	
User permission Permission v range	

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.

Control ID X0	)	
Description	•	
Description		
Periodic	○ Trigger type	
Sampling pe <sup>1</sup>	Second V	
- Control settings		
- Control settings - ▼ Suspend Ci	PSB0 Trigger co ON Y	

	cont	rol ID	It is used for system management control and cannot be operated by users.					
	desci	cription Can be used to comment on the purpose of this control.						
5	sampling	periodic	Set the sampling period and collect it regularly according to the cycle time. The cycle time					
1	mode	defaults to 1 second, and can be adjusted as needed (collection unit						
			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.					

		O Periodic
		Trigger address         Devic       本地设备       ✓       Settin         Addre       PSB       ✓       0         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       Address     PSB        type     User defined label       Address     0       System register
		Address format [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	t	_	_			
Basic	Attril Data (	Display Se	curity se Loc	ation		ilui					_	
		-	10									
	umber o 3 XY axis data c		n the same	data	a area							
		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	~	
- C	hannel settings curve styl	s Avv	↓ Occupi	ed P	PSW0-PSW1	9	X0:F	PSW0 YO:	ate PSW PSW		ss c(	
	Line colc	~	Line w	idth	<b>、</b>		X2:F Line style	1	PSW ~	/5		
	pper and lowe	r limits of	range									
	X axis Jppe 100		Register cor	trol	Lowe		0	Register co	ontro	Ĩ		
	Y axis											
	Jppe 100		Register cor	trol	Lowe	}	0	Register co	ontro	1		
	- ( 1'											
	eference line Number o <sup>0</sup>											
	References		urve									
	line v	value c	olor									
number of channel	Sat the mu	mbara	fahanna		(the mer			har of oh		ala ia 16	) 01	nd aaah ahannal
number of channel												
	decrease a			y c	licking _	•	, the nu	imber of	ch	annels be	low	will increase or
XY axis data				fre	om the s	am	e data a	rea acci	ımi	na the se	et a	ddress is n, the
										-		$\mu$ point 3 is (n+4,
same area	n+5)	5 01 uai	a point i	arv		), C	ata pom	1 2 13 (11+)	2, 1	1+ <i>5)</i> , and	uata	i point 5 is (ii+4,
sume area	,	<sup>7</sup> are no	t selected	1 fr	om the sa	m	e data are	a acciim	ino	that the a	addr	ress set for the X
									U			1 are (a, b), data
	point 2 is (									or data po	onn	1 are (a, b), data
	X address				he X axis		(+2, 0+2)					
	Y address						on ha sat	when V	Vo	vision	fro	m the same data
	1 audiess		-			(0	all De Set		1 a		5 110	in the same data
	data trupa		not chec		,	a11	antine al	iest Var			- fa	9 hit 16 hit
	data type		-	-		011	ection of	bject. 10	u c	an choose	e irc	om 8-bit, 16-bit,
	data				ata types.	<b>.</b>	a a 114'					alaat deelaat
	data							•		•	can	select decimal,
1 1	format	_			ing point						1 1 .	
channel setting	Each chan						-	e, line col	or,	width, and	a lin	е туре.
upper and lower	Display ra	nge of $\Sigma$	and Y a	IX1S	data obje	ects	5.					

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	ct whether to set a reference curve, and set coordinate points and curve colors. The				
	coordinate	coordinate points can be dynamically specified by the register.				

# Display

color

	XY line chart
Basic Attril Data Display Security se Location	1
Line chart bac	Scale area bacl
Scale display	
✓ X-scale Scale color	
Main scale scale equal fraction	Sub scale scale equal fraction
Scale length 10	Scale length 10
Scale mark	
🔿 No display 💿 Display nur	nber ု Display percentage
Integer di	Decimal D <sup>2</sup>
Font Arial	~
Color 🔽	Size 12 v
✓ Y-axis scale	
Scale color Main scale	
1	Sub scale scale equal fraction
Scale length 10	Scale length 10
Scale mark	
	mber 🔘 Display percentage
Integer di 5	Decimal D <sup>2</sup>
Font Arial	~
Color 🔽	Size 12 v
t background Set the background co	lor of the line chart.
color	
a background Set the background co	lor of the scale area.

grid       X axis grid equal       Sets the number of grid divisions for the X axis.         display       Yaxis grid equal       Sets the number of grid divisions for the Y axis.         line style       Set the line style, including solid line, dotted line, dot line, thick line, and so on.         line color       Set the grid color.         Line color       Set the grid color.         y Axis grid equal       Set the grid color.         Scale area bad       Set the grid color.         Scale area bad       Set the grid equal         Scale area bad       Set the grid equal         Scale color       Sets the display color for the X axis and scale.         main       scale         display       Scale Color         Set the main scale segments       Secale for the X axis main scale segments         sub       scale         scale mark       Select whether to display scale marks, which is the display style. You can choose to display numbers, percentages, or not.         integer bit       After selecting the display.         size       Set the number of the scale display.         size       Set the font for the scale display numbers as needed.         fort       Set the font for the scale display.         size       Set the font for the scale display.         size       Set t	ş	grid display	Set whether the	grid is displayed.						
display       Yaxis grid equal       Sets the number of grid divisions for the Y axis.         line style       Set the line style, including solid line, dotted line, dot line, thick line, and so on.         line color       Set the grid color.         Une chart bac       Scale area bac         Ine style       Grid display         X axis grid equal 5       V-axis grid equal 5         Scale       Scale Color         Sets the display color for the X axis and scale.         main       scale         display       Set the X axis main scale segments         equal fraction       main scale         sub scale equal       Set the sub scale display length         length       sub scale equal         sub scale equal       Set the sub scale display length         length       Set the sub scale display length         length       segments         sub scale equal       After selecting the display flag, you can set the integer digit         display numbers, percentages, or not.       integer bit         After selecting the display flag, you can set the integer digit         display color for the scale display.         size       Set the number of decimal places to display numbers as needed.         font       Set the olor of the scale display.         size <td>grid</td> <td>X axis grid equal</td> <td>Sets the number</td> <td>r of grid divisions for the X axis.</td>	grid	X axis grid equal	Sets the number	r of grid divisions for the X axis.						
line style       Set the line style, including solid line, dotted line, dot line, thick line, and so on.         line color       Set the grid color.         Une chart bac       Scale area bacl         Grid display       Y-axis grid equal 5         Y-axis grid equal 5       Y-axis grid equal 5         Grid display       Y-axis grid equal 5         Y-axis grid equal 5       Y-axis grid equal 5         Grid display       Y-axis grid equal 5         Y-axis grid equal 5       Y-axis grid equal 5         Ine color       Y-axis grid equal 5         Y-axis grid equal 5       Y-axis grid equal 5         Ine color       Y-axis grid equal 5         Y-axis grid equal 5       Y-axis grid equal 5         Ine color       Scale Color         Sets the display color for the X axis and scale.       main scale Set the X axis main scale segments         sub scale equal after checking, display sub scale on the control, set the sub scal fraction       segments         sub scale       Set the sub scale display length         length       Set the sub scale display length         length       Set the sub scale display flag, you can set the integer digit display numbers, percentages, or not.         integer bit       After selecting the display flag, you can set the integer digit displayed as needed.         decimal bit	display		-							
line color       Set the grid color.         Line chart bac       Scale area bacl         Image: Scale display       Scale area bacl         Image: Scale display       Y-axis grid equal 5         Image: Scale display       Y-axis grid equal 5         Image: Scale display       Y-axis grid equal 5         Image: Y-axis grid equal 5       Y-axis grid equal 5         Image: Y-axis grid equal 5       Y-axis grid equal 5         Image: Y-axis grid equal 5       Y-axis grid equal 5         Image: Y-axis grid equal 5       Y-axis grid equal 5         Image: Y-axis grid equal 5       Y-axis grid equal 5         Image: Y-axis grid equal 5       Y-axis grid equal 5         Image: Y-axis grid equal 5       Y-axis grid equal 5         Image: Y-axis grid equal 5       Set the display color for the X axis and scale.         Image: Y-axis grid equal 5       Set the X axis main scale segments         Sub scale color       Set the number of decimal places to display style. You can choose the display numbers, percentages, or not.         Integer bit       After selecting the display flag, you can set the integer digit display numbers, percentages, or not.         Integer bit       After selecting the display flag, you can set the integer digit display numbers, serecettages, or not.         Integer bit       After selecting the display flag, you can set the integer digit d			-							
scale       X scale       Scale Color       Sets the display color for the X axis and scale.         main       scale       Scale Color       Sets the display color for the X axis and scale.         main       scale       Set the X axis main scale segments         equal fraction       main       scale Set the X axis main scale segments         sub       scale equal after checking, display sub scale on the control, set the sub scal fraction         sub       scale       Set the sub scale display length         length       scale mark       Select whether to display scale marks, which is the display style. You can choose the display numbers, percentages, or not.         integer bit       After selecting the display flag, you can set the integer digit displayed as needed.         decimal bit       Set the scale display taxt.         color       Set the scale display text.         color       Set the display color for the Y axis and scale.         main       scale color         Set the display color for the Y axis and scale.         main       scale color         set the display color for the Y axis and scale.         main       scale color         Set the display color for the Y axis and scale.         main       scale color         Set the display color for the Y axis and scale.         main <td></td> <td>line color</td> <td>Set the grid cold</td> <td colspan="7"></td>		line color	Set the grid cold							
scale       X scale       Scale Color       Sets the display color for the X axis and scale.         main       scale       Scale Color       Sets the display color for the X axis and scale.         main       scale       Set the X axis main scale segments         equal fraction       main       scale Set the X axis main scale segments         sub       scale equal after checking, display sub scale on the control, set the sub scal fraction         sub       scale       Set the sub scale display length         length       scale mark       Select whether to display scale marks, which is the display style. You can choose the display numbers, percentages, or not.         integer bit       After selecting the display flag, you can set the integer digit displayed as needed.         decimal bit       Set the scale display taxt.         color       Set the scale display text.         color       Set the display color for the Y axis and scale.         main       scale color         Set the display color of the Y axis and scale.         main       scale color         set the display color for the Y axis and scale.         main       scale color         Set the display color for the Y axis and scale.         main       scale color         Set the display color for the Y axis and scale.         main			Ī							
x-axis grid equal 5       y-axis grid equal 5       y         scale       X scale       Scale Color       Set the X axis main scale segments       y-axis grid equal fact checking, display sub scale on the control, set the sub scale fraction       y-axis grid equal 5       y-axis grid equal fact checking, display sub scale on the control, set the sub scale equal fraction       y-axis grid equal 5       y-axis grid equal fact checking, display sub scale on the control, set the sub scale equal fact checking, display sub scale on the control, set the sub scale equal fact checking, display sub scale on the control, set the sub scale equal fafter checking, display sub scale on the control, set the sub scal										
scale       X scale       Scale Color       Sets the display color for the X axis and scale.         main       scale       Set the X axis main scale segments         equal fraction       main       scale         main       scale       Set the main scale display length         length       sub scale equal       after checking, display sub scale on the control, set the sub scal         fraction       segments         sub       scale       Set the sub scale display length         length       length         scale mark       Select whether to display scale marks, which is the display style. You can choose t         display numbers, percentages, or not.       integer bit         After selecting the display flag, you can set the integer digit         display das needed.       decimal bit         decimal bit       Set the fort for the scale display.         size       Set the fort for the scale display text.         color       Set the display color for the Y axis and scale.         main       scale       Set the Y axis main scale segments         equal fraction       main       scale         main       scale color       Set the Y axis main scale segments         equal fraction       main       scale         main       scale       <										
Scale display         X scale         Scale Color main         Sets the display color for the X axis and scale.           main         scale equal fraction         Set the X axis main scale segments           equal fraction         main         scale           sub scale equal fraction         after checking, display sub scale on the control, set the sub scal segments           sub scale equal fraction         Set the sub scale display length           length         scale mark           Select whether to display scale marks, which is the display style. You can choose the display numbers, percentages, or not.           integer bit         After selecting the display flag, you can set the integer digit displayed as needed.           decimal bit         Set the number of decimal places to display numbers as needed.           font         Set the size of the scale display text.           color         Set the display color for the Y axis and scale.           main         scale           main         scale           scale color         Set the display color for the Y axis and scale.           main         scale           scale color         Set the display length           integer         Set the display color for the Y axis and scale.           main         scale           scale color         Set the display length										
display       main       scale       Set the X axis main scale segments         equal fraction       main       scale       Set the main scale display length         length       sub scale equal       after checking, display sub scale on the control, set the sub scal         fraction       segments         sub       scale       Set the sub scale display length         length       sele       Set the sub scale display length         length       Select whether to display scale marks, which is the display style. You can choose the display numbers, percentages, or not.         integer bit       After selecting the display flag, you can set the integer digit displayed as needed.         decimal bit       Set the number of decimal places to display numbers as needed.         font       Set the font for the scale display text.         color       Set the color of the scale display text.         color       Set the display color for the Y axis and scale.         main       scale         main       scale         main       scale         sub       Set the main scale display length         length       sub scale equal			Line style							
equal fraction       main scale       Set the main scale display length         length       sub scale equal       after checking, display sub scale on the control, set the sub scal         fraction       segments         sub       scale       Set the sub scale display length         length       segments         sub       scale       Set the sub scale display length         length       Select whether to display scale marks, which is the display style. You can choose the display numbers, percentages, or not.         integer bit       After selecting the display flag, you can set the integer digit displayed as needed.         decimal bit       Set the number of decimal places to display numbers as needed.         font       Set the scale display text.         color       Set the color of the scale display text.         color       Set the display color for the Y axis and scale.         main       scale         main       scale         equal fraction       Set the main scale display length         length       sub scale equal         sub scale equal       after checking, display sub scale on the control, set the sub scale scale	scale	X scale	Scale Color	Sets the display color for the X axis and scale.						
main       scale       Set the main scale display length         length       after checking, display sub scale on the control, set the sub scal         sub       scale       Set the sub scale display length         length       segments         scale mark       Select whether to display scale marks, which is the display style. You can choose the display numbers, percentages, or not.         integer bit       After selecting the display flag, you can set the integer digit displayed as needed.         decimal bit       Set the sub of the scale display text.         size       Set the size of the scale display text.         color       Set the display color for the Y axis and scale.         Y scale       Set the Y axis main scale segments         equal fraction       main         main       scale         sub       Set the main scale display text.	display		main scale	Set the X axis main scale segments						
Image: Second			equal fraction							
sub scale equal fraction       after checking, display sub scale on the control, set the sub scal segments         sub       scale       Set the sub scale display length         length       Select whether to display scale marks, which is the display style. You can choose t display numbers, percentages, or not.         integer bit       After selecting the display flag, you can set the integer digit displayed as needed.         decimal bit       Set the number of decimal places to display numbers as needed.         font       Set the font for the scale display text.         color       Set the color of the scale display text.         color       Set the display color for the Y axis and scale.         main       scale         genal fraction       main         main       scale         sub scale equal       after checking, display sub scale on the control, set the sub scale			main scale	Set the main scale display length						
fraction       segments         sub       scale         sub       scale         Scale mark       Select whether to display scale marks, which is the display style. You can choose the display numbers, percentages, or not.         integer bit       After selecting the display flag, you can set the integer digited displayed as needed.         decimal bit       Set the number of decimal places to display numbers as needed.         font       Set the font for the scale display text.         color       Set the color of the scale display text.         color       Set the display color for the Y axis and scale.         main       scale         main       scale         sub       Set the main scale display length         length       after checking, display sub scale on the control, set the sub scale										
sub       scale         sub       scale         sub       scale         scale mark       Select whether to display scale marks, which is the display style. You can choose the display numbers, percentages, or not.         integer bit       After selecting the display flag, you can set the integer digited displayed as needed.         decimal bit       Set the number of decimal places to display numbers as needed.         font       Set the font for the scale display text.         color       Set the display color for the scale display text.         color       Set the display color for the Y axis and scale.         main       scale         main       scale         sub       scale equal         after checking, display sub scale on the control, set the sub scale			-							
Image: Select whether to display scale marks, which is the display style. You can choose the display numbers, percentages, or not.         integer bit       After selecting the display flag, you can set the integer digited displayed as needed.         decimal bit       Set the number of decimal places to display numbers as needed.         dot       Set the font for the scale display.         size       Set the size of the scale display text.         color       Set the display color for the Y axis and scale.         main       scale         main       scale         sub scale       Set the main scale display length         length       after checking, display sub scale on the control, set the sub scale										
scale mark       Select whether to display scale marks, which is the display style. You can choose t         display numbers, percentages, or not.       integer bit         After selecting the display flag, you can set the integer digit         decimal bit       Set the number of decimal places to display numbers as needed.         font       Set the font for the scale display.         size       Set the color of the scale display text.         color       Set the display color for the Y axis and scale.         main       scale         equal fraction       main         main       scale         sub scale equal       after checking, display sub scale on the control, set the sub scale				Set the sub scale display length						
display numbers, percentages, or not.         integer bit       After selecting the display flag, you can set the integer digit 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.         color       Set the display color for the Y axis and scale.         main       scale         equal fraction       Set the main scale display length         length       sub scale equal         after checking, display sub scale on the control, set the sub scale										
Integer bitAfter selecting the display flag, you can set the integer digit displayed as needed.decimal bitSet the number of decimal places to display numbers as needed.fontSet the font for the scale display.sizeSet the size of the scale display text.colorSet the color of the scale display text.Y scalescale colorSet the display color for the Y axis and scale.mainscaleequal fractionmainscalesub scale equalafter checking, display sub scale on the control, set the sub scale		scale mark								
Image: Section of the section of th										
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.         main       scale       Set the Y axis main scale segments         equal fraction       main       scale         sub scale equal       after checking, display sub scale on the control, set the sub scale			integer bit							
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.         main       scale       Set the Y axis main scale segments         equal fraction       main       scale         sub scale equal       after checking, display sub scale on the control, set the sub scale			1 : 1 1- :4							
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.         main       scale       Set the Y axis main scale segments         equal fraction       main       scale         main       scale       Set the main scale display length         length       sub scale equal       after checking, display sub scale on the control, set the sub scale										
color       Set the color of the scale display text.         Y scale       scale color       Set the display color for the Y axis and scale.         main       scale       Set the Y axis main scale segments         equal fraction       main       scale         main       scale       Set the main scale display length         length       sub scale equal       after checking, display sub scale on the control, set the sub scale										
Y scale       scale color       Set the display color for the Y axis and scale.         main       scale       Set the Y axis main scale segments         equal fraction       main       scale         main       scale       Set the main scale display length         length       sub scale equal       after checking, display sub scale on the control, set the sub scale										
main       scale       Set the Y axis main scale segments         equal fraction       main       scale         main       scale       Set the main scale display length         length       sub scale equal       after checking, display sub scale on the control, set the sub scale		V scale								
equal fraction         main       scale         length         sub scale equal       after checking, display sub scale on the control, set the sub scale		1 Scale								
main       scale       Set the main scale display length         length       sub scale equal       after checking, display sub scale on the control, set the sub scale				Set the T axis main searce segments						
length       sub scale equal       after checking, display sub scale on the control, set the sub scale				Set the main scale display length						
sub scale equal after checking, display sub scale on the control, set the sub scal										
				after checking, display sub scale on the control, set the sub scale						
			fraction	segments						
sub scale Set the sub scale display length										
length										

Security setting

					XY line	char	t			
Basic Attril	Data	Display	Security se L	ocation						
	y contro nable en	隐藏	~							
	Devic Addre Enable		¥	<ul><li>✓ 0</li></ul>	Indirect	~	Settin			
	ermissio lide this		ent when t	ne user	r has no p	ermiss	sion scop	)e		
	Jser per ange	mission	Permissi	on1		~				

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 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	XYT0					
描述						
采集方式						
● 周期采集	采样周期	1 🗘	0.1秒 ~			
○ 触发采集	Ę					
点数设置						
采样点数	t 10	÷	使用寄存器			
采集处理	防式					
۲	停止取样	○ 清除数据	重新取样 〇	循环覆盖		
范围上下限						
X轴						
上限 1	00		下限 0			
	寄存器		- 寄存器	R A		
Ya						
上限 1	00		下限 0			
L			□ 寄存器	0		
	寄存器					

control IDIt is used for system management control, and cannot be operated by usersdescriptionCan be used to comment on the purpose of this controlRefreshPeriodicSet the sampling period and collect it regularly according to the cycle timemodeacquisitiontime defaults to 0.1 seconds, which can be adjusted as needed (collect)	ion unit: 0.1						
Refresh modePeriodic acquisitionSet the sampling period and collect it regularly according to the cycle time time defaults to 0.1 seconds, which can be adjusted as needed (collect)	ion unit: 0.1						
mode acquisition time defaults to 0.1 seconds, which can be adjusted as needed (collect	ion unit: 0.1						
accord/minute)	s the trigger						
seconds/second/minute)	s the trigger						
Trigger Set a register and select the trigger condition. When the address reache							
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	y the value.						
○ 周期采集							
<ul> <li>● 触发采集</li> <li>○ 位</li> <li>● 字</li> </ul>							
设 备 本地设备							
地址 PSW 0 0							
数据类型 Word ∨ Unsigned ∨ 间接指定							
Bit address trigger acquisition: After selecting a bit address, you can set the	e condition to						
the rising edge or falling edge to take effect.							
<ul> <li>● 触发采集</li> <li>● 位</li> </ul>							
设 备 本地设备 ✓ 设置							
地 址 PSB / 0 0							
□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □							
device Device port currently communicating							
address Set target coil number							
setting Click "Settings" to enter the address setting interface. This interface allows y	you to set and						
use system registers and user-defined tags. You can click the address ta	se 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       地址类型     PSB     □       地址     0     □       歩統寄存器     □       地址棺式     DDDD [范围: 0 - 9999]       地址标签库       确定     取消
	indirect	Set the current address offset. The current coil address changes with the indirectly
	specify	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	sampling	Set the maximum number of points for curve sampling, which can be checked as register
setting	points	control. After selecting register control, the value in the register will prevail
	Acquisition	Set the collection status when the sampling points are fully collected, stop sampling,
	and	clear the data, and resample or cycle over
	processing	
	method	
	Upper and	Set the upper and lower limits of the XY axis, which can be specified through registers
	lower limits	
	of range	

