

# TouchWin Pro software

User manual

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### 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 7/ Windows 8/windows10 /windows11.

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

	Select Setup Language	×			
<b>75</b> Select the language to use during the installation.					
	English	~			
	OK Cance	el 🛛			

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

Setup - TouchWin Pro version 1.0.2.220716R 🛛 🗖	×
License Agreement Please read the following important information before continuing.	TS
Please read the following License Agreement. You must accept the terms of this agreement before continuing 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	
$\bigcircI\underline{d}o$ not accept the agreement	
Next Ca	incel

(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 version	n 1.0.2.220716R 🛛 🗕 🗖	x
Select Destination Location Where should TouchWin Pro be installed?		TS
Setup will install TouchWin Pro into the following folder	r.	
To continue, click Next. If you would like to select a different fol	lder, click Browse.	
C:\Program Files (x86)\TouchWin Pro	B <u>r</u> owse	
At least 728.7 MB of free disk space is required.		
	Back Next Can	cel

(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 <u>d</u> esktop shortcut
<u>B</u> ack <u>N</u> ext Cancel

(5) Click Install to finish the installation.

<u>75</u>	Setup - TouchWin Pro version 1.0.2.220716R 🛛 🗕 🗖	٢				
Ready Setu	Ready to Install         Setup is now ready to begin installing TouchWin Pro on your computer.         TS					
Click	Install to continue with the installation, or click Back if you want to review or change any settings. tination location:					
Add	itional tasks: Additional shortcuts: Create a desktop shortcut					
	Back Install Cancel					



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.

### 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.

Monitor	Product description
<ul> <li>TS3 Series</li> <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-E(7*, 800 x 480)</li> <li>TS3-700-M(10*, 1024 x 600)</li> <li>TS3-1000-M(10*, 1024 x 600)</li> <li>TS3-1000-M(10*, 1024 x 600)</li> <li>TS3-1000-M(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 •
Model	Previous Next page Cancel Help

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				×
		COM1	信捷	
		COM2 Net0	信題 信題 信題 西门子 Modbus_通用 三菱 合达 基恩士 产电 丰炜 欧姆龙 汀川 永宏 松下 AB 光洋	
	_		ABB	
			Communication settings	
		COM1	信捷 Essential information	
		COM2	信捷 XC系列 Equipm 信捷 XC系列	
		Net0	信捷 XD/XL/XG 系列(Modbus RT Equipm 信捷 XC 系列	
			Serial communication information	
			Interfac RS232 V	
			Baud 19200 v Data bit 8 v	
			Check Parity check v Stop bit 1 v	
			Station 1	
			Timeout and packaging parameters	
			Communicat 1000 Retry count 3	
			Delay time 0 Interval time 0	
			Serial Equipment name Equip Maximum 120 🐨 Maximum 120	
			Advanced 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.

7	S		×
Γ	COM1	西门子	~
	COM2	信捷	
	Net0	西门子 Modbus 通用	
		三菱	
		台达	
		金融の上	
		丰炜	
		欧姆龙	
		松下	
		AB	
		光洋	

75		Communication settings
	COM1	信捷
	COM2	信捷 XD/XL/XG系列(Modbus TCP)
	Net0	Equipm 信捷 XD/XL/XG系列(Modbus TCP)
		Network port communication information
		IP space 192 . 168 . 6 . 6
		End 502 Station 1
		Timeout and packaging parameters
		Communicat 1500 Retry count 3
		Delay time 0 Interval time 0
		Maximum 120 A Maximum 120
		Communication status register
		Serial Equipment name Equipment PSW 100
		0 本地设备 本地设备 Do not export communication status informatio
		Communication shield address
		PSB 100
		Do not use communication mask address
		Advanced

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 )	~
	本村山P     ★       ○ Get address     ● 使用自定义IP地址       □ P地址     192.168.6       255.255.255.0     0       Default     192.168.6       1     Get       0     0.0.0       0     0.0.0       0k     Cancel	ion
	Previous Ok Cancel He	lp

- 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.

		Кеу		×
Basic propert	e Appearance Function	bindi Security setting	Position	
Control 1	D BTO			
Describe				
- Write add	ress			
Equipm	信捷 XD/XL/XG系列(Mo	dbus RTU )	✓ Set up	
Address	Y v	0 1		
		Indirect designation	on	
Action				
⊖ Set	on 🔿 Set off	Reverse C	) Instantaneous on	

Text: enter reverse Y0.

	Кеу	×
Basic properti Appearance	Function bindi Security settine Position	
	✓ Use pictures	
	Status 0	~
reverse Y0	Name button_05_a	
	Categor svg	
	Dimensi 80 × 42	
Change appeara	Ince More	
Fill		
Fill pattern Solid color	r 🗸 Fill color	~
State 0	✓ ✓ Display Apply fonts to each	
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.