Data

'趋势图							?	>
基本属	性	数据	显示	安	全设置	位置		
通道	数 1		<b>令</b> 新	増通道	删除通道			
通道	X轴地址	数据类	型数据	諸名式	/轴地址	数据类型	数据	格式
1	PSW0	Word	- Unsig	ned 🔫	PSW0	Word 🝷	Unsigr	ned
		~		*	¥式 👝		v	3
参考线	2		Interest	新増	删除			
序号	曲	线颜色		博式		坐标点		
1			折		-			-

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

基本属性	数据	显示	安全设置	位置	
背景颜色					
趋势图背景色	<u>ا</u> ا	~	刻度区背景的	<u>4</u>	~
一栅格显示					
X轴栅格等分割	数 5	-	Y轴栅格等分	数 5	-
粗细 —		- ~	样式 -		- ~
颜色		~			
X轴刻度					
刻度颜色		~			
主刻度			☑ 副刻度 —	-	
轴等分数	5	-	轴等分数	1	\$
刻度长度	10	-	刻度长度	5	•
刻度标记					
○ 不显示	•	显示数字	○ 显示百分	计比	
整数位	4		小数位	0	\$
字体	微软雅黑	14	~	常规	~
颜色		~	大小	12	~
Y轴刻度					
刻度颜色		~			
主刻度			☑ 副刻度 —	-	
轴等分数	5	\$	轴等分数	1	-
刻度长度	10	-	刻度长度	5	•
刻度标记					
○ 不显示	۵ ي	显示数字	○ 显示百分	光	
整数位	4	-	小数位	0	•
字体	微软雅黑		~	常规	~
颜色		~	大小	12	~

trend o	color	Set the background	l color of the trend chart				
scale	area background	Set the background color of the scale area					
	color						
Ę	grid display	Set whether to disp	olay 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	Set the thickness of grid lines				
	style	Set the style of grid lines, including solid lines, dashed lines, dotted lines, thick lines,					
		etc					
	color	Set the color of grid 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

Y趋势图					?	>
基本属性	数据	显示	安全设置	位置		
- 显示控制						
☑ 启用验证						
验证失败时	1 隐藏	$\sim$				
设备	f 本地设备			~	设置	
地址	PSB		~ 0	0		
启用状态	S ON N	1		间接指定		
用户权限						
🗌 当用户无机	2限范围时,開	的藏该元件				
所需用户根	2限范围 无		~			
	and the second second					

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

#### Location

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

#### 4-5-5. 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

					Report f	UIII			
Basic Attributes	Display	Арре	arance	Query	Security se	tings Locat	ion		
Control ID	RF0								
Description	n								
Sampling G	roup 0	~	No.	0		~	Data		
list selectio	'n								
Selec Cha	a Address	Data type	Data format	Integer digits	Decimal digits	Encoding format	word number	Alignmer	Display color
✓ 1	PSW0	Word	Unsign	100	0	1	1	Center	
✓ 2	PSW1	Word	Unsign		0	1	1	Center	
✓ 3	PSW2	Word	Unsign	4	0	1	1	Center	
- Channel se Integer d	and the second s		Decimal d <sup>0</sup>			🗌 Lea	ding 0		
	iç4			1		-	ding 0		
Integer d	iq4 nt Center			1		-	ding 0		
Integer d Alignmen	iq4 nt Center		Color	1		-	ding 0		
Integer d Alignmen I Display Number Time	ic4 nt Center serial numl	ber	Color Co	lor		-	ding 0		
Integer d Alignmer Ø Display Number	ic4 nt Center serial numl	ber	Color Co	lor		-	ding 0		
Integer d Alignmen I Display Number Time	ic4 th Center serial numl of digits	ber The second	Color	lor <b>C</b>		-	ding 0		
Integer d Alignmen I Display Number Time I Display I Display	id t Center serial numl of digits date Y/M tim HH:N	ber The second	Color	lor <b>C</b>	Color	-	ding 0		
Integer d Alignmen Display Number Time Display Display Data capaci	ig4 serial numl of digits date Y/M tim HH:N	ber M/DD MM:SS	Color	lor	Color	-	ding 0		
Integer d Alignmen I Display Number Time I Display I Display	ig4 serial numl of digits date Y/M tim HH:N	ber The second	Color	lor	Color	-	ding 0		
Integer d Alignmen Display Number Time Display Data capaci Max lines	ic4 serial numl of digits date Y/M tim HH:N ty 100	M/DD MM:SS	Color Co	lor	Color	-	<ul> <li>✓</li> </ul>	te	
Integer d Alignmen Display Number Time Display Display Data capaci Max lines	ig4 serial numl of digits date Y/M tim HH:N ty 100 Used for	M/DD MM:SS	Color Co Lines pe n manage	lor v c v c r 10 ement c	color		v v ot operat	te	

description	Can be used to annotate the purpose of this control
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.

dis	play date	Set the date display format.				
	color	Set the color of the date display text.				
dis	play time	Set the time display format.				
	color	et 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

			Report form			
Basic Attributes	isplay Appeara	ance Query	Security settings	Location		
✓ Display part 1	Title					
Tevt	O Multiling					
L Co L						
Fo微软雅黑		✓ General	~			
Co	<b>•</b> •	Size 12	~			
Ali Middle_Cent	er 🗸	Row	15	~		
	1					
display list	n head Whether		to column width			
Show Items		Title bar descr	iption	Column spacing		
No.		No. Time		59 58		Move up
Time Date		Date		59		
Channel1		Channel1		58		
Channel2		Channel2		58		Move
Channel3		Channel3		58		
						Restore
						Restore
Title bar font						
Fo 微软雅慧	2	✓ Gene	eral 🗸			
Co						
	<b>~</b>	Size 12	~			
Ali Middle_0	Center 💙	Ro	w height	~		
List font						
Fo 微软雅	黑	<ul> <li>✓ Ger</li> </ul>	neral 🗸			
rt titlo	Sat tha tit	la of the co	ntrol is disp	lowed in the	first row a	f the table
rt title			-	•		
	multiple la	anguages (re	efer to 5-1 fo	or details of	multiple la	nguages).
		nt for compo			-	
	Set the siz	re of the con	nnonent title	text		

	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		
	- 1	Basic Attributes	Display	Appearance	Query	Security settings	Location	
		Appearance						
		<ul> <li>Use Libra</li> <li>Oustomiz</li> <li>Table</li> <li>Backgro</li> </ul>		ce v	Title descrip	otion	×	
	- 1		er frame	M			×	
	- 1	Line style		¥	Line color		Ť	
		Grid		✓ Column s	separator			
		Line style		~ ~	Line color			
use	e library style	Select a	table sty	le from the	gallery.			
sty	yle selection	Click to	select th	e desired s	tyle appear	ance from th	e gallery.	
5	style color	Modify	the appea	arance colo	or.			
custor	nize appearanc	e Set you	r own app	pearance st	yle.			
table	background co	olor Set the	overall ba	ackground	color of the	e table.		
	title backgrou color	and Set the	backgrou	nd color of	the title ro	w.		
	outer frame	e After ch	necking, d	lisplay the	peripheral	border.		
	line style	Set the	form of b	ox and line	e, you can c	choose lines,	dotted line:	s, dashed lines, etc
	line color	Set the	color of t	he border l	ines.			
	line width	Set the	width of	the line.				
grid	grid	Set the	display st	yle of the g	grid.			
	row separate	or When c	hecked, a	1 horizontal	l border wi	ll be displaye	ed.	
	column separa	ator When c	hecked, a	vertical bo	order will b	e displayed.		

	line style	Set the form of box and line, you can choose lines, dotted lines, dashed lines, et	c.
	line color	Set the color of the border lines.	
	line width	Set the width of the line.	
■ ①	Query Export		
Rep	ort form		×
E	Basic Attributes	Display Appearance Query Security settings Location	
	Picture PSB	0 Export ON->OFF ~ Export PNG ~	
2	ct the Query	to use export picture function. Meets export conditions, export format is PNG. Report form	
	Basic Attribu		
	Query m	ne query function	
	Query se	ettings	
		PSB0 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 control	PSW0
	PSW0:年(无符	号数方式输入,YYYY格式,例	如2004)
	PSW1:	Month (input in unsigned	number format, MM for
	PSW2:1	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	Appearan	ce	Query	Security settings	Location
✓ Pictur	PSB0 Exp	oort ON-	>OFF ¥	Export	PNG ¥	
Query metl	/ by date ter control qu	<ul> <li>Quer</li> </ul>	y by tim	e period		
Query setti						
Query setti		30				
Query	control	30				
Query o	control PSI	30 April V	15	Ho(38	Minute	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.

From	Tuesday	,	April 🗸	15	Hor 38	Minute	Second
To [	Tuesday	E	April 🗸	14	Ho 18	Min 1	Second
			✓ Regi	ster co	ntrc 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.

Basic Attributes	Display	Appearance	Query	Security settings	Location		
✓ Pictur	PSB0 Exp	ON->OF	F v Export	PNG V			
🕑 Use the qu	ery function						
Query meth	od						
O Query	by date	O Query by	time period				
			1				
Regist	er control qu	Jer PSW0	Reaister v	value 0: bv date	space 1: b	/ time period	
<ul> <li>Regist</li> <li>Query settin</li> </ul>		Jer PSW0	Reaister v	alue 0: bv date	space 1: b	/ time period	
	igs	Jer PSW0	Reaister v	value 0: bv date	space 1: b	v time period	
Query settin	igs		Reaister v	value 0: bv date	space 1: b	/ time period	
Query settin	igs ontrol PSE		Reaister v	value 0: bv date	space 1: b	/ time period	
Query settin Query co	igs ontrol PSE	30	Reaister v	value 0: bv date	space 1: b	v time period	

Security setting

Basic Attributes	Display	Appearance	Query	Security settings	Location
Display cor C Enable When					
Dev	ic 本地设备		0	✓ Settin	
Ena	ble Sta ON	¥	Indirect		
User permi		nent when the u	iser has no j	permission scope	
	permission	Permission1			

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

SIC Attrib	Display S	ecurity se Locati	on		
Con	trol ID	PC0			
Dec	cription				
Des	chption				
	ta addre	ss			
Devic	本地设备	ŕ		~	Settin
Addre	PSW	~	0		
Data	Word Y	✓ Unsignec ✓			
type		- S-4	Indi	rect	

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)

		A	ddress	×	
	Device	本地设备	~	Statio n No.	
	Address type	PSW		User defined label	
	Address	0		System register	
	数据类型	Word 🖌 Unsigned			
	Address format	[range : 0 - 9999]			
				Address Label	
			Determine Can	Application	
indirect specify	Set the c	urrent address offset,	where the curre	ent register addres	ss changes with the
	indirectly	specified register value	e, i.e. Dx[Dy]=D	[x+Dy numerical	value] (x, y=0, 1, 2,
	3). Exar	nple: The current regist	er address is PSV	V0, if the indirectly	y specified address is
	PSW100;	When the value of th	e PSW100 regis	ter is 0, the regist	ter that controls this
	componer	nt remains PSW0; When	n the value of the	e PSW100 register	is 1, the register that
	controls th	nis component is PSW1	(and so on)		
data number	Set the nu	mber of blocks (consec	utive addresses at	fter the first address	s)

### Display

	Pie C	hart	
asic Attril Display Sec	curity se Location		
4	1 2 3 Directi © Clo Start and End ang	ckwise O A	Anti-clos
circle center radius	0	ter fram	<b>v</b>
Channe 通道1 v	Bac	kgroun	~
Border Settings Border col	<b>v</b>		
Sign			
Sign O No display	<ul> <li>Display number</li> </ul>	🔿 Display per	rcentage
	<ul> <li>Display number</li> <li>Decima</li> </ul>		rcentage

## 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				
sta	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				
		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

curity se Locatio	on			
隐藏	~			
地设备		~	Settin	
SB	✓ 0			
a on 🗸				
mponent wh	en the user has no	o permissi	on scope	
sion Perm	nission1	~	Ċ.	
	≍地设备 SB a ON → mponent wh	地设备 SB ✓ 0 a ON ✓ □ Indire mponent when the user has no	地设备 ~ 0 SB ~ 0 a ON ~ Indirect mponent when the user has no permissi	地设备 、 Settin SB 、 0 a ON 、 Indirect mponent 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.

### 4-5-7. 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

	Data Table
Basi	c Attribe Display Appearance Security set Location
	Control ID DTB0
	Description
	✓ Use consecutive addresses
	Data address
	Devic 本地设备 v Settin
	Addre p <sub>SW</sub> v 0
	Data Word V Unsigner CV
	Data content
	Titles in Edit all Add Delete
	Title         Data type         Data         Number         ditable         Integer         Decimal         Incodi
	Data capacity 自行数 5 Lines per 5
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 "

5-1 label multilingual for specific usage)

settings (refer to

multilingual

	✓ Titles in	✓ Ed	it all				Add	ł	Dele	te
	Title	Data type	е	Data		Number	ditable	Integer	Decimal	Incod
		Word	-	Unsig	•	1	✓	4	0	
		Word	-	Unsig	•	1	~	4	0	-
		Word	•	Unsig	•	1	✓	4	0	-
data setting	After selection, y width of the data c			-	git	s, decima	l place	s, leadir	ng 0, and	l colur
data capacity	Set the total numb	er of rows an	d ro	ws per pa	ge	displayed	l in the	data tab	le	

(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.

<ul> <li>Titles in</li> </ul>	✓ Ed	✓ Edit all				Add	ł	Delete	
Title 📕	Data type	е	Data	a Numbe		ditable	Integer	Decimal	Incod
	Word	•	Unsig	•		✓	4	0	
	Word	•	Unsig	•	1	✓	4	0	-
	Word	-	Unsig	•	1	~	4	0	

(2) When continuous addresses are not used, the display is shown in the following figure:

Use consecutive add	lresses	
– Data capacity –		
行数 5	Number 5	

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

ewo.		Title	
序号	静态列		
1			
2			
3		din	
4		- V	
5			

2 Set the address

Fill type: address monitoring, monitoring numerical values and characters.

自元格设置		? ×	单元格设置			?	×
埴充类型	地址监控 ~		<b>埴充类型</b>	地址监控			
地址类型	数值 ~		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	Word v Unsigned v 间接指	Ē	寄存器数	1	🗌 自定义数据类型		
数据类型			数据类型	······································			
整数位数		前导 0 可编辑	编码方式	UTF_8 ~ □ 可编辑			
	a	1定 取消			确定	取	消

Fill type: text monitoring

元格设置		?	×
埴充类型	文本 ~		
• 文本	○ 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	- Jn	signed	•	1	1
							مه کې د
		1					
<							>
数据设置	_	/					
编码格式	UTF_8		寄存器数	1		-	
列宽	ASCII					(manual)	
71 5G	UTF_8 UTF_16						
数据容量	GB2312						

## Display

Title		ceSecurity sel Location	
	O Multiling		
		Title	
Colum	✓ Titles in multili	ngual	
Display	Show contents	Title name	Column width
✓	序号	序号	57
	名称	静态列	57
<b>√</b> Number of Static	✓ Use Multilinguali	89-8925	_
Number of	in the second se	sm Static Column Name	

title	text	Set the name of the data table header
	multiling	After checking, the header content can be set to multiple languages
column		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	ont	height of the three fonts remain consistent

### ■ Appearance

			Data Table					
	Basic Attrib D	isplay Appearance	Security set Location					
	- 🔾 Gallery app	pearance						
_	<ul> <li>Customize</li> <li>Backgro</li> </ul>							
- 1	Background color							
_	Border Settings							
	Border preset							
		Grid						
gallery appearance	style selection	Click and select a	a table style from the gallery arance Style selection					
customize appearance	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

Display contro	ol			
✓ Enable				
When	隐藏 🗸			
Devic	本地设备	~	Settin	
Addre	PSB 🗸	D		
Enable	Sta ON 🗸	Indirect		
User permissi	on			
✓ Hide this	component when the us	er has n <mark>o</mark> permissi	ion scope	
User per	mission Permission1	~		
range	and a second and a second and a second			

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.

		Re	cipe manag	ement					
ecipe group Recipe dat	a								
Recipe group		e Recipe_0	1	A <mark>dd r</mark> eci	pe Dele	te re	cipe		
recipe list 配方0 Recipe_0	Add Inse	ert Delete Delete all	Copy Paste						
	Recipe	e 4 Rec volu	tipe data ume	D					
	No.	Element name	Data typ	pe	Data forma	at	number	Integer	Decimal
	0	0	Word	*	Unsigned	•	1	4	0
	1	1	Word	-	Unsigned	•	1	4	0
	2	2	Word	•	Unsigned	•	1	4	0
	3			<b>.</b>					
		2	Word	Ţ	Unsigned		1	4	0
		3	word	×	Unsigned		1	4	0
		3	Word		Unsigned	•	1	4	0

Recipe group

itempe Bros	1							
recipe group		Select the recipe group that needs to be edited, and all added recipe groups can be selected through the drop-down menu						
	-	•						
name	Set the na	me of the recipe group						
add recipe	After ente	ering the name, click on	"Add Recipe" to a	add a	new recipe	grou	ıp	
delete recipe	Click to d	elete the selected recipe	group					
recipe group list	Display a	ll added recipe group nu	mbers and names	in tl	ne list below			
add	Add recip	e elements						
insert	Insert a ne	ew recipe element below	the selected reci	pe el	ement			
delete	Delete sel	ected recipe elements						
delete all	Delete all	elements in this group						
сору	Copy the	Copy the selected recipe element						
paste	Pasting th	ne copied data at the set	lected location, a	new	piece of da	ta n	amed 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	-	-	
recipe length	Automatic	cally display the length	of the currently ac	lded	recipe and ca	anno	ot be edited	
recipe volume	Each grou	p of recipe data has a s	eparate data volu	me.	As shown in	the	above figure, if the	
	data amou	unt is set to 100, it mean	ns that up to 100	sets	(0-99) of da	ta ca	an be set within the	

		recipe group 0. If it exceeds this, a pop-up prompt will appear in the following figure.
		Prompt
		Current recipe has reached upper limit of data
		Ok
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 <sup>Byte_String</sup> DDWord_String DDWord_String DDWord_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 managen	nent				×
Recipe group Recipe data									
all recipe group list	Search		٩	Add Insert	Delete Delete a	11			
配方0 Recipe_0 配方1 Recipe_1		Use external ad		🔿 Nam	e 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
	<								>
						Determ	ine Can	cel Appl	lication
15						11	1 a 4 1 2		

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

Basic Attril Display Appearan Query Security's Location         Control ID       E0         Description       Description         Data source       Recipe Edit         Recipe Recipe 0       Recipe Edit         Image: Provide the source       Recipe Edit         Recipe Edit       Image: Provide the source         Recipe Comment name ditable       Recipe Edit         Image: Provide the source       Provide the source         Recipe Comment name ditable       Recipe Edit         Image: Provide the source       Provide the source         Recipe Comment name ditable       Provide the source         Image: Provide the source       Provide the source         Recipe Comment name ditable       Provide the source         Image: Provide the source       Provide the source         Recipe Comment name ditable       Provide the source         Recipe Comment name ditable       Provide the source         Data capacity       Total         Total       Toval         Toval       Total         Toval       Toval         Total       Provide the source         Data capacity       Total         Total       Toval         Toval       Total <t< th=""><th></th><th></th><th></th><th></th><th>Recip</th><th>e table</th><th></th><th></th><th></th><th></th><th></th></t<>					Recip	e table					
control ID       RL0         Description       Description         Data source       Recipe 0         Recipe Recipe 0       Recipe Edit         group       Full display         Editable       Editable         ielec       Element name ditable         isource       Bord         group       Select the recipe group         tata		В	asic Attril Display Ap	pearan	Query Se	curity s Lo	cation				
control ID       Used for system management controls, user cannot operate         description       Can be used to annotate the purpose of this control         data       recipe         group       Recipe group         edita the recipe group       Recipe Edite         group       Recipe Edite         edita source       Recipe Edite         edec Element name ditable       edec         i       i											
control ID       Used for system management controls, user cannot operate         description       Can be used to annotate the purpose of this control         data       recipe         group       Recipe Edit         source       group         group       Select the recipe group         o       Vord         1       Word         1       Word         1       Word         1       Word         1       4         0       7.583         Word       1         4       0         7.583       Word         4       0         7.584       Word         4       0         7.585       Word         4       0         7.586       Word         4       0         7.587       Word         1       4         0       7.586         Word       1         4       0         7.586       Word         6       Word         7.586       Word         7.586       Word         7.587       Word											
Recipe Recipe 0       Recipe Edit group         Full display       Editable         i elec       Element name         1       Word         1       4         0       77583         Word       1         4       0         77583       Word         Word       1         4       0         77583       Word         1       4         0       77583         Word       1         4       0         77587       Word         1       4         0       77587         Word       1         0       77587         Word       1         0       77587         0       1         0       77587         0       1         0       1         0       77587         0			Description								
Recipe @ @ @ Recipe Edit group         Full display       Editable         @ @ @ I diable       @ @ I diable         @ @ I diable       @ @ I diable         @ @ I diable       @ @ I diable         @ I diable       @ @ I di			Data cource								
control ID       Used for system management controls, user cannot operate         description       Can be used to annotate the purpose of this control         data       recipe         group       Select the recipe group					Destruction	Part					
control ID       Used for system management controls, user cannot operate         description       Can be used to annotate the purpose of this control         data       recipe group         group       Select the recipe group			group Recipe_0		Kecipe Ed	IIT					
0       Word       1       4       0         1       Total       Word       1       4       0         1       Total       Total       Total       0       Total         rows       Lines per       5       *       *       *         Used for system management controls, user cannot operate       Can be used to annotate the purpose of this control         data       recipe       Select the recipe group that needs to be displayed, or click on the recipe editor to add or modify the recipe group			Full display		🗌 Editable	e					
1       Word       1       4       0         1_Copyed       Word       1       4       0         元素3       Word       1       4       0         元素4       Word       1       4       0         元素5       Word       1       4       0         元素6       Word       1       4       0         元素7       Word       1       4       0         元素7       Word       1       4       0         元素7       Word       1       4       0         元素8       Word       1       4       0         Data capacity       Total       Total       0       0         Total       Total       0       0       0       0         Joes per page       5       1       0       0       0         Joes used for system management controls, user cannot operate       Can be used to annotate the purpose of this control       0         data       recipe       Select the recipe group that needs to be displayed, or click on the recipe editor to add or modify the recipe group       0       0			elec' Element name	ditable	Data type	number	Integer	Decimal			
Image: source       Image: source<			0			57	1	11			
Control ID       Used for system management controls, user cannot operate         description       Can be used to annotate the purpose of this control         data       recipe         group       Select the recipe group that needs to be displayed, or click on the recipe editor to add or modify the recipe group			1		Word	1	4	0			
image: source       image: source<											
image: source       image: source<						-	524	100 T			
image: source       image: source<						-					
image: source       image: source       image: source       image: source       Word       image: source       image: source       Word       image: source       ima											
image: source       image: source<						-					
Data capacity         Total         rows         Lines per         page         page         control ID         Used for system management controls, user cannot operate         description         Can be used to annotate the purpose of this control         data       recipe         source       group         group       modify the recipe group											
control ID       Used for system management controls, user cannot operate         description       Can be used to annotate the purpose of this control         data       recipe         group       Select the recipe group that needs to be displayed, or click on the recipe editor to add or modify the recipe group											
Image       Image <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>											
control ID       Used for system management controls, user cannot operate         description       Can be used to annotate the purpose of this control         data       recipe         group       Select the recipe group that needs to be displayed, or click on the recipe editor to add or modify the recipe group			Data capacity								
times per page       5       5         control ID       Used for system management controls, user cannot operate         description       Can be used to annotate the purpose of this control         data       recipe group         source       group											
page       page         control ID       Used for system management controls, user cannot operate         description       Can be used to annotate the purpose of this control         data       recipe         group       Select the recipe group that needs to be displayed, or click on the recipe editor to add or modify the recipe group				5	1	<b>A</b>					
control ID       Used for system management controls, user cannot operate         description       Can be used to annotate the purpose of this control         data       recipe         group       Select the recipe group that needs to be displayed, or click on the recipe editor to add or modify the recipe group				0	1	•					
description     Can be used to annotate the purpose of this control       data     recipe       source     group   Select the recipe group that needs to be displayed, or click on the recipe editor to add or modify the recipe group			15-		1						
data     recipe     Select the recipe group that needs to be displayed, or click on the recipe editor to add or modify the recipe group	cont	rol ID	Used for system	n mana	agement c	ontrols,	user ca	nnot opera	ate		
source group modify the recipe group	desc	ription	Can be used to a	annota	ate the pur	pose of	this con	ntrol			
	data	recipe	Select the recip	e groi	up that nee	eds to b	e displa	ayed, or cl	ick on the	e recipe edi	tor to add or
When the recipe group is selected, the table below displays all the elements of the	source	group	modify the recip	be gro	up						
			When the recip	be gro	oup is sel	ected, t	he tabl	e below	displays a	all the elen	nents of the
selected recipe group			selected recipe	group							

full di	splay	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

	splay Appearan	Query Security s Locat	ion	
Title displ	lay			
) Tevt	O Multilina			
		Recipe_0		
lisplay list				
Use	✓ Display	Show row	Show	
Sho	ow Items	Title Title Description	Column	Move up
	序号	序号	60	
	名称	名称	60	
				Default
erial Num Style Sty	ber Style le1 (1/2/3)	~		
	le1 (1/2/3)	× 		
Style Sty Title descriptio Column	le1 (1/2/3)	· ·	nchronize land	
Style Style Fitle descriptio Column neader able title	le1 (1/2/3)	· ·	-1	
Style Style Title descriptio Column neader able title o 微软雅	le1 (1/2/3) on List title	List Data Sy General	•	
Style Styl Title descriptio Column neader able title	le1 (1/2/3)	List Data Sy General	•	
Style Style Title descriptio Column neader able title o 微软雅。	le1 (1/2/3)	List Data Sy General Size 12	•	quage font

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	<ul> <li>Display</li> </ul>	✓ Show row	~	Show
Sho	w Items	Title Title Description	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

	Recipe table
asic Attri Display	Appearance Query Security se Location
Gallery Appeara	nce
Customize appe Backgroud	arance
Background c	olor Different colors of odd
Background c	
Border Setting	s
Border pr	eset 🗄 🔛 🔛 🗰 🗰
Outer	frame
-	hi
	.k ~
	s
1	St 🚬 🗸
Grid	
Select Focus	
Text	olor
Row background o	
now background c	
	Cell 🗸

gallery appearance	style selection		Click and select a table style from the gallery     Gallery Appearance     Style selection				
			Style selection				
customize	background	background	set the background color of the table				
appearance	setting	color					
background		different	After selection, you can set the odd and even rows to display different				
		color of	colors				
	odd		<ul> <li>Customize appearance Backgroud</li> <li>Odd line color</li> <li>Even line color</li> </ul>				
	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	y <mark>setti</mark>	Location	
Picture	PSBO	Export	ON->OFF	~	Expo	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
<ul> <li>Enable query fun</li> </ul>	ction
Query method	
Query by	Query by data
Query settings	
Query Control	PSBO
Quanykanword	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.

(1) 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 method Query by	○ Query b	oy data
Query settings		
Query Control	PSB0	
Quantikassuard		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	Ourse hudete
O Query by	Query by data
Query settings	
Query Control	PSB0
Query Control	PSB0

Security setting

Basic Attri Dis	play Appea	ran Query	Security se Locatio	on
	200		-	
- Display con				
C Enable				
When	隐藏	~		
Devi	c 本地设备		~	Settin
Add	re <sub>PSB</sub>	~	0	
Enal	ole Sta ON	~	Indirect	
User permi	ssion			
✓ Hide ti	nis compone	nt when the u	user has no permiss	ion scope
User p	ermission	Permission1	~	
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

20 <b>2</b> 2 10 2 2	Recipe Transfer
asic Attrib	utAppearance Security sett Location
Contr Descr	ol ID RT0
Actic	
transmi	ssion mode
O Regi	ster control
sourc	Recipe () V NCUDE Recister
sourc	e Recipe_0 V Recipe
source Number of	e Recipe_0 V Recipe
source Number of words	e Recipe_0 V Recipe
source Number of words – PLC add Devic	e kecipe_0 v kecipe of 9 Iress
sourc Number o words – PLC ado Devic	e Kecipe_0 V Kecipe Kegister

control ID	Used for system management controls, user cannot operate			
description	Can be used to annotate the purpose of this control			
action	Select the button action mode, and you can choose to transmit when pressed or released			
transmission mode	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			
download recipe to PLC	Transfer the recipe data in the HMI to the PLC address, which is set in the address			
	below			
upload recipe from PLC	Read the data from the PLC address to the HMI and replace the existing recipe data			
register control	Using register controlled transmission method, transmitting through rising/falling edge			
	triggering			
	transmission mode			
	<ul> <li>Download recipe to</li> <li>Upload Recipe from PLC</li> </ul>			
	Register control     Download recipe to			
	Upload Recipe from			
recipe source	Select the recipe group that needs to be transferred, or click on the [recipe] button to			
	modify the recipe data			
register	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)			
number of words	Display the length of the recipe that needs to be transferred and cannot be changed			
PLC address	Set the PLC initial address for transmission or upload, and calculate the occupied			

	address length based on the wo	rd numbers set above			
device	The device port currently com	nunicating with			
address	Set Target Register Number				
data type	Byte-8Bit; Word-16Bit; DWord- 32Bit; DDWord -64Bit; BCD; Hex; Signed number;				
	Unigned number; Floating n	umber			
setting	Click "Settings" to enter the a	ddress setting interface. T	his interface allows you to set		
	the use of system registers an	d user-defined labels. You	can click on the address label		
	library or the project tree - lib	orary - address label librar	y below to set the labels used		
	(refer to 5-2 Address Label Li	orary for the use of address	s label library and user-defined		
	labels)				
		Address	×		
	Device 本地设备	Statio	0		
	Address PSW	v n No.	r defined label		
	type				
	Address 0	Syst	em register		
	数据类型 Word ∨ Unsigned				
	Address [range : 0 - 9999] format				
		Addr	ess Label		
		Determine Cancel	Application		
indirect specify	Set the current address offse	t where the current regis	ster address changes with the		
maneet speeny		e	numerical value] (x, y=0, 1, 2,		
			the indirectly specified address		
			), the register that controls this		
		<b>U</b>	00 register is 1, the register that		
	controls this component is PSV				
recipe transfer	-	. ,	omatically set it to ON after		
completion	transmission is completed	- ·	-		

Appearance

asic Attribu Appearance Security sett			
	✓ Use pictur	es	
	Status	0	~
OFF	Name	button_05_a	
	categor	<b>y</b> svg	
	Size	80 × 42	
I I Fill State 0 I I I I I I I I I I I I I I I I I I	Font applied to	each	
	Font applied to		
State 0 ·	Font applied to		
State 0 · ·		each	

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
	- 11	Operation confirmation delay
	- 11	Confirm before Waiting time
		C Key delay
		Display control I Enable When PSB V 0 Enable Sta ON V Indirect Enable control I 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 V range
operat		You can set the delay time (s). If this option is checked, a pop-up window will appear when
confirm		operating the component, saying "Are you sure to execute this operation?" If you do not click
dela	У	"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 de	elay	Long press the set delay time before the operation takes effect
display c	•	Use bit control to display the component. When the conditions are not met, the control is
		hidden and defaults to hidden, which cannot be modified
enab	le	When checked, display control will be enabled
When val		Set the display of the control when validation fails
fails		
addre		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 c	ontrol	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 Recipe data	3								
Recipe group	✓ Name	e Bread recipe 0	Add	recip	Dele	te re	cipe		
recipe list	<b>*</b>		Ē Ē						
	Add Ins	ert Delete Delete all	Copy Paste						
	Recipe	e 5 Rec	cipe data ume 100 Data type		Data forma	at	number	Integer	Decima
	Recip	e 5 Rec volu	tipe data ume	*		at •	number 1	Integer 4	Decima 0
	Recipe	e 5 Rec volu	ipe data ume 100 Data type	*	Data forma			NOVER STOR	100000000
	Recipe No. 0	e 5 Rec volu Element name flour	Data type Word	-	Data forma Unsigned	•	1	4	0
配方0 Bread recipe 0 配方1 Recipe_1	Recipe No. 0 1	e 5 Rec volu Element name flour water	Data type Word Word	•	Data forma Unsigned Unsigned	•	1	4 4	0

			Recip	e manageme	ent		
Recipe grout Recipe data							
all <mark>recipe group list</mark>	Search		P	Add Insert [	Delete Delete	all	
配方0 Bread recipe 0 配方1 Recipe_1		Use external a	address			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
	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	ecipe manageme	nt				
ecipe group Recipe da	ata							
Recipe 1		Bread recipe 1	Add r	ecipe	Delete re	cipe		
group				•		90		
recipe list	<b>F</b>							
配方0 Bread recipe 0 配方1 Bread recipe 1			Copy Paste					
BOJI Bread recipe 1	Recipe	5 Re	cipe data lume					
	No.	Element name	Data type		format	number	Integer	Decima
	0	flour	Word	( Constanting	aned 🔹	1	4	0
	1	water	Word	• Unsi		1	4	0
	2	sugar	Word	• Unsi		1	4	0
	3	butter	Word	• Unsi	ned •	1	4	0
	4	egg	DWord	• Flo	oat 🔹	1	4	4
		h [	Recipe n	F 🖽	Delete	Delete all		
all recipe group 配方0 Bread recipe	e 0	h		F 🖽		and the second se		
	e 0	Use external a		F 🖽		Delete all	butter	egg
all recipe group 配方0 Bread recipe	e 0 e 1	Use external a	ddress	d Insert	Delete	Delete all	butter 103	the second se
all recipe group 配方0 Bread recipe	e 0 e 1 序号	Use external a	ddress flour	Id Insert	Delete	Delete all gar	7	104.1044
all recipe group 配方0 Bread recipe	e 0 e 1 序号 0	Use external a	ddress flour 100	id Insert water 101	Delete sug	gar 02	103	104.1044 204.2044
all recipe group 配方0 Bread recipe	e list Searc e 0 e 1 序号 0 1	Use external a Saturnal a 名称 数据0 数据1	ddress flour 100 200	d Insert water 101 201	Delete	par   )2   )2   )2	103 203	104.1044 204.2044 304.3044
all recipe group 配方0 Bread recipe	e 0 e 1 序号 0 1 2	Use external a 公務 教掘0 数据1 数据2	flour 200 300	water 101 201 301	Delete	gar   )2   )2   )2   )2   )2	103 203 303	egg 104.1044 204.2044 304.3044 404.4044 504.5044
all recipe group 配方0 Bread recipe	e 0 e 1 序号 0 1 2 3	Use external ad San Stress San S	P         Address           flour         100           200         300           400         400	water 101 201 301 401	Delete	gar   )2   )2   )2   )2   )2   )2   )2   )2	103           203           303           403	104.1044 204.2044 304.3044 404.4044
all recipe group 配方0 Bread recipe	e 0 e 1	Use external ad States of the second	Image: Point of the second s	water 101 201 301 401 501	Delete	gar         02           02         02           02         02           02         02           02         02           02         02           02         02           02         02           02         02           02         02           02         02           02         02	103         203         303         403         503	104.1044 204.2044 304.3044 404.4044 504.5044
all recipe group 配方0 Bread recipe	e 0 e 1	Use external ad S 名称 数据0 数据1 数据2 数据3 数据4 数据5	Image: Point of the second s	water 101 201 301 401 501 601	Delete	Delete all gar   )2   )2   )2   )2   )2   )2   )2   )2	103           203           303           403           503           603	104.1044 204.2044 304.3044 404.4044 504.5044 604.6044
配方0 Bread recip	e 0 e 1 5 6	Use external ad	Image: Point of the second s	water 101 201 301 401 501 601 701	Delete	Delete all gar   )2   )2	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).

recipe	transfer-down	load	recipe	to	PLC	2

sic Attrib	utAppearance Security sett Location
Contr	ol ID RT0
Descr	iption
Actio	n Press 🗸
transmi	ssion mode
	nload recipe to 💦 Upload Recipe from PLC
<ul> <li>Dow</li> <li>Regi</li> <li>Recip source</li> </ul>	nload recipe to OUpload Recipe from PLC ster control e Bread recipe 0 V Recipe V Register PFW0
Dow Regi Recip	nload recipe to OUpload Recipe from PLC ster control e Bread recipe 0 V Recipe V Register PFW0
<ul> <li>Dow</li> <li>Regi</li> <li>Recip</li> <li>source</li> <li>PLC adde</li> </ul>	nload recipe to O Upload Recipe from PLC ster control e Bread recipe 0 V Recipe Recipe PFW0 ress

Function key - recipe download

		Function key	
ew Help	Function     Appearance     Security set       Control ID     FB0       Description       Action     Press Status       Start	Location V	
	Functions	Or	otional functions
	下载配方 To PSW0	·	设置线圈
		Add	设置数据
			四则运算
	Download recipe	×	数据传输
Basic Attributes Security settings			画面切换
配 方源 Bread recipe 0	✓ Recipe ✓ Specified	PFW0	调用窗口
<ul> <li>Recipe download address</li> </ul>			关闭窗口
Devic 本地设备	✓ Settin	-	导入CSV
Addre PSW	✓ 0		导出CSV
Data Word ∨ Unsigne type	Indirect		上传配方
			下载配方
Recipe transfer compl	ation flag		函数调用
	PSB0		画面打印
	Determine Cancel	Application	

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.

laine value value value value NGC NGC NGC NGC NGC	Recipe Transfer
	Basic Attribut Appearance Security sett Location
	Control ID RT0
	Description
	Action Press V
	transmission mode     O Upload Recipe from PLC
	Register control
	Recipe source Bread recipe 0 ← Recipe ✓ Register PFW0
140	PLC address Devic 本地设备 v Settin
	Addre pSW v 0 Data Word v Unsignec v Indirect
	✓ Recipe transfer completion PSB0

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

						Recipe ma	inager	nent			
Recipe gi	rour Recipe data										
Recipe group	0	~	Name	Bread	d recipe 0		Ad	d recip	De De	lete re	ecipe
and the second se	e list Bread recipe 0 Bread recipe 1		Recipe	5	ete Delete a	II Copy Pa Recipe data volume	ste				
			lo.	Element name		Da	ta type		Data form	nat	numbe
			0 P	SWO	flour	W	ord		Unsigned	•	1
			1 P	SW1	water	W	ord	•	Unsigned	•	1
			2 PS	5W2	sugar	W	ord		Unsigned		1
						5-76	S 117 73 25				
			3 P	SW3	butter	W	ord	5.56	Unsigned	5.55	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		
- AUTOCOO	Data	DWord 🗸	Float V	T realizes		
	type			Indirect		

#### 3. Put the recipe table on the screen

			Recip	e table			 ×								
Basic Att	tril Display A	opearan	Query Se	curity se Lo	ocation										
Contr	rol ID RL0														
Descr	ription						OFF								
	autoraana T						OFF								
Data s															
Recip	Bread recipe	0 ~	Recipe Ec	lit —				LO							11
Recip group	Bread recipe	0 ~						LO IPSB106		Bread reci	pe 0				
Recip group I Fu	Bread recipe pull display		Editable	e	Integer	Decimal			5	Bread reci 名称	pe 0 flour	water	sugar	butter	eç
Recip group I Fu	Bread recipe			e	Integer 4	Decimal 0		PSB106	<b>1</b>			water	sugar	butter	eç
Recip group I Fu	pel Bread recipe pull display Element name	ditable	Editable	e	Integer 4 4	1		PSB106	5			water	sugar	butter	eç
Recip group I Fu jelec E	pe Bread recipe pull display Element name flour	ditable	Data type	e	4	0		PSB106	9			water	sugar	butter	eç
Recip group Fu jelec E	Bread recipe p ull display Element name flour water	ditable	Data type Word Word	e	4	0		PSB106	5			water	sugar	butter	e

4. Put a recipe index register SPSW256.

	191012	1.1.1.1.1	1557		111		193		1957
1.14	+1.+. +1.4	+1.+	<b>*</b> 1. <b>*</b>	1.5	+ 1 · +	1.14	11.1		+ 1 +
8. 4	0 1 0 0	0.4.0.4		1.1		19.14	1.1	1.1	
11	La og	00		fH	de	x r	eg	iste	er
1.			(Sale		Na)	11	ŝ,		Natio
101214	0100000004	1004004004	11240	0.0124	4124-3	0.0024	4124	0.000	4124-2

- 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.

75		Touch Win Pro					
OFF		Bread recipe 0	]	_	_	_	
OFF	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
OFF	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
Index register da specified reg	ta of the						

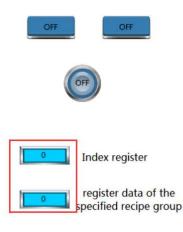
As shown in the following figure, change the register data of the specified recipe group to 1 and the index register to 0. Click the recipe download button. At this point, download the data 0 from recipe table 1 to the

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.



			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

#### 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 AttribiAppea	rance Security set	Location		
Control ID	REO			
Description				
4_1000-01-00000000	e		Key action	
Function type				

cont	rol ID	Used for system management controls, user cannot operate				
desc	ription	Can be used to annotate the purpose of this control				
functi	on 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				
	сору	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	res	
		Status	0	*
OFF		Name	keyboard_01_a	
		catego	<b>ry</b> svg	
		Size	80 × 42	
				a
	appearance		Mo	re pictures
✓ Fill			<u>6</u>	
	• 🗹 Di	splay text For	nt applied to eac	ch
ate 0	▼ ▼ Di	splay text For	nt applied to eac	ch
ate 0		splay text For	nt applied to eac	ch
ate 0		splay text For	nt applied to eac	ch
ate 0			nt applied to eac	ch
ate 0		oplay text For	nt applied to eac	ch
ate 0			nt applied to eac	ch
ate 0			nt applied to eac	ch
ate 0			nt applied to ead	ch
ate 0	Aultilina	OFF		ch
ate 0		OFF	nt applied to ear	ch

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
Ba	asic Attrib Appearance Security set Location
	Operation confirmation delay
	Confirm before
	✓ Key delay Delay time 1
	Display control
	✓ Enable
	When 隐藏 V
	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
- L	Enable Sta ON V Indirect
	User permission
	Cancel permission after operation
	A prompt window pops up when the user has no permission range
	Hide this component when the user has no permission scope
	User permission None v
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	"confirm" or "cancel" within the set delay 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
1.1	hidden and defaults to hidden, which cannot be modified
enable	When checked, display control will be enabled
When validation fails	Set the display of the control when validation 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 will be hidden. If the enabled state is ON, the component will be displayed
	normally. If the PSB0 state is OFF, the component will be hidden and not displayed
enable control	Can be set with bit restrictions (customizable enabled state), and only when the enable
enuole control	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
	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.