	Indicator light
Basic properti	Appearance Security settine Position
Control I	D LIO
Describe	
Read add	ress
Equipm	信捷 XD/XL/XG系列(Modbus RTU)      ✓   Set up
Address	Y V 0 1
	Indirect designation
logic	
Pos	sitive logic O Negative logic
- 🗌 twinkle	,
On	status flashes Off status flashes
	Flicker frequency 0.1 秒 V
<ul> <li>twinkle</li> <li>On</li> </ul>	status flashes Flicker frequency 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 online simulation in control window.

	Comm port o	configuration	X
Device Port No.	Local port No.	Config result	
COM2		>>>> <<<<	
	Dete	rmine Cancel Applicat	ion

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	onfiguration	×
COM1 COM2 1	Local port No.	Config result	Device Port No.	Local port No.	Config result (COM1, COM4) 4	
	Dete	rmine Cancel Application		Deter	rmine Cancel Applicati	ion

Device port Select the HMI port number, that is, the COM port selected when adding a device f	
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 the	
number	computer device manager

Configuration	Display port configuration results
result	
2. The following moment window will non-while the interface, and it is recommended to calculate 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 record	
✓ Clear alarm history	
✓ Clear data sampling	
Clear operation	
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





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

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

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

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

	Download (PC - > HMI)		x
Communication settings			
Connection LAN	~		
• Device IP discovery	~		
○ Device ID lookup	~		
Scan	IP Communic		
Upload Download			
Downloa	Ø		
<ul> <li>Allow project upload</li> </ul>	✓ Upload pa	••	
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	n
✓ Overwrite recipe data	<ul> <li>Download fonts to</li> </ul>	☑ Clear PFW/SPFW data	a
	7		
Download Upload		Close	

Communication settings	Set the download connection mode and corresponding parameter settings
Connection	Refers to the way to connect the HMI. You can select USB, LAN and remote
Download password	To set the download password of the project, it must be consistent with the password
	set in the HMI, otherwise it will not be downloaded. The default download password
	is 123456. For the modification of the password in the HMI, refer to chapter 7-2
	Password
Allow project upload	Set whether the current project can be uploaded
Upload password	When Allow Project Upload is selected, you can choose to set the upload password
User defined boot screen	After checking, click "Browse", and select the file as the HMI boot loading screen
	(the current version only supports images with 800 * 480 pixels and BMP format)
Synchronize PC time	The time information of the computer is synchronously downloaded to the HMI to
	synchronize the HMI clock with the computer

Hide menu system	There is a system menu at the lower right corner of the HMI by default, here you can
	set whether the menu is displayed
Enable installment	This download will enable the installment function
Clear alarm record	This download will delete the alarm information stored in HMI
Clear operation	This download will delete the operation record information stored in HMI
Clear data acquisition	This download will delete the data collection information stored in HMI
Overwrite recipe data	This download will overwrite the original recipe data in HMI with the recipe data set
	in the current project
Download fonts to	Download the fonts of the computer to the HMI to synchronize the HMI fonts with
	the computer
Clear PFW data	This download will delete PFW data stored in HMI
Download	Execute the download operation, and download the project to the HMI
Upload	Read the project in HMI to the computer, and check "Allow project upload" is
	selected when downloading the project in HMI, otherwise it will prompt that the
	project does not support upload
Close	Close the window

#### The connection mode is described in detail here:

① USB: When USB connection mode is selected, it can be used after successful connection, and no other parameter setting is required.

**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) LAN: 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.

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.

KK/MQ自己也且问			
DevName	IP	DevID	Model
Hmi	172.31.0.55	417-036-024-7885-1350	ТS3-700-Е
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

③ Remote: 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)

Communication settings	
Connection 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.

### 2-6. 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)		×
Communication settings			
Connection LAN	*		
• Device IP discovery	~		
O Device ID lookup	~		
Scan	IP Communic		
Upload Download			
Downloa	Ø		
☑ Allow project upload	☑ Upload pa 11111	1	
User defined boot scre	ee⊡ Use the default boot s	creen	
Synchronize PC time	🗌 Hide menu system	🗌 Enable installment	
✓ Clear alarm record	<ul> <li>Clear operation</li> </ul>	✓ Clear data acquisitior	n
✓ Overwrite recipe data	<ul> <li>Download fonts to</li> </ul>	✓ Clear PFW/SPFW data	•
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

:h Win Pro - 🔟	L桯 - [00001]页面1	
	Download (PC - > HMI)	
+	Communication settings	=
Download	Connection USB 🗸	n entry
step 1		XA
1 唐 田		
<b>í</b>		E
	USB刷新 Communi	<b>^</b> :
	Upload and download	A
	Download password	4
	✓ Allow project upload ✓ Upload p 11111	
	Browse For Folder	×
	□ User defined boot screen 请决择文件本	
	MOTALIA	
	▲ 🖟 TXB	^
	Synchronize PC time	
	→ .local	
	Clear alarm record	
	✓ Overwrite recipe data ✓ ▷ Le Desktop	
	DFbqmK5 Step 5. select the folder to     save the upload file	
	Downloads	
	Favorites	
		<b>,</b>
	Make New Folder OK Can	
	Download Upload step 2 Close	