Click on the menu bar 'Parts/Operation Record/Operation Record' or click <sup>Operation record</sup> in the toolbar to enter the operation record configuration interface. After checking the enable operation record, the display is as follows:

		Operation re	cord s	etting		×	
	<ul> <li>Enable operation logging</li> </ul>	22		9		^	
	Screen	Part [	elect	Description		1	
	<ul> <li>User screen1:[00001]</li> <li>System picture2000</li> </ul>		<u> </u>				
	System picture2000		<u> </u>				
	System picture2000		H				
	System picture2000		<u>–</u> –				
	System picture2000		8				
	System picture2000		H				
	System picture2000		Ē				
	System picture2000						
	System picture2000						
	System picture2000						
	System picture2001		Ē				
			<u>–</u> –				
	System form25001:[	A				~	
	Control address						
	Enable control	Enabling method	OFF	~			
	Clear control	Clear by	ON-:	>OFF ∨			
	Save setting						
	● H ○ U						
	Export Control						
	Data retention days	<ul> <li>Register</li> <li>Overwrite ol</li> <li>Dav</li> </ul>		rds rrmine Canc	:el Ap	> plication	
select	Select to indicate that if t	the control i	s one	rated the one	ration rec	ord will be di	isplayed on th
Select			-				
			n clicl	c the " 🗏 " sig	n to expa	nd the contro	Is in the scree
	and set whether to check	them.					
	Screen	Part		Screen		Part	
				User screen1:	[00001]		Ţ
	User screen1:[00001]						
	User screen1:[00001]				IDaga1	Pacina Tra	
	System picture2000			窗口1:[00001		Recipe Tra	-
	<ul> <li>System picture2000</li> <li>System picture2000</li> </ul>					Recipe Tra Function k	
	System picture2000			窗口1:[00001 窗口1:[00001	l]Page1	Function k	
	<ul> <li>System picture2000</li> <li>System picture2000</li> <li>System picture2000</li> </ul>			窗口1:[00001 窗口1:[00001 窗口1:[00001	l]Page1 l]Page1	Function k Value inpu	-
	<ul> <li>System picture2000</li> <li>System picture2000</li> <li>System picture2000</li> <li>System picture2000</li> </ul>			窗口1:[00001 窗口1:[00001 窗口1:[00001 窗口1:[00001	L]Page1 L]Page1 L]Page1	Function k	-
	<ul> <li>System picture2000</li> <li>System picture2000</li> <li>System picture2000</li> </ul>			窗口1:[00001 窗口1:[00001 窗口1:[00001	l]Page1 l]Page1 l]Page1 l]Page1 re2000	Function k Value inpu	
select	Select to indicate that if t "Operation Record Displa	ay"; You car them. Part	s ope	rated, the oper c the " <sup>†</sup> " sig Screen	ration rec n to expa	ord will be di	

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.

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
C C	
	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
1.	up to 200 characters)
date	The stored file name is named with a date, for example, the file exported on May 29, 2021 is
register	named 20210529 Set the register address, and the stored files will be named based on the contents of the register.
Tegister	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;
9	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

	Oper	ation record display	
Basic Attrib Dis	play Query Sect	urity set Location	
Control ID	OR0		
Description			
Operation record setting	Operation		
— Display list —			
Use	<ul> <li>Adaptive column</li> </ul>		
Select	Project	Title Title Description	Column spacing
	序号	序号	35
<ul> <li>✓</li> </ul>	日期	日期	82
<ul> <li>✓</li> </ul>	时间	时间	62
✓	控件ID	控件ID	56
~	控件描述	控件描述	56
✓	地址	地址	220 55 56
~	动作	动作	
✓	用户名	用户名	
	窗口	窗口	56
	操作信息	操作信息	139
Move up	Move down F	Restore default	
Order			
Time	Chronological or	der O Reverse chro	onological order
Format	Date YY/MM/DD	v Tim e HH:MM:	ss v
ID Used for sy	ystem management	controls, user cannot operate	e
otion Can be use	ed to annotate the pu	urpose of this control	
Record Click on "	Operation Record S	ettings" to set the relevant co	ontent of the oper
gs	-	-	1
If the list of	displayed in the ope	eration record is in multiple	languages, chec

multi-language	using multiple languages is checked, a multi language setting table will be	displayed on the				
muni-ranguage	right side of the title description. Clicking on it will lead to the multi language					
	interface for setting multiple languages. The use of multiple languages can b					
	chapter 5-1. Multiple languages					
a dantizza a alizmun		vill automatically				
adaptive column	After checking, the column width cannot be customized, and the software will automatically adjust it to the most suitable size based on the project screen					
space						
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. If				
	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				
	before or after	1 2				
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,	•				
	operation record is displayed at the bottom of the table	,				
reverse	Contrary to the chronological order, the first generated operation record is	displayed at the				
chronological	bottom, and the later generated operation record is displayed at the top, t					
order	operation record information is displayed at the top of the table					
time date format	set the date and time format					
	bet 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 

		Operation	record dis	play	
asic Attrib Di	splay Query	Security s	et Location		
Use title					
U levt					
Table title	List title	List Data	□ s	ynchronize lang	uage font styles
Fo 微软雅黑		~	General	~	
Co	$\sim$	Size 12		~	
Ali Middle_Ce	enter 🗸		Row h30		
Table					
Background	color	~	Title de	scription	~
	me				
✓ Outer fra					
✓ Outer fra Thi	<b>v</b>	Style -		~	
Thi Co	~ ~	Style —		~	
Thi	~ ~	Style –		~	
Thi Co lor	~ ~	Style —	2	×	
Thi Co lor	~ ~	Style –		~	

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
i	font	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					
Operation record	display				>
Basic Attribute	Display	Query	Security setting	Location	
Picture	PSB0	Export conditio	ON->OFF ~	Export Format PNG	~

Select **Picture** to use the picture export function. Meets export conditions, export format is PNG.

2 Query

Basic Attribute	Display	Query	Security setting	Location		
Picture	PSB0	Export conditio	ON->OFF ~	Export Format	PNG	~
Enable op	eration recor	d query				
Query	by date		O Query by time			
<ul> <li>Regist</li> <li>Query contr</li> </ul>						
PSB0						
- Query date						

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:

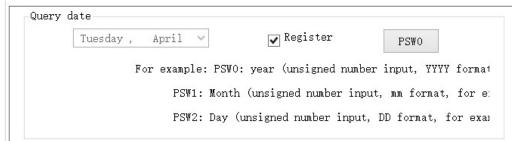
query control Set an address, and when set to that address, the query function will be triggered, and the query results will be displayed in the table

(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 V	n 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	<ul><li>✓ 11</li></ul>	Hou 44	Minute	Second
То	Tuesday ,	April	✓ 11	Hou 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.

From	Tuesday ,	April	~ 11	Hou 44	Minute	Second
To [	Tuesday ,	April	✓ 11	Hou 44	Min 32	Second
		_	Pogiator	PSW	1	
		✓ ·	Register	FSW		
		Exa	mple: PSW0	°PS₩5: from	time year, m	10nth, day
			~		the time yea	

(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	
Display control ✓ Enable When 隐藏 Devic 本地设备	~	
Addre PSB Enable Sta ON	<ul><li>✓ 0</li><li>✓ Indirect</li></ul>	
User permission	ent when the user has no permission scope	
User permission range	None 🗸	

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 purchase		
Enable static ins				
Enter administra	ator Administr password		Ø	
dd Batch add D				
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
Enable dynamic	installment			
Installment key	installment	Ø		Generate dynamic
Installment	installment	<ul> <li>Dynamic super password</li> </ul>	2	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 Interval time	$2023/04/20 14:45 \qquad \blacksquare \qquad \checkmark$ $0 \qquad  \qquad 0 \qquad 0 \qquad  \qquad 0 \qquad 0 \qquad  \qquad 0 \qquad 0 \qquad  \qquad 0 \qquad $	M In
Add Periods	1 ♥ 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:

请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 14:46	5:0		•		
	确认				
	Virtu	al Ke	yboa	rd	
	Esc	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		0.
] Er	nable static inst	allment			
Er	nter administrat	tor Administ passwor		Ø	
Add	Batch add De	lete 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
] Ér	nable dynamic i	nstallment			
	able dynamic i Installment key Dynamic Installment	nstallment	Ø       Dynamic super password	4	Generate dynamic

Only by checking this option can dynamic installment payments be set.

	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			×	
	Enable static installment	10.0117					
	Enter administrator	Administrator		Ø			
		Dynamic pas	ssword generat	and the second			
	Add Batch add Delete Delete all Period Start 1	Device ID			Password		
	Penoa Start	Installment key			Password		
		Start time of installment 202	23/04/18 00:00				
			23/05/18 00:00				
		O Duration of 30	(				
		Dynamic		Ø			
	Enable dynamic installment	Dynamic		Ø			
	Installmentkey		Confirm	Cancel	Generat		
	Dynamic Installment	Dynami passwo	ic super ord		dynami Ø	c	
				Determine	Cancel Applica	ition	
				1 <del></del>			
device ID		on the lower rig	ght corner o	of HMI scr	een, select "	$ (\mathbf{i} \circ \mathbf{i}) $	will
	Hmi版本: 1.1.3.2210	06					
	系统版本: 1.1.3.2210	08					
	硬件版本: HV2						
	设备IP: 172.31.6.2	28					
	设备ID: 022-009-0	16-0851-0036					
	2. check the I	D on the product	label				
	-	ouch Panel					
	POWER:DC24V 5W ID: 256-135-149-D518	4141					
	■ (1) (1) (1) (1) (1) (1) (1) (1)	IIIII C€					
	WUXI XINJE ELECTRIC	CO., LTD.					
	3. When down	loading, select t	the LAN do	wnload and	d scan the IP inter	face to find the	
	required de	vice ID based on	the model	and IP add	ress	1 04.003-012-0-0444	
	下號 (PC -> HMI) 通信设置	×	以太网设备信息查询 网络名称	IP地址	设备ID	× 机型	
	连接方式 局域网 ④ 设备IP查线 172.31. <sup>6</sup> .150	~	Hmi Hmi	172.31.6.228 172.31.6.230	022-009-016-0851-0036	TS3-700-E TS3-700-E	
	○ 设备ID查找 022-00¥016-0851-0036		Hmi	172.31.7.139 172.31.6.150	022-010-010-0856-0046 022-009-007-0901-0029	TS5-700-E TS5-700-E	
	扫描IP 通信》	A武	Hmi Hmi Hmi	172.31.7.141 172.31.1.53 172.31.6.115	022-010-010-0958-0007 022-009-027-1844-0001 022-009-008-1438-0004	TS5-700-E TS3-700-E TS5-700-E	
	下载密码 123456 ④ □ 允许工程上传		Hmi	172.31.0.110	022-009-006-1659-0058	TS5-700-E	
	□ 用户自定义开机画面 □ 使用默认开机	単面					

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 "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.

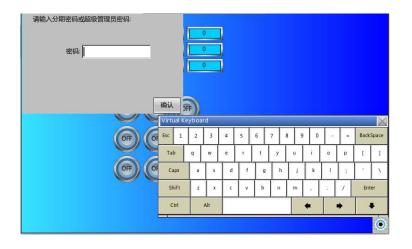
HMI display 

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 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

Timer	×
Basic Attrit	
Control ID TM0	
Description	
Time unit: 0.1 secc V	
✓ Delay 1 Execution cycle	
Timer execution flag bit	
Devic 本地设备 v Settin	
Addre PSB V 0	
□ Indirect	
<ul> <li>End condition</li> <li>Stop when screen is clos</li> <li>Stop when the preset time is reached ange</li> </ul>	
Preset time	
Constant     Specified by register	
1	
✓ Timer arrival preset time no       PSB0       Condi       ON       ✓         ✓ Time counte       PSW0         ✓ Reset bit       PSB0       Condit       ON       ✓	
Determine Cancel Applic	ation

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         Address       PSB       User defined label         Address       0       System register         Address       [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 O Bit state change ) Word value cha Screen start
	word value change	Trigger ac       PSB0       Trigger cc       Rising e          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       O         Bit state change ) Word value chaO       Screen start         Trigger ac       PSW0       Image: Equal value 5
	screen start	Start timing when the screen where the timer is located starts Trigger conditions 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       ● Specified by register         Read address       ○       ○         Devic       本地设备       ✓ Settin         Addre       PSW       ○         Data       Word       ✓ Unsignec ✓         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

Enab	le control					
	Enable					
141-42	Devic	本地设备		✓ Set	tin	
	Addre	PSB	0			
	Enable	Sta ON 🗸 🗸	Indirect			

Le control 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

Co	ttrit <mark>Securi</mark> ontrol ID <u>Display co</u> Always shi Controlle Always shi		on			
Co	ontrol ID Display of Always sho Controlle	SC1				
∩≏ 0	Display of Always sho	ontrol				
0	Display c Always sh Controlle					
1	Always sh Controlle					
1	Controlle			Show cont	ents	
-		a losses and the second second				
2	Always shi	and a second				
		ow Y				
			142 V.1	0	6	2)
Ad	d	Delete	1	Move up	Move	
Font	(					
Fo	微软雅黑		~	Genera		
Со			c:-	e 12		
1000		<b> ~</b>	Size	12	*	
croll	l sage	1	11			10.1
IVICS	saye			scroll spe	1	/0.1s
5 - A - A - A	order					
Thi	Border	less 🗸	Style	e 9 <del></del>	- v	
Co		$\sim$				
Fil						
			~			
Cold	or					
		Determi	ne	Cancel	App	lication

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 PSR     Controlle PSR     Text string     Text     Multiling     Thank you for your kindness
		Determine Cancel Application
control	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 O Always show Y Thank you for your kindness 2 Always show Y Register assignment Address Devic 本地设备 V O Indirect logic Positive logic Negative logic
show	<sup>7</sup> contents	Determine         Cancel         Application           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     PSR0       2     Always show     Y         Copy content       New Text String       New Variable text       New Data Display       Delete
oper	ate 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,
	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	
When	隐藏    ~
Devic	本地设备 v Settin
Addre	PSB V 0
Enable	Sta ON v Indirect
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

Surveillance cam	iera					×
Basic Attribute	Security settin	Location				
Control	ID CP0					
Descript	tion					
	Webcam					
Path						
	rtsp://admin:	123@192.168	0.1.1:554/h26	54/ch1/main/a	v_stream	
	1000	123@192.168	0.1 <mark>.1:554/h</mark> 26	ō4/ch1/main/a	av_stream	
*Example:	1000	123@192.168	attautstate what	64/ch1/main/a	200 IIII	
*Example:	ntrol	123@192.168	attautstate what		200 IIII	
*Example: Image co	ntrol	123@192.168	Enable	e dynamic RTS	SP	

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     V     Settings       Address     PSW     V     0
	Data Word V BCD V Indirect
	Start/stop import: PSW0
	Pause: PSW1

Enable dynamic	Set whether to dynamically specify RTSP addresses	_
RTSP	Image control Enable Enable Enable Enable	
	Device Local Device V 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 of 6	4
	words.	

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 CZVIZ 5	T.			请登录 菜	₽ - □ ×
<b>2</b> @ 设备 消息	设备管理			×	👳 意见留言
搜索:设备名 🙁	搜索到的局域网设备				🗹 展示窗口序号
<ul> <li>▼ 我的设备(0)</li> <li>您没有登录,请</li> </ul>	CS-C6CN-1C2WF-D(G75404997)	1	_	刷新	
▶ 本地设备	本地操作 网络参数配置 高级配置	伊政网络参数       IP地址     10 . 100 . 19 . 214       网关     10 . 100 . 19 . 255       子网進码     255 . 255 . 255 . 0       確定   取消			
<ul> <li>② 设备管理</li> </ul>	+ 添加 预览 回放		[1]	4 9 1	5 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.

		远程亂畫	
f管理	土 🚳 系统	配置设备的网络参数	
搜索到的局域网设备	- © 网络	网卡类型 10M/1000M 自适应 ~	
	WI-FI	<ul> <li>✓ 自动获取</li> <li>IPv4地址: 10.100.19.214</li> </ul>	
CS-C6CN-1C2WF-D(G75404997)	<ul> <li>         ······         ····         ····</li></ul>	<b>掩码地址(IPv4)</b> : 255.255.255.0	
	<ul> <li>         · 靈 萤石云         · ● </li> <li>         · ● </li> <li></li></ul>	网关地址(IPv4): 10.100.19.254 IPv6模式:路由公告 ▼	
	<ul> <li>▲ ④ 存储</li> <li>▲ ④ 事件</li> </ul>	IPv6抽址: ~	
agieror .	土 ⑥ 前端参数	网关地址(IPv6): □ 物理地址: ec:97:e0:2d:a8:b4	
	🕙 🚱 图像	MTU(Byte): 1500	
本地操作 网络参数配置 高级配置		设备端口号: 8000	
		多播地址: 0.0.0.0 HTTP满口号: 80	
		RTSP)嵩口: 554	
			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.

	<b>BRR</b> E		_		×
配置监控点的图像)	质量、分辨率及	及其他压缩参	<u>ži</u>		
点空虚:	通道 1	~	]		
視频					
码流类型:	主码流		视频类型	夏合流	~
码率类型:	变码案	~	码率上限:	1024 Kbps 👻	
图像质里:	中等	~	分辨室	4CIF(704*576)	~
帧类型:	P	~	视频航率	15fps	
- 城间隔:	60	\$	音频编码类型	AAC	
编码类型:	STD_H264	-			
全天录像文件大小:	10.0G				
音频					
音频输入类型:	Mic In	~	输入音里:		
输出音里:					
夏利到					保存
	监控点: 視頻       研究失型:       研究失型:       研究失型:       研究失型:       研究失型:       防衛所量:       航岡素型:       全天景像文件大小:       首類       音频输入失型:       輸出音量:	配置监控点的图像质量、分辨率3 当空点: 通道1 視频 一段先类型:主码充 码承类型: 变码率 四像质量:中等 ••• ••	配置监控点的图像质量、分辨率及其他压缩参 监控点: 通道1 ● 視频型          一段流失型:主码流       ●         一段流失型:主码流       ●         四座房里:中等       ●         「「「」」」」       ●         「「」」」」       ●         「「」」」」       ●         「」」」」       ●         「」」」」       ●         「」」」       ●         「」」」       ●         「」」」       ●         「」」」       ●         「」」」       ●         「」」」       ●         「」」」       ●         「」」」       ●         ●       ●		配置监控点的图像质量、分辨率及其他压缩参数         监控点         通道1         現案         研究类型:主码流         研究类型: 正码流         研究类型: 正码流         研究类型: 正码流         研究类型: 正码流         研究类型: 正码流         日日本         日日本

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 v 0		
Enable St	ON V Indirect		
User permission	1		
	emponent when the user has no permissio	n scope	
	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

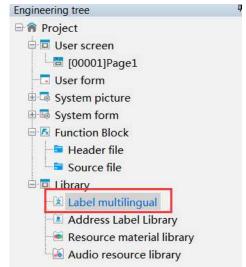
# 5-1. Label multilingual

### 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	multilingual					×
Label	Multiling									
		Add label	Delete a tap De	lete all Add state	us Deleted state	e Copy Paste	e Import Exp	port		
No.	Label name	Number	State Languag	e 1 Language 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language I
							8			
							Dete	rmine C	Cancel A	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

						Label r	nultilingual					×	
L	abel	Multiling		bel Delet	e a tap Delete	all Add statu	Deleted state	e Copy Past	e Import Ex	<b>port</b>			
	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						
_	1.2			2	Text1								
>	3	label_3	1	0	Text1								
									Dete	ermine	Cancel	pplication	
	sea	rch	Searc	h for tl	ne set lang	uage and	quickly l	ocate the	line				
	add	label	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 name Status Quantity	label_1	Label name Status	label_1
State		Quantity	
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)

	No.	Label name	Add lat	State	e a tap Delete	1	Deleted state	1	1000	Language 7	Language
	1 label_1	2	0	OFF	off	5-5	 3-3-	3-3-3			
ŝ.		4.000/00/00/00/		1	ON	on					

(3) click determine to save the settings.

# 5-1-3. Label table

ibl [IC	»: 000]	Add ta		⊔ ◎│,⊯₩				
No.	Language 1	La Add Delete D	elete all Copy Pa	te Import Expor	t Language 5	Language 6	Language 7	Language 8
1	Text1	Le Add Be 2	Language o	Lunguage	Lunguage o	Language o	Lunguuge /	Lunguage o
2	Text1							
3	Text1							

	delete	delete the table		
_	delete			
	search Search for the set language and quickly locate the line			
	add	Add a number to the selected table		
	delete	Delete numbers in the selected table		
	delete all	Delete all numbers		
	copy	Copy the row containing the selected number		
	paste	Paste a copied line		
	import	Import Multilingual Table		
	export	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')

		Label multil	ingual			×
Label         Multiling           Tabl         [ID: 001]           [ID: 000]         [ID: 000]	Add table Del					
No. Language 1 1 Text1	Language 2 Language	3 Language 4	Language 5	Language 6	Language 7	Language 8
				Detern	nine Cancel	Application

(2) Click on options such as add/delete and click under Language to directly set text.

		Add Delete De	Elete all Copy Pas	te Import Expor	t			
lo.	Language 1	Language 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language 8
1	Text1	aa	сс	dd				
2	Text1	bb						
3	Text1							

(3) click determine to save the setting.

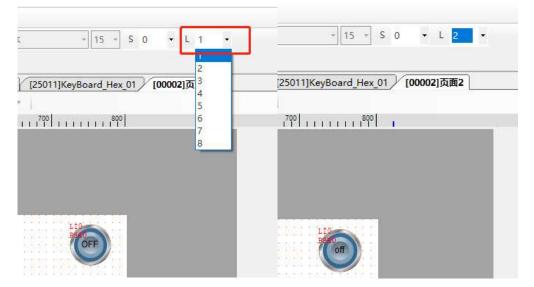
### 5-1-4. Examples of Multilingual Usage of Labels

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 Attril Appearancesecurity set Loo	cation	
	✓ Use picture	res
	Status	1 ~
	Name	lamp_05_a
aa	categor	1
	Size	60 × 60
	01.0	
Change appearance		More pictures
_ ✓ Fill 2		··
State 1 🗸 🗸 State	Display text For	nt applied to each
O Tevt   Multiling		Edit
✓ Enable 3	l Lana	
Label label_1[2]	✓ Lang Lang	uage 🗸
4		
	aa	
Font		
Fo 微软雅黑 v	General	~
Co Size	12	~
Ali Middle_Center 🗸		
	Determine	Cancel Application
	Determine	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)

Static text attributes	×
Basic Attribsecurity se Location	
Control ID ST2	
Description	
O Tevt Multiling 2 Edit	
✓ Enable 3	_
Table     [ID: 004]     No.     Lang       Language v	
4 5	
Text1	
Font	
Fo 微软雅黑 v General v	
Co Size 12 v	
Ali Middle_Center V Autofit size	
Border	
Thi Borderless V Style	
Determine Can	rel

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	Security se Locatio	ND.		
		Security se Locatio	//		
Cont	tent			2	
No	o. Va	lue	Text description string		dd
0	(	0	string0		
1	e .	1	Variable string1	De	lete
				Mo	ve up
				Label multili	ngual
				2	
abl [IC	o: 004] <b>3</b>	∽ Ade	d table Delete		
abl	o: 004] 3			]	
abl	o: 004] <b>3</b>			e Import Export	t
		Add Delete	Delete all Copy Past	e Import Export	
No.	Language 1	Add Delete	Delete all Copy Past	e Import Export	
No.	Language 1 Text1	Add Delete	Delete all Copy Past	e Import Export	
No.	Language 1	Add Delete	Delete all Copy Past	e Import Export	t Langua

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 •	τ · Ι5 · S Ο	• L 2 •
01 [25011]KeyB	oard_Hex_01 / [000	002]页面2	[25011]KeyBoard_Hex_01	00002]页面2
2			•	
111111111111	800	i.	700 800	1
群) Dt1 P梦我	这文字1 态文字1		静态文字2 <sup>D†1</sup> <sup>P</sup> 梦状态文字2	

language 1

language 2

### 5-2. Address label library

### 5-2-1. HMI internal address

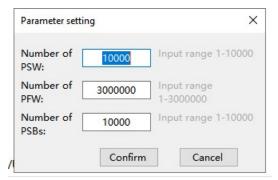
#### The TS series HMI has six types of internal objects: PSB, PSW, PFW, SPSB, SPSW, and SPFW.

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.

ał	pel type						
)	System label 🔘 Custom label	O Equipment			~		
ea	arch Add	Delete Delete all		port Export			
	Label name	Function	Address	Address	Read/Write	Power off hold	T
	用户权限登录标志位	工程默认值	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 *v* to quickly query the required registers (system registers cannot be changed).

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
			355					

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	515.0				
	HmiMain version	Local	0	SPSW	211	String	ReadOnly	False
		device	Ŭ	5150	211	Stillig	Reduciniy	1 uise
	System version	Local	0	SPSW	221	String	ReadOnly	False
	System version	device	Ū	5150		Stillig	Readonly	1 dise
	Memory footprint	Local	0	SPSW	231	DWord	ReadOnly	False
	Wembry Tootprint	device	0	51 5 W	231	Dword	ReadOnly	Taise
	Memory total capacity	Local	0	SPSW	233	DWord	ReadOnly	False
	wembry total capacity	device	0	51 5 W	235	Dword	ReadOnly	Taise
	Storage ecouropau	Local	0	SPSW	235	DWord	ReadOnly	False
	Storage occupancy		0	51 5 W	235	Dword	ReadOnly	Faise
	Total starses seresity	device	0	SPSW	227	DWord	ReadOnly	False
	Total storage capacity	Local	0	51 5 W	237	Dword	ReadOnly	Faise
		device	0	CDEW	252	33.7 1	D/W/	т
	Backlight adjustment	Local	0	SPFW	252	Word	R/W	True
	(values 0-11)	device		CDEW	256	337 1	D/III/	
	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
C	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
	r	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		-1 - 11				
	Ethernet device 1 IP	Local	0	SPFW	1	Word	R/W	True

type	label name	device	station	address	address	data type	read write	-
		name	no.	type			mode	holding
	address	device				4	_ /	_
	Ethernet device 1 port no.	Local	0	SPFW	5	Word	R/W	True
		device		CDEUV		<b>TT7</b> 1	D/W	
	Ethernet device 2 IP	Local	0	SPFW	6	Word	R/W	True
	address	device		CDEW	10	337 1	D/W/	
	Ethernet device 2 port no.	Local device	0	SPFW	10	Word	R/W	True
	Ethernet device 3 IP	Local	0	SPFW	11	Word	R/W	True
	address	device	0	SELW		word	IV W	IIuc
	Ethernet device 3 port no.	Local	0	SPFW	15	Word	R/W	True
	Ethernet device 5 port no.	device	0	SELW	15	word	IV W	IIuc
	Ethernet device 4 IP	Local	0	SPFW	16	Word	R/W	True
	address	device	0	511 W	10	word	10 10	Inde
	Ethernet device 4 port no.	Local	0	SPFW	20	Word	R/W	True
	Ethernet device + port no.	device		511 0	20	Word	10 10	Inde
	Ethernet device 5 IP	Local	0	SPFW	21	Word	R/W	True
	address	device						1140
	Ethernet device 5 port no.	Local	0	SPFW	25	Word	R/W	True
	r	device						
	Ethernet device 6 IP	Local	0	SPFW	26	Word	R/W	True
	address	device						
	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						
	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						
	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						
	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						
	Ethernet device 10 port no.	Local	0	SPFW	50	Word	R/W	True
		device						
	Ethernet device 11 IP	Local	0	SPFW	51	Word	R/W	True
	address	device						
	Ethernet device 11 port no.	Local	0	SPFW	55	Word	R/W	True
		device						

type	label name	device	station	address	address	data type	read write	1
		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						
	Ethernet device 21 port no.	Local	0	SPFW	105	Word	R/W	True
	Earchier device 21 port lio.	device		511 11		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	Ethernet device 22 IP	Local	0	SPFW	106	Word	R/W	True
	address	device		51 T. W	100	word		IIUC
			0	CDEW	110	Ward	D/W7	T.m
	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	power-off
		name	no.	type			mode	holding
	Ethernet device 33 port no.	Local device	0	SPFW	165	Word	R/W	True
	Ethomat danias 24 ID		0	SPFW	166	Wand	R/W	True
	Ethernet device 34 IP	Local	0	SPF W	166	Word	K/W	Irue
	address	device		CDEW	170	337 1	D/W	
	Ethernet device 34 port no.	Local	0	SPFW	170	Word	R/W	True
		device		CDEUV	1.51	<b>TT7</b> 1	D/W	
	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
	1	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
	Landing adding in pointion	device	Ŭ		200			
	Ethernet device 42 IP	Local	0	SPFW	206	Word	R/W	True
	address	device	Ŭ	511 11	200	Word	10.11	inde
	Ethernet device 42 port no.	Local	0	SPFW	210	Word	R/W	True
	Enternet device 42 port 110.	device		511 11	210	moru		line
	Ethernet device 43 IP	Local	0	SPFW	211	Word	R/W	True
	address	device		SEL W	211	word		Inte
				ODEW	215	<b>W</b> 7 1	D /337	т
	Ethernet device 43 port no.	Local	0	SPFW	215	Word	R/W	True
	The set of the set	device		(DEV)	011	<b>11</b> 7 <b>1</b>	D /III	-
	Ethernet device 44 IP	Local	0	SPFW	216	Word	R/W	True

type	label name	device	station	address	address	data type		power-off
		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	Ŭ	511 11	510	Word	10.11	inde
	Communication port 2	Local	0	SPFW	349	Word	R/W	True
	delay before sending	device	Ŭ	511 0	515	word	10 10	iiue
	Communication port 3	Local	0	SPFW	351	Word	R/W	True
	interface type	device	Ŭ	511 W	551	word	10 10	IIuc
	Communication port 3	Local	0	SPFW	352	Word	R/W	True
	device station no.	device	Ŭ	511 W	552	word	10 10	IIuc
	Communication port 3	Local	0	SPFW	353	Word	R/W	True
	device baud rate	device	0	SELW	555	word	IV W	IIue
			0	SPFW	254	Wand	D/W/	True
	Communication port 3	Local	0	SPFW	354	Word	R/W	Irue
	device data bit	device		CDEW	255	337 1	D/W	
	Communication port 3	Local	0	SPFW	355	Word	R/W	True
	device stop bit	device		aprill	2.56		D (111	
	Communication port 3	Local	0	SPFW	356	Word	R/W	True
	device parity bit	device		appur			D ////	
	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 Labe	el Library		×
Label type O System label  O Custom			~		
System laber @ Custom	-				
Search	Add Delete Delete all	Copy Import Exp	port :	Whether to synchronize MQTT	
Device T Station No.	Label name Address	Data 🍸 Da	ata type 🍸 Synchronize	Description	
				Determine	

	New address label
	Variable name Address mode Descripti on
	Devic 本地设备 v Settin Addre PSB 0 Data Word v Unsignec v Indirect Unsignec Cancel Application
variable	Set the label name for the address to be created.

	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 spec	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 I	button uses a user-defined label.
		ustom label
	75 File Edit Parts	Touch Win Pro - 工程 - [00001]Page1 Mapping Tool View Help
	New Open Save Clos	3 🔸 C* I I I I I I I I I I I I I I I I I I
	Engineering tree	a × [00001]Page1 Address Label Library ×
	☐	Label type
	User form I System picture I System form	○ System label ○ Equipment ✓
	Function Block	Search Ad Delete all Copy Import Export Whether to synchronize MQTT
	Source file	Device If Station No. Label name Address Data If Data type If Synchronize Description New address label
	- 🔅 Label multiling - 🗘 Address Label I	Library name
	Resource mate	
		on
		Devic 本地设备 v Settin
		Addre     pSB     v     0       Data     Word     v     Unsigner     Indirect
		Addre psg v 0

Device Y Sancor No. Label name Address Dets Y Dots hos Y Sanchronize Operation 14(2):5 0 extractor P300 Word Linegrad	se	arch	Add Delete	Delete all	Copy Im	port Export	Whether to synchronize MQT
							Description
	l	1.45.04.00					

(2) use custom label

Place indicator buttons on the engineering screen and follow the steps shown in the following figure for configuration.

indicator
Basic AttribiAppearance Security set Location
Control ID L10
Description
Read address
Devic 本地设备 v Settin
Addre pSB v 0
🗌 Indirect
Address
Device 本地设备 v
Address indicator
Address 0
Address Use custom labels : indicator
format
Address Label
Determine Cancel Application
Section Content Application

At the same time, the usage screen and window of customized label will also be display on Library/ Address Label Library/ Custom Labels to view. (When a control reads/write same address, "1 1" will appear as shown in the following figure)         Image: State S		indicator Basic AttribiAppearanceSecurity set Location	
Description         Read address         Devic 社授送器         Addre indicator         Image: Construction of the status flashes         Image: Constre status flashes         Image: Constre			
Read address         Devic 本地设备         Addre indicator         logic         logic         logic         Positive logic <tr< th=""><th></th><th>Control ID LIO</th><th></th></tr<>		Control ID LIO	
Devic 本地投發         Addre         indicator         logic         logic         e         Positive logic         Posit		Description	
Addre       Indicator         Iogic       Iogic         Iogic       Positive logic         I flash       Image: Constant status flashes         I flash       Image: Constatus flashes     <	Lindigate	Read address	
Iogic       Iogic         Iogic       Positive logic         Image: Flash       Off status flashes         Image: On status flashes       Off status flashes         Flicker frequency       Image: Older of status flashes         Image: Older of status flashes       Image: Older of status flashes         Image: Older of status flashes			
Positive logic Positive logic Positive logic Positive logic Flash On status flashes Off status flashes Flicker frequency O1お </td <td></td> <td>Addre indicator v 0</td> <td></td>		Addre indicator v 0	
● Positive logic       Negative logic         ● Flash       ● On status flashes         ● On status flashes       ● Off status flashes         Flicker frequency       0.1 P         At the same time, the usage screen and window of customized label will also be display on Library/ Address Label Library/ Custom Labels to view. (When a control reads/write same address, "1 1" will appear as shown in the following figure)            地域総合       ● 用户自定文标径 系统寄存器 计技术测显示 查询根式          ● 開戶自定文标径 系统寄存器 计技术测显示 查询根式        ● 開戶自定文标径 系统寄存器 计技术测显示 查询根式          ● 開戶自定文标径 系统寄存器 计技术测显示 查询根式       ● 開戶自定文标径 系统寄存器 计技术测显示 查询根式			
Flash         On status flashes         Flicker frequency         Off status flashes         Flicker frequency         Other         It the same time, the usage screen and window of customized label will also be display         In Library/ Address Label Library/ Custom Labels to view. (When a control reads/write         ame address, "1 1" will appear as shown in the following figure)         Image: The state of			
On status flashes       Off status flashes         Flicker frequency       ①19         The same time, the usage screen and window of customized label will also be display         Library/ Address Label Library/ Custom Labels to view. (When a control reads/write me address, "1 1" will appear as shown in the following figure)         ####################################			
Flicker frequency       01 秒         At the same time, the usage screen and window of customized label will also be display on Library/ Address Label Library/ Custom Labels to view. (When a control reads/write same address, "1 1" will appear as shown in the following figure) <sup>11</sup> Will appear as shown in the following figure) <sup>11</sup> Will appear as shown in the following figure) <sup>11</sup> Will appear as shown in the following figure) <sup>11</sup> Will appear as shown in the following figure)			
the same time, the usage screen and window of customized label will also be display Library/ Address Label Library/ Custom Labels to view. (When a control reads/write ne address, "1 1" will appear as shown in the following figure)			
the same time, the usage screen and window of customized label will also be display Library/Address Label Library/ Custom Labels to view. (When a control reads/write ne address, "1 1" will appear as shown in the following figure)		Flicker frequency 0.1 🕅 🗸	
査询方式:          投側面/窗口        投側面/窗口           ひ        搜索           子         び        凝索           添加         割除         割除         割除	on Library/ Add	dress Label Library/ Custom Labels to view. (When a control	
査询方式:     技術面/窗口       投稿面/窗口     ①       搜索     ①       液加<     割除       新除全部     复制       每出     导入       标签名称     设备名称       站号     地址类型       地址     使用画面/窗口	on Library/ Add same address, " 地标签件	dress Label Library/ Custom Labels to view. (When a control '1 1" will appear as shown in the following figure)	l reads/writes
液血         測除         删除金部         复制         导出         导入           标签名称         设备名称         站号         地址类型         地址         使用画面/窗口         使用控件	Library/Add e address, "	dress Label Library/ Custom Labels to view. (When a control '1 1" will appear as shown in the following figure) <sup>年</sup> <sup>由</sup> <sup>由</sup> 定义标签 〇 系統寄存器 □ 按类别显示 □ 查询模式	l reads/writes
标签名称 设备名称 站号 地址类型 地址 使用画面/窗口 使用控件	n Library/ Add me address, " ● ● 用户	dress Label Library/ Custom Labels to view. (When a control 1 1" will appear as shown in the following figure) 年 ··································	l reads/writes
▶ 指示灯技雑 本地设备 0 FSB 0 1 1 1.1B0 1:1B0	n Library/ Add ume address, "	dress Label Library/ Custom Labels to view. (When a control '1 1" will appear as shown in the following figure)	l reads/writes
	n Library/ Add ame address, " 地址际签牌 董调方式 建築家	dress Label Library/ Custom Labels to view. (When a control *1 1" will appear as shown in the following figure)	l reads/writes
	on Library/ Add same address, " <sup>地址标签件</sup> 查询方式 搜集	dress Label Library/ Custom Labels to view. (When a control *1 1" will appear as shown in the following figure)	l reads/writes
	on Library/ Add same address, " <sup>地址标签件</sup> 查询方式 搜集	dress Label Library/ Custom Labels to view. (When a control *1 1" will appear as shown in the following figure)	l reads/writes
	on Library/ Add same address, " <sup>地址标签件</sup> 查询方式 搜集	dress Label Library/ Custom Labels to view. (When a control *1 1" will appear as shown in the following figure)	l reads/writes
	on Library/ Add same address, " <sup>地址标签件</sup> 查询方式 搜集	dress Label Library/ Custom Labels to view. (When a control *1 1" will appear as shown in the following figure)	l reads/writes
	on Library/ Add same address, " <sup>地址标签件</sup> 查询方式 搜集	dress Label Library/ Custom Labels to view. (When a control *1 1" will appear as shown in the following figure)	l reads/writes
	on Library/ Add same address, " <sup>地址标签件</sup> 查询方式 搜集	dress Label Library/ Custom Labels to view. (When a control *1 1" will appear as shown in the following figure)	l reads/writes
	ibrary/ Add e address, " <sup>地址标签件</sup> <sup>1</sup> <sup>世山标签件</sup> <sup>1</sup> <sup>世山标签件</sup> <sup>1</sup> <sup>世山标签件</sup> <sup>1</sup> <sup>世山标签件</sup>	dress Label Library/ Custom Labels to view. (When a control *1 1" will appear as shown in the following figure)	l reads/writes
横定	ibrary/ Add e address, "' 地址标签库 ① 用户 查询方式 搜索	dress Label Library/ Custom Labels to view. (When a control 1 1" will appear as shown in the following figure)	reads/write

### 5-2-4. Equipment label

0 35	)系統标签 ○ 自定义标签 ④ 设备标签 信捷 XS系列 (CodeSys) CODES >						
搜索	添加 删除 删除全部 复制	₩ ₩ 导入 导出					
	标签名称	数据类型 🍸 描述					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Int					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Bool					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	Byte					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	LReal					
	Application/GVL_HMI_Group_Axis/Group_AxisCtrl	IReal					
	Application/GVL HMT Group Axis/Group AxisCtrl	LBeal					

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
🗄 🖪 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>□ 技健</li> <li>□ 指示「「</li> <li>□ 指示「「</li> <li>□ 指示「」」</li> <li>□ 指示「」」</li> <li>□ 指示「」」</li> <li>□ 非示」</li> <li>□ 教媛</li> <li>□ 別、「</li> <li>□ 御 秋泉勢</li> <li>□ 投影の</li> <li>□ 日</li> <li>□ 神術</li> <li>四 保</li> <li>○ 八、小泉</li> <li>□ 秋泉</li> <li>□ 秋泉勢</li> <li>□ 日</li> <li>□ 代 (大泉出)</li> <li>□ (市)</li> <li>□ (市)</li></ul>	E	Image: space of the space of
Left engineering column section		1       指示       新建文件夹         1       指示       添加文件夹         1       指示       添加文件夹         1       参状       删除文件夹         1       参状       ご添加文件夹         1       参状       ご添加文件夹         1       予加素材       重命名         1       予約清集       予約         1       所動清集       Note: Adding, deleting, renaming, and other operations to the default material library         in the system are not allowed
	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 folder	Delete selected folder
	add element	Add custom materials
	delete element	Delete selected material
	rename	Rename the added folder
	target file n the right	Select the object image, click the "OK" button below after selecting it, and confirm to enter the target editing interface. At the same time, the function of adding or deleting

#### 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 Libra</li> <li>Resource material I</li> <li>Audio resource libra</li> </ul>	ibrary		
				音频库			×
	0	6		文件	大小	播放	1
			0	alarm01.wav	831.256K	播放	
sounds			1	alarm02.way	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 Cano	cel Applicat	ion
add folder 🚺	Add a fold	der (	conta	aining audio to quickly a	add audio materials (cur	rently only s	upports wa
idd folder	format)						
lete folder 토	,	sele	cted	folder, please note that if	deleted by mistake, it c	annot be resto	ored
ld material	Add custor	Add custom materials					

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.

c AttribiAppearance Function bi Security	set Location		i 🔞 🕴		-
Control ID BT1			bile System settings Data san		
Description					
Write address		1	1%00%4		
Devic 本地设备	✓ Settin		, 590 690 790	1 1 1 1 1 1 890 1 1 1 1 1 990 1 1	111111000
Addre PSB V 0					
Indire	-+		音频库		
		0 = 0	文件	大小	播放
Action		0	alarm01.way	831.256K	播放
○ Set on ○ Set off	Negate     sounds	1	alarm02.wav	384.044K	播放
0	C	2	alarm03.wav	105.58K	播放
		3	beep02.wav	209.96K	播放
CL 1 00		4	message01.wav	132.404K	播放
Start alarm02.wav		5	ring01.wav	768.04K	播放
start alarm02.wav		6	ring02.wav	720.044K	播放
alarm02.wav		7	tune01.wav	1910.66K	播放
start alarm02.wav				1974.292K	播放
Start alarm02.wav		8	tune02.wav	1974.292K	」田川大

# 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.

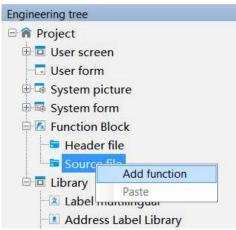
## 6-1. Function block introduction

#### 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 V	
Dute	Ok Cancel	
	Calicer	

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.

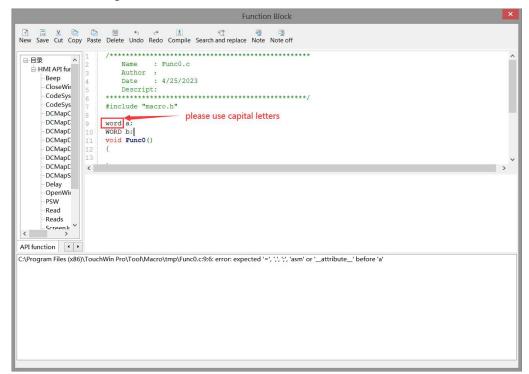
	Function Block	×
New Save Cut Copy Paste	· → · · · · · · · · · · · · · · · · · ·	
HMI API fur HMI API fur Beep -CloseWin -CodeSys -CodeSys -CodeSys -CodeSys -DCMapC 8	/*************************************	^
-DCMapE 10 -DCMapE 11	void Func0() { }	>

#### 6-1-3. Function block compilation

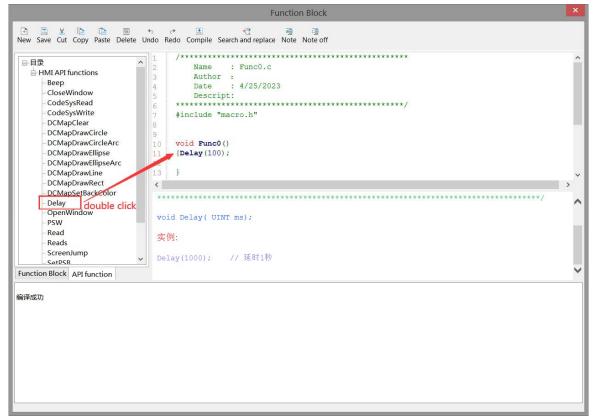
Depending on the current use of the computer keyboard, users can compile functions by pressing the F5 key on the keyboard or the 'Compile' button on the menu bar during the editing process.

The compilation function can detect whether the function has syntax and writing errors, variable definitions, editing function errors, etc.

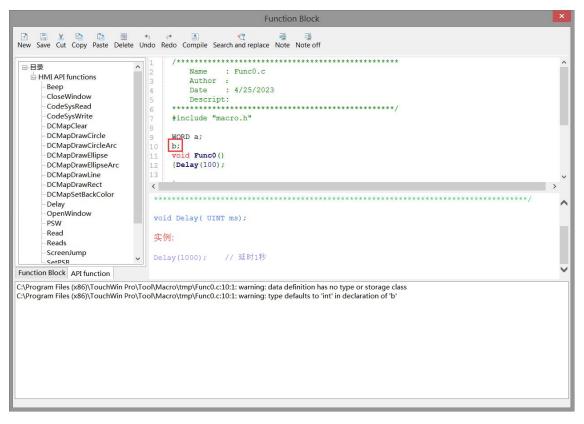
1. Grammar and writing errors



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.

HMI API functions     HMI API functions     Beep     CloseWindow     CodeSysRead     CodeSysWrite     DCMapClear	2 Name 3 Author 4 Date 5 Descrip	: 4/25/2023	Î
OCMapDrawCircle     OCMapDrawCircleArc     OCMapDrawEllipse     OCMapDrawEllipseArc     OCMapDrawEllipseArc     OCMapDrawRect     OCMapSetBackColor     Oelay     OpenVindow     P5W     Read     Read     Read     ScreenJump	9 WORD a; 10 void Funct 11 {Read( 12 13 } Soll Read(int 实例: Read(\$("本地设-	Register type         Type       学         Station         Device       本地设备         Object       PSW         type       0         Station       0         Value       0         Data       type         Determine       Cancel         Application	*******/ addl, int add2, void* pVal

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 key	×
Function Appearance Security set Location	
Control ID FB1	
Description	
Action Press Status V	
Start	
Functions Optiona	l functions
週用函数 Add	设置线圈
	设置数据     □
function call	× 加运昇 諸传输
Basic Attributes Security settings	面切换
Function al Func0    Edit Function	1窗口
Serial execution Parallel execution	7窗口
	CSV
	HCSV
Determine Cancel Application	
	战配方
	函数调用
	画面打印

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 Descript	INTAGEN		
Action m	node		
0 9	Screen		
0	Screen		
$\bigcirc$	Coil		
0	Timing		
	Continuo		
<b>—</b> -	First scan after First scan after	aucus 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.

Functions selected			Optional functions
调用函数	Σ.	Add	设置线圈
			设置数据
1			四则运算
	function	call	<mark>.</mark> ▲
Function al Func0		Edit	Function 奂
Seria	al execution Para	llel executio	n l
			V
	Determine	Cancel	Application V
	1000 (1000) (1000)		工传配方
			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.

	ranc Function binSecurity set Location	
	Add to	
	Delete	
	Move	
	Move	
	function call	
Function al Fun	Edit Function	
• s	Serial execution Parallel execution	

## 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 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; // de	fine the variables
void Test() // re	ealize 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 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 m	atch the dataType)
	return value	TRUE / FALSE (Success/Failure	)
example	bool bValu	;// 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	ister 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	Read and write 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	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	<b>DCMapSetBackColor</b> (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 Drawing		
format	BOOL DCMapDrawLine( DWORD dwDCMapID, int x, int y, int Width, int Height, int		
	linewidth, DWORD color )		
note	dwDCMapID:	Set Function Canvas Number	
	X:	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 $(0,0)$
	y:	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_po	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 DCMapDrawRect (DWORD dwDCMapID, int x, int y, int Width, int Height, int		
	linewidth, DWC	ORD 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	
	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;		
example	DWORD rec 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];		
	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	int x_pos,y_pos,Radius,linewidth;		
	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 DCMapI	BOOL DCMapDrawCircleArc( DWORD dwDCMapID, int x, int y, int Radius, int linewidth,		
	DWORD color,	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	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[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	Y_Axis_Len, int 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 drav	wing elliptical arcs				
format	BOOL DCMap	DrawEllipseArc( DWORD dwDCMapID, int x, int y, int X_Axis_Len, int				
	Y_Axis_Len, in	nt 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_	color;				
	float StartAngle	,EndAngle;				
	x_pos=PSW[30	0];				
	y_pos=PSW[30	1];				
	eArc_color=*(E	DWORD *)(PSW+302);				
	x_Axis=PSW[3	x_Axis=PSW[305];				
	Y_Axis=PSW[3	Y_Axis=PSW[304];				
	linewidth=PSW[306];					
	StartAngle=*(float *)(PSW+308);					
	EndAngle=*(flo	EndAngle=*(float *)(PSW+310);				
	DCMapClear(1	1);				
	DCMapDrawE	CllipseArc(1,x_pos,y_pos,x_Axis,Y_Axis,linewidth,eArc_color,StartAngle,EndAngle				
	);					
caution	Taking the orig	in (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
	CodeSysRe	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
	CodeSysRe	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	<pre>'rite(_T("Xinje XS series (CodeSys)"),</pre>
	"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 followi	ing two functions run simultaneously:
	void func0()	
	{	
	Lo	ck(1);
	PS	W[123] = 55;
	Un	Lock(1);
	}	
	void func1()	
	{	
	Lo	ck(1);
	PS	W[123] = 66;
	Ur	aLock(1);
	}	

### 6-2-5-22. COMReceive

Function	Free Communi	ication - Free Format Serial Port Reception Function
Format	int COMReceit 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 = <b>COMR</b>	Receive(_T("free format"), data, 100, 0, 0);// Received 100 characters, execution
	ended	
	result = <b>COMR</b>	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	
		Receive(_T("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:				
	int result = $-1$ ;					
	char snd[8] = $\{0\}$	, $data[8] = \{0\};$				
	snd[0]=0x01;// H	snd[0]=0x01;// Here is an example of modbus, which can be used according to the communication				
	product protocol	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:

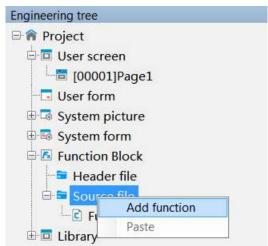
(1) User Manual for XD/XL Series Programmable Controllers (Basic Instructions)

(2) TouchWin Pro Editing Software User Manual

Operation process:

1. Establish C function block

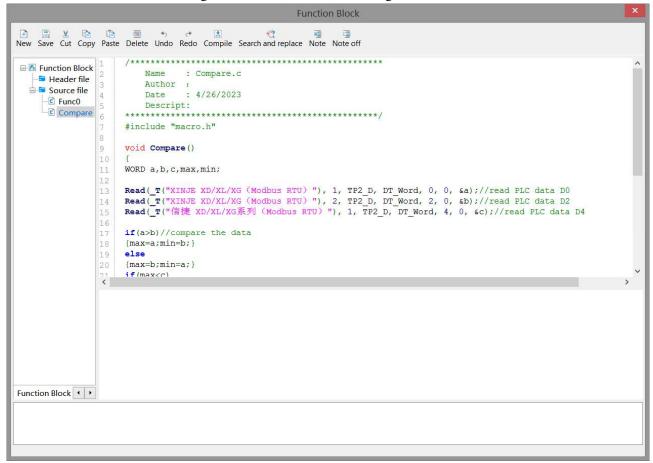
In the Engineering Tree Function Block, right-click and select Add Function.



The function block information input box appears (as shown in the figure below), fill in the relevant information and click OK.

	I	Function A	Attribute		×
Function name	Compare			.c	
Descriptio n					
Author					
Date	Wednesday,	April 🗸			
			Ok	]	Cancel

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.

		Fund	ction key			
unction App	earance Secur	ity set Loca	tion			
Control ID	FB1					
Descriptio	n					
Action P	ress Status	~				
Start						
Functions				Ор	tional functions	
	调用函数			_	设置线圈	
			Add		设置数据	
		function	n call		×	
	ibutes Secur	ity settings				
Function al	Compare		∀ Ed	it	Function	
	<ul> <li>Serial ex</li> </ul>	ecutior() Pa	rallel execut	tion		
0						
		Determine	Cance	el	Application	
				Ĩ.	下事が自じてつ	
					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:

<sup>.s‡0</sup> .D0	<sup>s†1</sup> D2	<sup>s†2</sup> .D4
0000	2 0000	4 0000
Max(PSW300)	5w30000	780 函数调用
Min(PSW301)	5w30000	

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

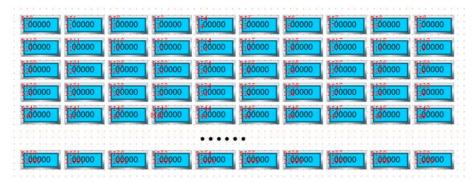
(2) One USB download cable, one PLC communication cable, and one computer

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

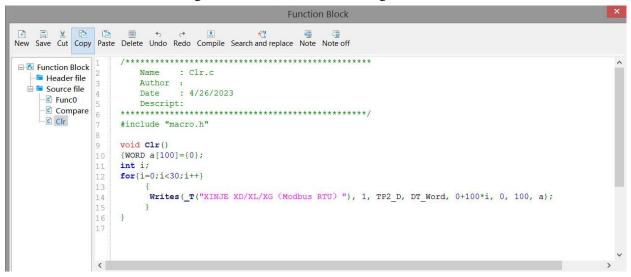
In the Engineering Tree Function Block, right-click and select Add Function.

Engineering tree
🕀 🎓 Project
🖨 🗖 User screen
User form
🕀 🗔 System picture
🗄 🔜 System <mark>f</mark> orm
🖶 🖪 Function Block
- 🖻 Header file
🖻 🖻 Source file
Add function
Paste

The function block information input box appears (as shown in the figure below), fill in the relevant information and click OK.

	F	unction A	ttribute			×
Function name Descriptio n	Clr			.c		
Author Date	Wednesday,	April V	Ok		Cancel	

Establish a C function block editing environment, with the following functions:



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 key	
Function	Appearance Security set	Location	
Contr Descr	ol ID FB2		
Actio		~	
Function		Add	Optional functions 设置线圈 设置数据
	fun	ction call	×
	Attributes Security settin ction Clr ③ Serial execution	✓ Edit	Function
	Detern	nine Cancel	Application
			函数调用 画面打印

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):

		100000	meric input properties			×
sic Att Data inp	Scale co	Notice	Appeara Security Locatio	n		^
Control ID	DI2					
Description						
Read / Wr	ite use di	ferent a	ddress			
	100.000					
-+->00	备					
and the second s			300			
type	i V Float		] Indirect			
		Nu	meric input properti	es		
t Data inpuSca	ale co N	lotice	Appeara Security Locat	ior		
Show	🗌 Le	ading (				
ber of digits						
Integer digit	s 2	1	<ul> <li>Decimal digits</li> </ul>	2		
	Description □ Read / Write A Devic 本地設 Addre PFW Data type Data inptSca Show ber of digits	Description Read / Write use dif Read / Write Address Devic 本地设备 Addre PFW Data type Data inptScale co N Show Le	Description □ Read / Write use different a Read / Write Address Devic 本地设备 Addre PFW  V Data UWOrd  Float  V Data inpuScale co Notice  Show  Leading C Leading C ber of digits Integer digits	Description Read / Write use different address Read / Write Address Devic 本地设备	Description □ Read / Write use different address Read / Write Address Devic 本地设备 Addre PFW	Description □ Read / Write use different address Read / Write Address Devic 本地设备

(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):

Descripti	D DD0
Read addre	255
Devic 本	地设备 v Settin
Addre PF	W 🗸 304
Data Dv type	vord V Float V Indirect
	Numeric Display Properties
	displescale con Appearan Security s Location
Attri Data d	
Attr <mark>i</mark> Data o	

#### 3. Establish C function block

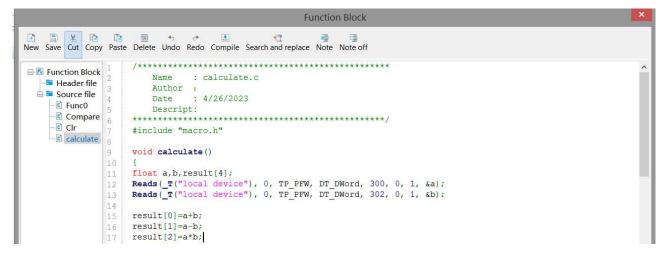
In the Engineering Tree Function Block, right-click and select Add Function.

Engineering tree
🗆 🎓 Project
🖨 🗖 User screen
[00001]Page1
- 🗔 User form
🕀 🗔 System picture
🗄 🔤 System form
E Function Block
- 🖻 Header file
🖻 🖶 Source file
C FI 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 Attribute	×
Function name Descriptio n	calculate .c	
Author Date		

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.

			Func	tion key		
Function	Appea	rance Security se	t Locat	ion		
Cont	rol ID	FB2				
Desc	ription					
Actic	on Pre	ess Status	~			
Star	rt					
Functior	1.750				Optional func	tions
	调用的	函数calculate			设置	<b>【线圈</b>
	_			Add		数据
		func	tion cal	1	×	算
Basic At	tribute	Security setting	js			输
Functional	on cal	culate	~	Edit	Function	]换
					4	
	•	Serial executior	Parallel	execution		
						sv
		Determi		Cancel	Anniliantina	SV
		Determin	ne	Cancel	Application	汸
- 77			1		下载	酒 方
					函数	x调用
						打印

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:

SPFW300	<sup>S†1</sup> PFW400	<sup>8†2</sup> PFW500	 	
0000.00	00000	0.00	 10 10 10 10	
Dword-float	Dword-unsigned	d Dword-float	 1 4 1 4 A	10 × 10 1

#### 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 Function Block
- E Header file
Source file
FI Add function
E Library Paste

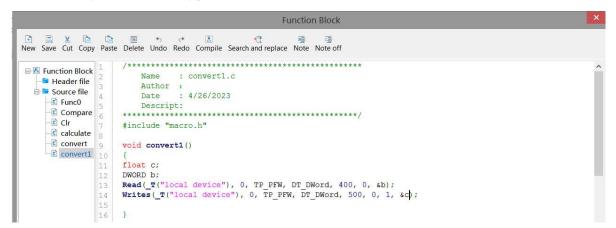
The function block information input box appears (as shown in the figure below), fill in the relevant information and click OK.

	Function Attribute	×
Function name Descriptio n	convert .c	
Author Date	Wednesday, April V Ok Canc	el

Establish a C function block editing environment, with the following function sections Convert: cast a floating point number to an integer.

	Function Block	×
New Save Cut Copy	🖺 🔟 🌜 r추 💰 🥰 🦉 🦉 다들 Paste Delete Undo Redo Compile Search and replace Note Note Off	
Function Block	<pre>2 Name : convert.c 3 Author : 4 Date : 4/26/2023 5 Descript: 6 ************************************</pre>	

Convert1: Integer cast to floating point number.



#### 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		
Function Appea	rance Security set	Location		
Control ID	FB2			
Description				
Action Pre	ss Status	~		
Start				
Functions			Optional functions	
调用函	函数convert1		设置线圈	
		Add	设置数据	
	func	tion call	× I	
Basic Attribu	tes Security settin	gs	)	_
Function al C	onvert1	∽ Edit	Function	_
	Serial execution	Parallel execution		-
	Serial execution	Parallel execution		
-	Dit	ine Cancel		
	Determ	ine Cancei	Application	_
No.		14	函数调用	_
			E-15X 9/0/ L1	

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 - > HMI	)	×
Communication settings			-
Connection USB	✓ B Communic		
Upload Download	Ø		
✓ Allow project upload	✓ Upload pa	<b>100</b>	
User defined boot sc	ree⊡ Use the default boot s	screen	
Synchronize PC time	✓ Hide menu system	🗌 Enable installment	
✓ Clear alarm record	Clear operation	✓ Clear data acquisition	i
✓ Overwrite recipe data	<ul> <li>Download fonts to</li> </ul>	☑ Clear PFW/SPFW data	1

# 7-2. Keyboard

Click on the "figure 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	625	=	Back	Space
Tał	>	q	w	e	r	t	у		u	i	o	p	1	1
Ca	ps	a	s	d	f	g	ł		j	k	1	8	1	1
Sh	ift	z	x	c	v	b	n		m	ĸ	-	1	Ent	er
С	trl		Alt							4		⇒		L

# 7-3. Device information

i

Click the *includes* HMI version, device information pop-up window, which includes HMI version, download version, system version, device IP, and device ID.

设备信息	$\times$
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.

请输入密码															
	Virt	ual Ke	eyboa	rd											$\mathbf{X}$
	Esc	1	2	3	4	5	6	7	8	9	0	-2	=	Back	Space
	Ta	b	q	w	e	r	t	у	u		i	0	р	I	1
	с	aps	a	5	d	f	9	h	j	1	k	Ţ	a.	x	N.
确认 取消	s	hift	z	x	c	v	Ь	n	m				1	En	ter
way his	(	:trl		Alt		di -	10	. CC					•		÷

#### 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.

名称	密码 网	网络 时	间   VNC	系统	8  其它	1	
		Hmi名利	R: gy		]		
			修改	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	确认	λ.	取消

When the modified name is downloaded through the local area network on the download page, scan the IP to display the corresponding name.

	下载 (PC -> HMI)			×
	通信设置			
	连接方式	局域网	~	
NGA 1992 1997 1977 1997 1997	● 设备IP查找	172.31.2.147	~	
	〇 设备ID查找	133-192-026-63B3-57	23 ~	
		扫描IP 通(	言测试	
以太网设备信息查询				
DevName		IP	DevID	Model
Hmi		172.31.0.55	133-192-026-63B3-5723	TS3-1000-E
Hmi		172.31.1.241	096-120-250-CE2C-7572	TS3-700-E
gy		172.31.2.147	361-071-138-C4C9-1476	ТS3-1000-Е
Hmi		172.31.0.110	275-036-242-DA23-4362	TS3-700-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	Т\$3-700-Е
Hmi		172.31.2.170	110-191-008-F918-7089	Т\$3-700-Е
Hmi		172.31.1.53	419-161-108-5CA7-3998	Т\$3-700-Е

#### 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.

© 手动设置中地址				r
IP address: 172 . 31 . 2 . 147	47	. 2 . 14	.72 . 31	IP address;
				Subnet Mask:
Gateway: 172 . 31 . 255 . 254	54	. 255 . 254	.72 . 31	Gate way:
DNS address: 221 . 228 . 255 . 1		. 255 . 1	221 . 228	DNS address:

#### 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 Interact	ic User peri Clock Device Printer Project	
Disable clock setting	7	
Clock source	-	
HMI internal		
O Peripheral		
Write clock to periphe	eral	
Write	· · · · · · · · · · · · · · · · · · ·	
Clock display format		
Decimal system	Hexadecimal	
Number of 0		
synchroniz		
Device	Register	-
	[2] [2] [2] [2] [2] [2] [2] [2] [2] [2]	
	名称 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
C 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
内核版本:	4.14.40-v1.0.2-gbbe8cfc	可用内存:	34.1/113.7MB 30.0%
系统版本:	1.1.2.220630	可用存储:	66.9/100.2MB 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.

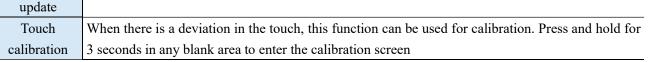
#### Enter mode

Function description

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

> 系统设置 固件更新

	在任意空白区域长按3秒进入触模控校准
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.



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 前					
本机信息	本机型号:	TS5-700-E/W/4G			
~	模块型号:	Wifi			
₩ 时间设置	HMI版本:	1.1.4.230617			
	系统版本:	1.2.25.230614			
IP HMI IP设置	硬件版本:	HV2			
	设备IP:	10 · 100 ·	19 · 55		
密码设置	设备ID:	120-144-139-0FE	37-2887		
	可用内存:	20.6 M	b/ 128.0	Mb	
1 信息化设置	可用存储:	41.7 M	b / 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			
本机信息			
时间设置	日期: 2023	年 6 月 30 日	
	时间: 15	时 38 分 27 秒	
LIP HMI IP设置	星期: 5		
密码设置			
<b>分</b> 信息化设置		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.

育 前		
本机信息		
1000 时间设置	日期: 2023 年 6 月 30 日	
<b>ПР</b> НМІ ІР&Ш	时间: 15 时 38 分 44 秒	
▲ 密码设置	星期: 5	日期修改成功!
<b>今</b> 信息化设置	(病认) 取消	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	<b>a</b> i	DHCP自z	动获取IP	地址		$\bigcirc$	手动获取	QIP地址
✓ 时间设置	IP地址	10	].[	100	].[	19	.[	55
	子网掩码	255	] . [	255	] . [	255	.[	0
IP HMI IP设置	默认网关	10	] . [	100	].[	19	].[	254
	DNS	10	].[	100	].[	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.

育 首页										
本机信息	通过	DHCP自动	动获取IP	地址		۲	手动获取	取IP地址		
	IP地址	10	].[	100	].	19	].	55		
时间设置	子网掩码	255	] . [	255	] .	255		0		
HMIIP设置	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		7	89	77		
信息化设置					(	修改	$\bigcirc$	取消		确定

#### 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.

🏫 前			
本机信息			
时间设置	上传密码 修改 原密码	下载密码 修改 原密码	後置密码 修改 原密码
<b>ПР</b> НМІ ІР\2010	新密码	新密码	新密码
會 密码设置	确认新密码	确认新密码	确认新密码
<b>分</b> 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 前	
本机信息	
时间设置	请输入信息化设置密码:
<b>ГР</b> НМІ ІРІЗШ	
會 密码设置	
<b>会</b> 信息化设置	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	日本 日  二  二  二  二  二  二  二  二  二  二  二  二
信号强度: 0	网址: (cloud.xinje.net)
SIM卡状态: 未插4G模块	日本に目 APP Store 要素の 安卓端 安卓端
远程登录标志: 已登录	の 中部 で の の の の の の の の の の の の の の の の の の
VNC启用标志: VNC已启用	
MQTT服务标志: 已登录	がたいます。 微信小程序
信息化密码修改	修改 返回

-									
	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.							
Ī	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 touch							
		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密码 修改 远程密码修改后萧重启生效!							
		原密码     原密码							
		新密码 新密码							
		·····································							
		366 ArViti (17 ha) 166 ArViti (17 ha)							
		返回 重启							
	M. 1.C.	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							
		page. If the networking method has been configured, the current networking method page							

	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.

IP地	址	10		100		19	].[	55	
子网	奄码	255	].[	255	].[	255	] . [	0	]
默认际	网关	10	].[	100	] . [	19	] . [	254	]
DN	ıs [	10	].[	100	] . [	2	] . [	10	]

#### (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
Xinje AP	WPA_WPA2_PSK	-65
xinxihua	WPA_WPA2_PSK	-77
xinje	WPA2_PSK	-85
TP-LINK_2108E8	NONE	-87
DIRECT-C6-HP Laser 136w	WPA2_PSK	-87
		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WiFi密码:					200	WiFi连接成功	
SSID	安全	信号强度		SSID	安全	信号强度	
Xinje AP	WPA_WPA2_PSK	-65	<u>1−</u> ⊅	Xinje AP	WPA_WPA2_P5K	-65	Ŀ
xinxihua	WPA_WPA2_PSK	-77		xinxihua	WPA_WPA2_PSK	-75	
xinje	WPA2_PSK	-85	下一页	TP-LINK_2108E8	NONE	-87	-۲
TP-LINK_2108E8	NONE	-87	<b>C</b> 刷新	DIRECT-C6-HP Laser 136w	WPA2_PSK	-87	R
DIRECT-C6-HP Laser 136w	WPA2_PSK	-87	刷新	Galaxy Z Fold4 1480	WPA2_PSK	-88	周
		1/2页				1/2页	

#### (3) 4G networking

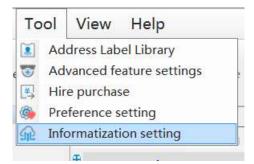
No other settings are required in 4G internet mode. After selecting the 4G internet mode, click "Confirm" to proceed.

联网方式:	4G上网 ⊘	
		确认 返回

# 8. Informationization settings

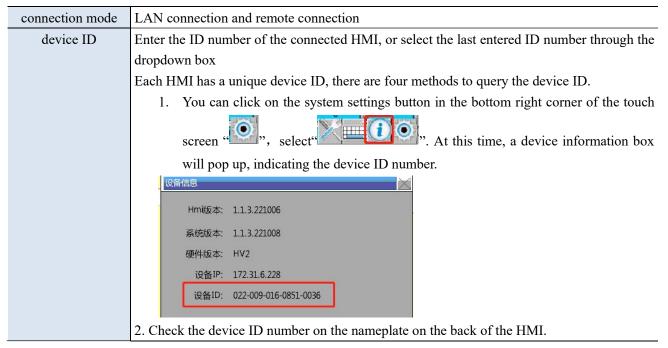
# 8-1. Information configuration login

1. Click on the menu bar - Tools - Informatization Setting to enter the Informatization Configuration interface



2. Information communication settings interface

Connection m	AN connection	~
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.
	Communication settings Ethernet device information query
	Operation         Device IP discovery         192.168.6.2         Network         IP address         Device ID         Model           Hmi         192.168.6.2         412-169-050-93CF-7761         TS5-700-F/W/4G
	O Device ID lookup 412-169-050-93CF-776
	Scan IP     Communic       Upload Download     Image: Communic       Downloa     Image: Communic       Image: Communic     Image: Communic       Upload Download     Image: Communic       Image: Communic     Image: Communic       Image: Communic     Image: Communic       Upload Download     Image: Communic       Image: Communic     Image: Communic       Image: C
	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
device	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
	同域网纹器 双击选择设备
	Hmi         172.31.6.109         02209902310330009         TS5-700-E         HV1/1.1.3.221006           Hmi         172.31.0.110         02209900516599058         TS5-700-E         HV1/1.1.3.220929
	Hmi         172.31.6.115         02200900814380004         TS5-700-E         HV1/1.1.3.220929
	取び時
• • • • •	
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:
	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	Regi	.ster	Value	Notes	
Networking m	node SP	SW56	3	Single word Dec intege	
Signal inten	sity SP	SW57	0	Single word Dec intege	
System tim	ie SP	SW16	2023-05-06 11:5:7	Six word Dec integer	
device running	time SPS	SW200	00:28:18	Triword decimal integ	
IP addres	s SP	SW58	192.168.6.2	Quadword Dec intege	
Subnet ma	sk SP	SW62	255.255.255.0	Quadword Dec intege	
Gateway	SP	SW66	192.168.6.1	Quadword Dec integ	
DNS	SP	SW71	0.0.0.0	Quadword Dec intege	
MAC addre	ss SP	SW75	3C-47-57-07-75-FF	Six word Hex integer	
VNC Service Ena	able Fl SF	SB22	1	Bit, binary	
MQTT server en	able fl SF	SB19	0	Bit, binary	
LAN connectio	n sign SF	SB23	1	Bit, binary	
Login server	flag SE	SB20	1	Bit, binary	

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

	Informatizati C -	×	
	Status information Networking settings Remote settings Online transmission Data release		
	Networking mode: Wired Internet Acce V		
	<ul> <li>Get address automatically</li> <li>Use the following address</li> </ul>		
	IP address 192 . 168 . 6 . 10		
	Subnet mask 255 . 255 . 0		
	Default Gateway 192 . 168 . 6 . 1		
	<ul> <li>Get server address automatically</li> <li>Use the following server address</li> </ul>		
	Preferred DNS Server 0 . 0 . 0		
	Applicatio Ok Cancel		
4G	When selecting 4G internet access, there is no need to c selecting 4G internet access, click "Application" below, a prompt you to restart the HMI. After clicking "OK", configuration parameters will take effect. Next time, configuration interface can be used	and a pop- restart the	-up window will e HMI, and the
WIFI	When selecting WIFI to access the internet, users can man wireless password, or click on the WiFi scan button to method, and signal strength of nearby devices. Click on Co WiFi password. If the connection is normal, the p automatically filled in to the parameter page <b>1-directly enter wifi name and password.</b> Note: The password and name must be entered correct	view the Sonnect and parameter ly, otherwi	SSID, encryption enter the correct values will be ise it may cause
	incorrect WiFi configuration to be downloaded and remo	ote connec	tions will not be

You can set the internet access method here: 4G, WiFi, or wired mode:

cause ot be able to log in. If this situation occurs, it is necessary to connect through the local area network and reconfigure the WiFi.

	Informatizati C - X
	Status information Networking settings Remote settings Online transmission Data release
	Networking mode: ID should be 17 bit: V WiFi
	Encryption WPA-PSK  enter wifi name and password 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
	2-scan the parameters through wifi.
	Step 1: Click on "WiFi Scan"
	Step 2: Click the "Quick Connect" button
	Step 3: Enter the corresponding WiFi password in the pop-up prompt box. If the
	password is entered correctly, there will be a prompt of "Connection Successful",
	otherwise there will be a prompt of "Connection Failed"
	Step 4: After successful connection, click the "OK" button, display "Download successful". The configuration parameters will take effect and remote connection can be made
	SSID         安全         信号强度         操作           > 0         SZ-TEST         WPAWPA2PSK         快速连接
	1 温控-七楼-CAD2 WPAWPA2PSK 快速连接
	2     TF-LINK_B12C     WFAWFA2FSK     供還连接       3     DevLink     WFAWFA2FSK     供還连接
	4     Xinje AP     WPANPA2PSK     快速连接       5     TP-LINK_BA09     WPANPA2PSK     快速连接
	6 Tenda_522488
	请输入密码:
	(如无密码则无需输入)
	确认取消
	刷新 关闭
wired	When selecting wired Internet access, users can configure to obtain IP automatically, or manually set Internet access parameters, including IP address, subnet mask, default
	To manuary set memor access parameters, meruaring in address, subject mask, default

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:

🖙 🗔 System picture
<mark>To</mark> [20002]Time
🔚 [20009]4G Internet
[20011]Network password

# 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.

Status information	n Networking settings	Remote settings	Online transmission	Data release	
VNC					
	Port number: 5900	)			
	VNC macaurada aa	45 d			
	VNC password 123	456	۲		
	Network	Sta	rt VNC		
		310	ic vite		
	If the network dela	wichigh it may	not be connect	ad ar stuck	
	II the network dela	iy is high, it may	not be connect	ed 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: v	anessa				0 —
<b>^ !!</b>	<b>* P</b>	۲			
Please enter the	device name or ID	Q			
My Device					
(1) test111	1				
	207C1314081			Enter device name	New
group1	Add gr	oup			
	Add de	-		Enter device ID	
		oup name		-	
	Delete			Enter device password	
	Delete	group			
				Select device group	group1
			-	-	r
					Add Device

(3) Enter the device ID and password, finish the configuration.

Image: matrix and the device name or ID     Q	
▲ 稅約设备 ① test111 group1 Enter device n Enter device pass Select device g	word 12345678

(4) Remote checking it.

Usemame: vanessa		0 – 🛙 🗙
Username: vanessa	Device Name:New Device ID:1642390904A332339 Online status:OnLine Networking:有线 Version Info:HV2/1.1.4.230613 (TS5L-700-E) Remarks:	CCID: 898604B5102270294942 CardStatus: 正常 TLV: 12288.00 M TUV: 2748.02 M TRV: 9539.98 M MUU: 0.06 M
TS5L-700-E ID:1642390904A332339( HV2/1.1.4.2;	Delete Device Add collect 0613 ) Data Monit Port Trans	Configuration

			∽ LI ∧
	Data Monit	Port Trans	
VNCapplications			
	V2		
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.

		密码登录	验证码登录
		1 vanessa	a
	云智造	â	
$\frown$	云智造	Remembe	r password Auto logir
			Login
		Register	Forget ADM/PW   Demo login   Lang ~
(2) Add item			

#### 🤿 🚅 🔵 vanessa 🕶 🗮 🔒 Home / 🛞 Configure / 🏶 Configure vanessa > ⊗ K Home Configure × Configure - abc × 🥖 Add Item i c Q, Search by keyword ... Q Search by keyword ... Configure □ 未分组 Hiren india abc $\rightarrow$ $\rightarrow$ O O O Enter SCADA 0000 C Enter SCADA Set data collection Total 2 items ( 1 ) 10 /page ~ Goto 1 Multifunctional Report (3) Add device

vanessa	=	A Home 🛛 🚱	Configure		⑦ 🚅 vanessa •
	< 0.3	Add device		×	■ 您有系统消息尚未确认×
		* Device name:	TS5LHY		Add device
	>	*	TS物联网机型	~	
	2	Communication device:			
	> >	TS5L ID:	1642390904A332339		
		TS5L 密码:	12345678		
	>	VNC 密码:	123456		
				_	
		GPS:	Automatic positioning      Manually positioning	_	
		Longitude :	Select	~	
		Latitude:	Select	<u> </u>	
		Device info:	+ Add a row		
			Save × Cancel		

(4) Check the item

vanessa	a			⑦ 💭 vanessa ▾
🔒 Home		K Home Item X		■ 您有系统消息尚未确认 × 8
# Item		Search by keywordQ	Search by keyword Q	
Configure		🗅 未分组	★ Hiren india	★ abc
SCADA screen				
👪 Data analysis			0 0 0 Total Read Unread	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				Total 2 items < 1 > 10 /page ~ Goto 1
☆ Recipe				

(5) Remote login to check, select image quality, compression level as the actual condition.

	VNC配置	×	
~	密码		
, et al.	1 画质 低	<b>○</b> 高	
	压缩等级 ————————————————————————————————————	高	
		取消 确定	
	<u>ÓXIN</u>	JE VNC	
0	Ø		

#### 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)

	云智	造 - Item	•••	Θ		云智造 - n	oVnc		Θ
Мар	Item	Data	Alarm	8	ĸ	Select VNC	device		
Q Search by	keyword.			∑≣					
Total		Read	Unread						
		) No Data				连接参	钩		
Enter the	project	E	Enter VNC		密码	••••••	~~		
_					画质	低	-0-	吉同	
🖹 abc					压缩等			[ <b>D</b> ]	
0 Total		0 Read	0 Unread			低	_	高	-
		) No Data				Cancel	Conf	irm	
	6	) No Data		-					
Enter the	project	E	Enter VNC						
	N	lo more							
<b>4</b>		<u></u>	2	3					
Home	Item	workbei	nch n	ny					

### 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	Networking settings	Remote settings	Online transmissi		
	I read a search of the search	riemote seange		Data Torodoo	
T	ion mo serial port				
Transmiss	son no senar port	passun			
COM1:		C	DM2:		
	1 10000		Baud rate: 19	200 ¥	
Bau	d rate: 19200	~		200 +	
Dat	a bits: 8	~	Data bits: 8	~	
Che	eck dig <mark>i</mark> Even	~	Check digi Eve	en 🗸	
			Stop bit: On	e v	
Sto	p bit: One	~	and the second		
Virtua	l serial COM1	~ \	/irtual serial CC	M2 ~	
Enabl	e statu Enable (	OM1	Enable statu	Enable COM2	
Rese	et virtual serial		Enable vir	tual	
			Applicatio		
			Applicatio	Ok	Cancel

transmission mode	erial 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.

atus information	Networking settings	Remote settings	Online transm	ission Data	release	
Transmissi	on mo serial port	: passthr 🖂				
COM1:		C	DM2:			
Baud	rate: 19200	~	Baud rate:	19200	$\sim$	
Data	bits: 8	~	Data bits:	8	¥	
Chec	k digi Even	~	Check digi	Even	~	
Stop	bit: One	~	Stop bit:	One	~	
Virtual	serial COM27	~	/irtual serial	COM2	~	
Enable	statı 🗹 Enable (	COM1	Enable statu	Enable	COM2	
Reset	virtual serial		Close th	ne virtual		
	erial port pair	succeeded				^
Opening ser		£.11.				
	ial port success to the network	siully				
	work successful	lly				
COM1 port of	orresponding	passthrough h	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.

🛃 设备	管理器
文件(F)	操作(A) 查看(V) 帮助(H)
(m m)	📰   📰 💭 🖕 🗙 📀
~ 4	) 靖口 (COM 和 LPT) 蘭 Electronic Team Virtual Serial Port (COM1)
	Electronic Team Virtual Serial Port (COM27)
	₩ 蓋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	e selection		
Interface Type:	СОМ	~	
CommProtocol:	Modbus	~	
Communication p	arameter configurat	ion	
Automatic Del	tection		
Station No		Baudrate( <u>B</u> )	
1		○ 4800BPS ○ 9600	BPS
Serial Port(C)		19200BPS () 3840	
COM27	~		
Blue Tooth	Serial Port	115200BPS	
Parity(P)		Other set	
○ None ○ C	odd 💿 Even	Databits:8 ,Stopbits:1	
Connect To PLC	Susseded	✓ Auto-conne	ect on exit
Connect TO PLC	Succeeded		
Comm-Test		OK C	ancel

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".

	ing Remote	setting	s	Onlin	e pi	assth	roug	jh	Data	relea	se		
Passthrough mc	VPN passtł	nroug	~										
VPN parame	ter configu	ration	i										
v	irtual gate	192	4	168		1	•	1					
S	ubnet mas	255		255		255	•••	0					
v	irtual netw	192		168		1	•	252		1			
		<mark>19</mark> 2	<b>3</b> 99	168	4	1	1	254					
									_	-		_	
										Enab	le VF	PN .	
									1	Enab	le VF	PN	
									1	Enab	le VF	PN	
		1-1-							1	Enab	le VF	PN -	
Connecting the u	upper com	npute				ılly				Enab	le VF	'n	^
Lower computer Connecting the t VPN current state VPN current state	upper com us:Connec	npute ting	er \	/PN		ılly				Enab	le VF	2N	^
Connecting the overlap of the overlap	upper com us:Connec us:Checkir	npute ting ng Lo	er \	/PN		illy				Enab	le VF	PN	^
Connecting the u VPN current state VPN current state	upper com us:Connec us:Checkir	npute ting ng Lo	er \	/PN		ılly				Enab	le VF	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 ",Scan Cycle:0.0ms", now user can download and monitor the PLC program.

L.	ommunication con	ngulatio	1
Communication	Ethernet_Modbus_1		
Connection mode s	election		
Interface Type:	Ethernet	~	
CommProtocol:	Modbus	~	
Scan IP Device IP:	192 . 168 . 1 . 100	502	
Local IP:	192 . 168 . 1 . 252		
Connect To PLC Suc	cceeded	✓ A	uto-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.

us information   ive	etworking settings Ren	note settings Online	e transmission Data	release
QTT server cor	nfiguration			
Se	erver type: Gener	al MQTT server		$\sim$
	Release met Ensure	successful publi	ishing once (once	~
Se	erver addres: mqtt.x	-net.info		
	User namexinjead	dmin		
	Passwor	•••••	•	Ø
Rest	ore	Read		Write
ata configuratio			-4 E	
Instruction	Comman	d	nstruction	
Instruction name	Communication device	Instruction address	Data number	Notes
device1	本地设备	PSB0	1[Bit]	-
device2	本地设备	PSBO	1[Bit]	

#### MQTT server setting

	server type	general MQTT server /Aliyun server/Custom server					
		Corresponding QoS service quality level: QoS0, published only once, regardless of					
	publish once	whether it reaches the publisher or not, the publisher (when the client or server is					
	puolisii olice	the sender) only sends once, regardless of whether the receiving end has received					
		the data					
release	Successfully	Corresponding QoS service quality level: QoS1, successfully published at least					
method	published at least	once. The publisher needs to confirm upon arrival. After publishing the message, the					
memou	once (possibly	publisher waits for the recipient's confirmation message. If the receiving end doe					
	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	Read the published MQTT configuration, password, username, and publishing					
	Icau	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 i	nstruction configuration	_ 🗆 🗙
Device command		
Command r	Communica本地设备	*
Data specif <mark>i</mark> Bit	Add metho Single addition	*
Data object PSB	Start addre 0.	0
MQTT		
Data type: BOOL(Bool)	Trigger m Triggered when the value $\vee$	
Trigger co <sup>less than</sup>	Minimu	
Maximu	Publish eve S	
remar		
	Ok	Cancel

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:

						ion	editing sett	ings				×
Search		Add	Delete Delete	all Import	Export							
Ins			Instruction	Data	Data	Y	Min value	Max value	Publish	Notes		
	1	本地设备	PSB0	1[Bit]	bool		-	-	-	-		
	2	本地设备	PSB0	1[Bit]	bool		-	-	-	-		
										Ok	Cancel	
ch	E	nter rele	vant keyv	vords to	searc	h					_	
				, 5145 10	Seare							
1	ac	ld a inst	ruction									

	add	add a instruction			
	delete Select a line of instructions to delete				
delete all delete all the commands		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 setti	ngs Remo	ote settings 0	nline transmission	Data release	
MQTT server	configuration					
	Server type:	General	MQTT serv	er	~	
	Release me	et Ensure s	successf <mark>ul</mark> p	ublishing once (	once 🗸	
	Server addre	s:mqtt.x-i	net.info			
	User nan	n∉xinjeadr	nin			
	Passwo		•••••	•••	Ø	
Re	estore		Read		Write	
Data configur	ation					
Instruction		Command		Instruction		
Instruction name	Commur devi		Instruction address	Data number	Notes	

(2) select server type: general MQTT server.

Serv	er type: Gener	ral MQTT server	~
Re	elease met Ensur	e successful publishing	once (once 🗸
Serv	er addres: mqtt.:	x-net.info	
	User namexinjea	dmin	
	User nam∉xinjea Passwor	dmin	Ø

(3) select release method, please choose it as needs.

Server type:	General MQTT server	~
Release me	Ensure successful publishing once (	once 👻
Server addres	Publish only once Publish successfully at least once (po	ossibly
Sciveradures		
	Ensure successful publishing once (	once an
User name	Ensure successful publishing once ( xinjeadmin	once an
User nam Passwo	xinjeadmin	Ø
	xinjeadmin	once an

(4) click add instrcution, click ok after addition.

Instruction	Comm	and	Instruction		
		Data instruc	tion configuration	n	·······
Device com	mand				
Command r			Communica 本	地设备	
Data specifi	Bit	~	Add metho Si	ngle addition	
Data object	PSB	~	Start addre	0.	0
MQTT					
Dat <mark>a type</mark> :	BOOL(Bool)	Trigge	er me Triggered wher	the value $\vee$	
Trigger co	ess than	<ul> <li>✓ Min</li> </ul>	imur	*	
Maximu		Publis	h 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.

us information	Networking settings	Remote settings C	Inline transmission D	ata release
QTT server	configuration			
	Server type: G	eneral MQTT serv	er	~
	Release met <sup>El</sup>	nsure successful p	ublishing once (or	nce ~
	Server addresem	qtt.x-net.info		
	User namexi	njeadmin		
	Passwor	•••••	•••	Ø
Re	estore	Read		Write
ata configura	ation			
Instruction	Com	imand	Instruction	
Instruction name	Communica device	tion Instruction address	Data number	Notes
D20	本地设备	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.

TD 无锡值捷电气股份 📕 The Econ	omist - W 🨏 中国店	《刨首乐叠吧 😏 尢	锡康辉国际服行	3 尤锡市平医医院 3	曹埋贝盆菜 🐥 【尤锡	·回购]-尤锡团	S 搜狐 a Kindl	电子书-亚马 🧲	Be with You Ra
云智造	≡ *	Home / 🛞 Config	ure / 🍪 Confi	gure					
A Home	< O Home	Item ×	Settings ×	Monitor View ×	Configure ×				
Ⅲ Item	Search by ke	eyword Q		Search by keyword	Q	Er	ter project configu	ation	
Configure ^	□ 未分组			test			A_BOX		
Configure					Enter SCADA	>)			$\rightarrow$
Set data collection									
Multifunctional Report				XD5E			abc001		<b>→</b>
□ SCADA screen ×									~
🗈 Data analysis 🛛 🗸								Total 4 iter	ms < 1

(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:	

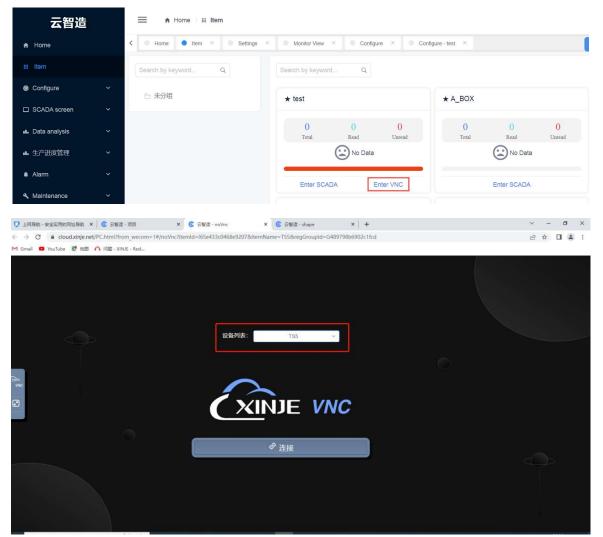
(3) Monitor in [device configuration]: click "refresh device" and monitor to see all the data.

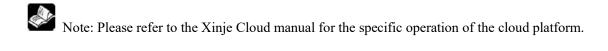
V TS5L			♀ 监控 C Refresh devic	e Belete device
	Name T	🗹 Data type	monitor ♂ Data length	空溢

(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 center						va	ariable gr	oup		2.1.52					batch
										monitor		modify		batch impo		
数据源 data so	ource						3	变量组管理	里	♀ 监控	の 批量	修改・	+ Add	り 批量导入		了批量删除
选择 >	请选	择	~ 请	选择	~	请选择	~	查询	清	空						
数据源	原名称	设备	变	量组	是否可写	Data t	进制编	码数据	居下限	数据上限	单位	۲. R	留小数位	多段字符	串	监控
Ⅲ 项目																
	~	~ 数据源									变量钼管理	♀ 监控	② 批量修改	+添加 司批量	导入 1	1 批量删除
● 配置	^	>数据源 资源/平3		清选择数据类型	× 1	选择变量相	<ul> <li></li> <li><!--</th--><th>ģ写模式 →</th><th>~ 查询</th><th>潮空</th><th>交量调管理</th><th>♀ 监控</th><th>② 批量修改</th><th>十添加 习批量</th><th>导入 <mark>1</mark></th><th>11. 建制除</th></li></ul>	ģ写模式 →	~ 查询	潮空	交量调管理	♀ 监控	② 批量修改	十添加 习批量	导入 <mark>1</mark>	11. 建制除
	^			1800-1800 Barrier Bas	<ul> <li>ご 登屋相</li> </ul>	是否可写	<ul> <li>&gt; 透過用</li> <li>数据类型</li> </ul>	之亏损1.C ~ 进制编码	~ <u></u> 查询 数据下限	1 滿空 数派上限	変量相管理	♀ 监控 條備小数位	② 批量修改 多段字符串			ī 批 <b>重</b> 制除 计
● 配置	^	请选择发	188 ×			是否可写										
<ul> <li>配置</li> <li>项目配置</li> </ul>	^		数据源名称	设备	変量組	是否可写	数据类型	进制编码				保留小数位	多段字符串	畫控	H	作
<ul> <li>配置</li> <li>项目配置</li> <li>数据采集配置</li> <li>多功能服表</li> </ul>	^ ~		帝 > 数据源名称 信捷 XD/XL/XG	设备	変量组 信息化_05d	是否可写 - 是 - 是	数据类型 Bool	进制编码 十进制				保留小数位 0	多段字符串		橫道	部除
<ul> <li>配置</li> <li>项目配置</li> <li>数据采集配置</li> <li>多功能服表</li> </ul>			※ ~ 、           数据源名称           償捷 XD/XL/XG           償捷 XD/XL/XG	<b>设备</b> 信速 信速	<u>変量相</u> 信息化_05d 信息化_05d	是否可写       .     .       .     .       .     .       .     .	数振类型 Bool Bool	<ul> <li>进制编码</li> <li>十进制</li> <li>十进制</li> </ul>				保留小数位 0 0	多段字符串 直看 直看	: <u>當</u> 控	橫道 病道	ff 部除 部除
<ul> <li>● 配置</li> <li>● 项目配置</li> <li>● 政用配置</li> <li>● 数据采集配置</li> <li>● 多功能服表</li> <li>□ 组态大屏</li> </ul>	*		部 、           数据源名称           衛捷 XD/XL/XG           佰捷 XD/XL/XG           佰捷 XD/XL/XG	设备 信速 信速 信速	変量相           信息化_05d           信息化_05d           信息化_05d	<ul> <li>是否可写</li> <li>是</li> <li>見</li> <li>見</li> <li>見</li> <li>見</li> <li>見</li> <li>見</li> </ul>	数据类型 Bool Bool Bool	进制编码        十进制        十进制        十进制				<b>保留小数位</b> 0 0	多段字符本 查考 <b>查考</b> <u>查</u> 看	· 激授 	病镜 病镜 病镜	部除           部除           部除           部除

(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	Networkin	g settings	Remote settings	Online transmission	Data release
MQTT server o	onfigura	tion			
S	erver typ	e: Custo	m MQTT serv	er	~
c	erver na				
3		L	25 H.	ALC: NOT	_
	Release	me Ensure	e successful p	ublishing once (o	~
S	erver ad	dre			
	User	ham			
	Pas	swo			$\triangleright$
Rest	ore		Read		Write
Data configura	tion				
Instruction		Comman	d	Instruction	
Instruction	Comm	unication	Instruction	Data	
name		evice	address	number	Notes
					8

(2) Select the release mode as you need.

Server type:	Custom MQTT server	~
Server name:		
Release me	Ensure successful publishing once (o	-
Server addre	Publish only once Publish successfully at least once (poss	ik
User nam	Ensure successful publishing once (onc	e
Passwo	۲	
Restore	Read	Write

Status information Ne	etworking set	tings	Remote settings	Online transmission	Data release			
MQTT server cor	figuration					_		
Sen	ver type:	Cust	om MQTT serve	er	~			
Sen	ver name:							
R	Data instru Device c		configuration				- 0	
Ser	Comma	nd			Communic	Local D	evice ~	
	Data sp	eci B	it	~	Add meth	Single a	ddition ~	
Resto	Data ob	ec P	SB	~	Start addr	• 0	. 0	
Data configuration	MQTT					2	2	
Instruction	Data ty	be B	DOL(Bool)	~	Trigger n	Trigger	ed when the val $\vee$	
Instruction name	Trigger	c( le	ss than	~	Minimu			
	Maxi	nu		*	Publish e	v	S	
	ren	nar						

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.

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热门产品	物联网云服务	设备端服务	行业物联网
计算 >	物联网无线连接服务	AliOS Things (物操作系统)	城市物联网平台
容器 >	物联网平台	边缘计算服务	生活物联网平台 (飞燕平台)
存储 >	物联网智能视频服务		云价签
网络与CDI>	loT 设备身份认证		云投屏
安全>	loT 安全运营中心		
中间件 >	物联网络管理平台		
数据库			
大数据十算 >			
人工著能与机器学习>			
媒体影务			
V /			
企业服务与云通信>			
物联网 >			
Serverless			

(2) Select manage the console;

物联网平台	
物联网干台提供全托管的企业级实例服务,具有低成本、高可靠、高性能、高安全的优势,无 施即可接入各种主流协议设备,管理运维亿级规模设备,存储备份和处理分析EB量级的设备数 现设备数据和应用数据的融合,实现设备智能化升级。	
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产品优势 产品功能 产品规格 增值服务 应用场录 客户室的	刘 接入方案 产品动态 文档与工具
佐恵活动	重要功能
试用中心 访问试用中心,企业版实例新用户免费试用一个月	全球实例 全球实例发布,设备跨地域分发助力客户业务出海
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限时试用 增值服务IoT李生引擎全新上线,限时免费试用	IoT Studio 新版物联网应用开发服务(IoT Studio)全新上线

(3) Click Public instance.

实例概览 增值	服务  产品文档		
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购买实例	快速入门		
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试用 测试环境			
试用 测试环境 公共实例		购买企业版实例	
<ul> <li>試用 测试环境</li> <li>公共实例</li> <li>◇ 已开通</li> <li>◎ iot-06z00blol294</li> </ul>	升级企业版 🛛	企业版实例提供更丰富的功能,更	
<ul> <li>試用 测试环境</li> <li>公共实例</li> <li>◇ 已开通</li> <li>◎ iot-06z00blol294</li> </ul>	升级企业版 🛛		
	升级企业版 🛛	企业版实例提供更丰富的功能,更	

(4) Create a product in the "Product" column of "Device Management", set relevant configurations, and confirm saving.

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实例详情	物联网平台	/ iot-06z00blol294w4t / i	设备管理 / 产品			
<b>设备管理</b> へ	产品	(设备模型)				
产品			设备接入流程概览			
设备		物联网平台常爱型使用演示		00 Allas/7.85	03 编辑物模型	
分组			01 创建产品 产品是同品类设备的集合	02 创建设备 创建设备获取连接平台所需的 身份信息	03 納利初復空 产品下的设备都会继承产品的 物模型	04
设备模拟器		_		정미원을	10121	
设备分发	创建产品	快速入门 潮	輸入产品名称查询 Q	请选择产品标签 💙		
IoT孪生引擎	产面装积		ProductKey		节点类型	
消息转发 >	1					
協控运维  イ						
安全中心 > /						
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		← 新建	产品 (设备模型)			
设备管理	^	The second second				
产品		新建产品	从设备中心新建产品			
设备		*产品名称				
分组		DeviceName				
		*所属品类 📀				
设备模拟器		🔿 标准品类 🧕	自定义品类			
设备分发	L	* 节点类型		<u> </u>	1	
loT孪生引擎		~				
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		更多信息				
		マ产品描述				
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(5) In "Devices", click "Add Device", set a "DeviceName" for the device, and set relevant configurations;

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实例详情	*** *** *****************************		
设备管理 ヘ  产品	信達物財列募制式     ◇     ●     激活设备●     ●     当前在线●       0     0     0     0		
分组		×	
设备模拟器	Account and the second	里云会颁发产品下的	最
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loT孪生引擎	信律物政风屏测试		
消息转发 イ	DeviceName @		
监控运维 ~	TS5-1000		
安全中心 ~	留注名称		
仿真实验	测试		
文档与工具		<b>确认</b> 取满	

(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)".

信捷物联网屏测试	2	1	й <b>О</b>	0	fi设备 😡	0	当前在线 🥝					
设备列表 批次	た 「「「「「」」 「「」」 「「」」 「「」 「」 「」 「」 「」 「」 「」	搜索										
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← <b>TS5-</b> <sup>产品</sup>	1000	1屏測试 査書 n 复制	设备 / TS5-1000 设备影子	文件管理	日志服务	在线调试	子设备管理	分组	DeviceSecret 任务	<u>5</u> 8		
← TS5- 产品 ProductKey 设备信息 设备信息	「 1000 信題物联ド j10zjnFXFs Topic 列表	未勤活 (屏測)は 重書 (1) (見) (初橋型数据)			日志服务					28		
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← TS5- 产品 ProductKey 设备信息 设备信息 定当名称 节点类型	「1000 信理物研F j10zjnFXFs Topic 列表 催 研	未激活 用用測试 查書 n 愛射 物模型数据 物模型数据 主物联网用测试			日志服务	ProductKey DeviceName	jī			<u>28</u>	地域 认证方式 回性版本	华东2(上海) 设置或明 -
← TS5- 产品 ProductKey 设备信息 近晶名称 节点类型 新注名称 ●	1000 信捷物联F j10zjnFXFs Topic 列表 僅 陽 調	未激活 開展測试 查書 n 質制 物模型数据 者物模型数据 者物模型数据			日志服务	ProductKey	ј1 Т:	OzjnFXFxn 复制 55-1000 复制		<u>2</u> 8	认证方式	设备密钥
← TS5- 产品 ProductKey 设备信息 ど場合息 ごようないろういろういろういろういろういろういろういろういろういろういろういろういろうい	1000 (国建物联) j10zinFXF5 Topic列表 管理 で 変 資 20	未款活 用 実)式 重書 n 2011 1 物模型数据 世地联网 再设试 そ 式 端編			日志服务	ProductKey DeviceName IP방방士	ן ז דר -	OzjnFXFxn 复制 55-1000 复制		<u>2</u> 7	认证方式 固件版本	设备密钥 -
← TS5- 产品 ProductKey 设备信息 产品名称 节点类型 管注名称 @ 前建时间 当前状态 @	1000 (国建物联) j10zinFXF5 Topic列表 管理 で 変 資 20	未認び活 は用意調は 重書 の 変形 1物模型数据 世地既阿屏源は た さ、実績 13/07/10 20:08:41 物活			日志能务	ProductKey DeviceName IP地出 波波町间	ן ז דר -	OzjnFXFxn 复制 55-1000 复制		55	认证方式 固件版本 最后上线时间	设备密钥 - -
← TS5- 戸惑 ProductKey  (没备信息 次备信息 戸品名称 市品名称 市品名称 市品名称 市品名称 市品名称 市品名称 市品名称 市品名称 市品名称 市品名称 市品名称 市品名称 市品名称 市品名称 市 の の の の の の の の の の の の の	1000 個地統與 j102jnFXFs Topic列表 當兩 調 20 20 未	未認び活 は用意調は 重書 の 変形 1物模型数据 世地既阿屏源は た さ、実績 13/07/10 20:08:41 物活			日志服务	ProductKey DeviceName IP地出 波波町间	ן ז דר -	OzjnFXFxn 复制 55-1000 复制		20	认证方式 固件版本 最后上线时间	设备密钥 - -
← TS5- 严品 ProductKey	1000 個地統與 j102jnFXFs Topic列表 當兩 調 20 20 未	未認び活 は用意調は 重書 の 変形 1物模型数据 世地既阿屏源は た さ、実績 13/07/10 20:08:41 物活			日志服务	ProductKey DeviceName IP地出 波活时间	ן ז דר -	0zjnFXFxn 复制 55-1000 复制 R武		<u>29</u>	认证方式 固件版本 最后上线时间	设备密钥 - -

(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.

Status info Ne	two <mark>rk setting</mark> Re	mote settings On	line passthrough D	ata release	
MQTT serve	er configuratio	n			
	Server type:	Aliyun Server		~	
	Device cer	ti		~	
				~	
	Release m	etho <mark>d:</mark> ih only o	nce	~	
	Specify do	main name:			
	Regional in	East China 2		~	
R	estore	Re	ad	Write	
Data config		2	1 155 70 730		10
Instructio	n C	ommand	Instruction	Imp	ort
Instructi name		ication Instruct ce addre	seas - each	Notes	R

(8) In the Aliyun IoT platform, select the created product in the product category, click "Function Definition", and then click "Edit Draft".

数据定义
产品下
7

(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.

) Ifth 🛛 1692035 v 🔮	缘东2(上海) ~			Q 搜索	-	B
[詞里云] [物联网平台] [中国站旧	日版公共实例规格上限变更] 查看详	青	添加自定义功能		×	
<ul> <li>他就网平台 / iot-06:00biol294w4t / ざ</li> <li>← 编辑草稿</li> <li>产品名称</li> <li>(直理地就网屏前后)</li> </ul>		濉定义	<ul> <li>功能機型 ●</li> <li>漏性 服务 事件</li> <li>功能名称 ●</li> <li>请输入您的功能名称</li> </ul>			j10zjnFXFxn 复制
⑧ 您正在编辑的是草稿,素点击发布	5后,物模型才会正式生效。		*标识符 @			
快速导入 物模型 TSL 历	使版本 🗸		请输入您的标识符			
请输入模块名称 Q +	默认模块		* 数据类型			
and an and a second sec	添加标准功能 添加自定	V Inas	int32 (整数型)		~	
默认模块	功能类型	功能名称	取倡范围 最小值	~ 最大值		検型
添加模块	屬性	Redavia	<ul> <li>歩长 環輸入歩长</li> <li>単位 環辺環単位</li> <li>* 彼写美型</li> <li>● 读写 ○ 只様 描述</li> <li>滞輸入価述</li> </ul>		0/100 取満	2 (張政道)

(10) Click on "Model TSL" and in the Perfect Model, select "Ctrl+A" and then "Ctrl+C" to copy or export the model file.

	anit.	查看物模型 ×
<ul> <li>您正在编辑的是草稿,素点目</li> <li>快速导入</li> <li>物模型 TSL</li> </ul>		。 物模型是对设备在云端的功能描述,包括设备的层性、服务和事件。物联网平台通过定义一种 物的描述语言未能达物模型。称之为 TSL(即 Thing Specification Language),采用 JSON 格 式,您可以根据 TSL 组线上极设备的政绩。您可以得出完整物模型,用于云流应用开发;您也 可以只导出精简物模型。配合设备换 SDK 实现设备开发。
请输入模块名称 Q +	默认模块	飲み機会
默认模块	添加标准功能 添加	自至义功] 完整物模型 精简物模型
+添加機快	王 王 王 王 王 王 王 王 王 王	<pre>1 * {     "schema"; "https://iotx-tsl.oss-ap-southeast-1.aliyuncs.com/schema.j;     "profile"; {     "version"; "1.0",     "productKey"; "jl0gjnFXFxm"     },     "productKey"; "jl0gjnFXFxm"     // "productKey"; "l0gjnFXFxm"     // "amae"; "mungitHttp://     "eccestide"; "nest",     "mame"; "mungitHttp://     "required"; false,     "dettiyee"; {         "type:"int",         "sccsside", "int",         "sccsside", "int",</pre>

(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.

医信息 联网设置 远程	设置在线透传数据	发布		阿里产品物模型信息导入 — □
IQTT服务器配置				完整物模型Json文本
服务器类型	些 阿里云服务器		~	"productKey": "j10zjnFXFxn" }, "properties": [ { "identifier": "test" "name": "Whit對握占" "accessMode":
设备证书	5: { "ProductKey": " "DeviceName":		<b>`</b>	Type://withinstrime     "properties": [ [ "accessMode":       "identifier: "test", "name": "別试想揭云", "accessMode":       "identifier: "test", "name": "们认得这些人。       "max": "2147483647", "unit: "nF", "unitName": "%]       "max": "2147483647", "unit: "nF", "unitName": "%]       "identifier: post", "name: post, "type: info", "required': true, "desc", "mather: "set,", "unitName": "%]       "identifier: post", "name: post, "type: info", "required': true, "desc", "Mill&据G.", "mather: "%]       "identifier: "test", "name: "mather: "%]       "identifier: "test", "name: "mill&llac", "mather", "2147483647", "mill       "step: 1", "IT", "unitName: "%]       "step: 1", "IT", "unitName: "%]       "step: 1", "IT", "unitName: "%]
发布方式			~	"required": true, "desc": "属性上报", "method": "thing.event.property.post", "outputData"; [ { "identifier", test", "ngme","测试数据点",
地区信息	9: 华东2		~	aataiype 1 "-2147483648", "max": "2147483647", "min": "-2147483648", "max": "2147483647", "unit": "
恢复默认	读取		写入	"step": "1" } } } ] ]]] "services": [ { "identifier": "set", "name": "set",
据配置				劉 「required": true, "callType": "asyno", "deso": "寓性设 置 "", "method": "thing service property.set", "inputData";
指令添加	指令编辑	指令删除	导入物模型	し、し、し、「identifier": "test", 「name": "別Ц数据 点", "dataType": { "type": "int", "specs": { min": "-2147483648", "max":
指令名称 通讯	设备 指令地址	数据个数	备注	
测试数据点本	地设备 PSB0	1[DWord]	-	], "outputData": [] }, { "identifier": "get", "name": "get", "reouired": true, "callType": "async",
				*step***********************************

(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	Ē				信息化设置				0->
设备指令				He			置 在线透传 数据发	布	
22253226	测试数据点	· 通讯设备:	本地设备	√ t	- MQTT服务器配置 服务	。 B器类型:	阿里云服务器		~
数据规格:	测试数据点 Word	添加方式:	单个添加		1	设备证书:	{ "ProductKey": "DeviceName"		Î
数据对象:	PSB	~ 起始地址:	0 0	and a second	3	发布方式:	只发布一次		~
MQTT						皆定域名: 他区信息:	华东2		~
数据类型:	INT32S(双字十进制数)	⇒ 触发方式:	值改变时触发	~	恢复默	认	读取		写入
触发条件:	小于	最小值:			数据配置 指令添加		皆令编辑	指令删除	导入物模型
最大值:		÷ 发布间隔:		S	指令名称 测试数据点	通讯设1 本地说		数据个数 1[DWord]	备注
备注				as pe					
				64 4					
94-1-k			确定取	消	一键发布			应用 章	角定 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.
release conditions	Add system data tables by default.
payload instance	{
Falliona monare	
	"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"
	}, {
	"Order name": "length",
	"Order ID": "43912342299231234+4",
	"Order type": "Float"

		<pre>}, {     "Order_name": "yield[6]",     "Order_ID": "43912342299231234+5",     "Order_type": "Float"     }],     "Localghost": [{</pre>
		"Order_ID": "43912342299231234+6", "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[]

Data	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 key value pairs	If the instruction name is followed by "[6]", it indicates that the instruction is batch added, and the value of the data is the actual value of the batch added data.
	ssage cache	
d	ata	"Variant": [{
		"Unix": "1614576888000", "Version": "V1.0",
		"Pub Data": {
		"device 1": {
		{ "
		temperature": 23,
		"length": 50,
		"yield[6]": [12, 32, 43, 53, 15, 53]
		}
		"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" (
		"device 2": {
		"temperature": 13, "length": 60,
		"yield[6]": [12, 32, 123, 53, 15, 53]
		Jana[0] · [12, 02, 120, 00, 10, 00]

}
}
}
]
}

Data control request

	Fitle	ID+PWD/write data
payload	Write single	
payload instance	Write single or multiple pieces of data	<pre>{     "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[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": {	

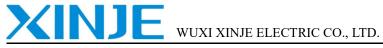
		"temperature": "OK",
		"length": "OK",
		"yield[2]": "OK",
		"yield[4]": "OK"
		},
		"device 2": {
		"temperature": "ERROR0",
		"length": "ERROR1",
		"yield[2]": "ERROR2",
		"yield[4]": "ERROR0"
		}
		}
		}
Parameter	Unix	The time of publication, formatted as a millisecond level UNIX timestamp (milliseconds
		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

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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