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	~	
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	
用户目定义并机画面		
□ 同步PC时间至HMI	□ 隐藏系统菜单	□ 启用分期付款
☑ 清除报警记录	☑ 清除操作记录	☑ 清除数据采集记录
□  □  □  □  □  □  □  □  □  □  □  □  □  □		☑ 法除DF\W/数据
文件正在上传,请稍候		
文件上传成功		
下載上传		关闭

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



### 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.

<b>D</b>		<b>T</b> 1 1	Screen	Screen	
Project area	a Menu bar	Tools bar	tools bar	editing area	Function area
			tools bar		
Control	Outp	ut window	S	tatus bar	
object a	rea				
Project area	It involves b windows, and	basic operation	ns such as creation block	ating, deleting, copy ocks and libraries	ving and cutting pictures and
Menu bar	There are 7 m	enus, includin	ig File, Edit, Par	t, Mapping, Tool, Vie	ew, Help
Tools bar	Some commo simulating, et	on tools, inclu c	uding creating,	saving, copying, cut	tting, searching, downloading,
Screen tools bar	Some tools t	for operating	the contents of	f the screen during	the screen editing, including
	alignment, centering, equal width, equal height, combination, etc				
Screen editing	n editing Project screen editing area				
area					
Function area	Display and outline	switching of f	unction window	v can be freely set, i	ncluding address preview and

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 User Add to [00001]贝国1	]
User Add to Line [00001]页面1	]
Page properties	×
Page information	
Page2	
Page 2	
Page backgro	
Picture size	
Width 800	
Height 480	
Overlay window	
Top floor 无	~
Bottom 无	~
Screen permission	
Required user per 权限1	~
$\checkmark$ Switch to the permission range when 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	Provention Page1		
Page	1		
Page backgro	■ ■ ■ ■ ■		
Picture si	ze		
Width	800		
Height	480 🛓		
Overlay v	vindow		
Top floor	[00002]Page2	~	Page1
Bottom	无	~	
Screen p	ermission		Page2
Required	user per 无	~	
Switch	n to the permission range when the screen / wind	dow is clos	

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



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

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

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

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

The same is true for the bottom layer.

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

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



### 2. Add window

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



	Page properties					
- Page info	ormation					
Page	Forms5001					
Page	5001 Used as keyboard display					
Page	✓					
Dackgro						
Picture si	ize					
Width	800					
Height	480					
— Overlay v	vindow					
Top floor	无 ~					
Bottom	无					
Pop up w	vindow					
<ul> <li>In the</li> </ul>	middle of the screen					
○ Show in						
	poli 🔄 Close button					
- Screen pe	ermission					
Required	user per 无 V					
Switch to the permission range when the screen / window is clos						
	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" $\times$ " 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	₽ × [[			
Engineering		Engineering tree	Ąх	
User screen	Ð	Engineering	^	4
<mark>)</mark> [00001]Pa				J
	Сору	🕀 🔲 User screen		c
User form	Delete	A	dd to	ì
⊕ <mark>E</mark> s System form	Close		aste	
🕂 🛃 Function bloc	Attribute	[00002]Pagez		

### 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.

**P** 

	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

Cancel

Return to screen editing status

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)

请输入密码	<u>ц</u>			x
密码:	•••••	确定	取消	(长度不超过32字数)

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

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



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

#### 8. Decryption project

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

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



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

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

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

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



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

9. Compile

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

_	Output window	
×	Output ErrorlList	
Compiling	Compile window25014 Compile window25900 Number of compiled resource files:32 Compilation succeeded.	
Compling	0Error, 0warning, 0News	

#### 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.

		×
	← → ~ ↑ ■ 此电脑 >	<ul> <li>C 在 此电脑 中提素</li> </ul>
Ē	組织 ▼	8: 🕶 😗
- 8	> 🏡 WPS网盘 ── 文件夹 (6) ──	
	※ ● 此电脑	四片
导出U鱼选项 导出文件路径	→ 12 祝祭 → 10 祝祭 → 10 照片	「数
		直面
4 × -	→ ④ 音乐 → 设备和驱动器(	(5)
. =	文件名(N):	
	保存类型(I): dat文件 (*.dat)	~
012 8	▲ 隐藏文件夹	保存(5) 取消

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

Export file C:\Users\TXB\Desktop\1111.dat					
puti		HV1	~	Ехро	rt

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 succeeded	
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.

U盘更新 🛛 📉	选择更新文件
	Show: *,dat
更新Hmi工程	/ System Volume Information/
	database/
	导出工程.dat
	□ Preview □ Show hidden files
	Filename: //mnt/udisk/导出工程.dat
	OK <= Cancel

(5) Import is successful.

更新进度	$\times$
100%	
更新成功! 1秒后重启	

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	Clear operation record	<ul> <li>Clear data acquisition</li> </ul>		
✓ Overwrite recipe data	✓ 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.

📙 Run
Hmi.Simulator.dll
🔌 Hmi.WPP.dll
SCADA.exe

III C:\Users\xinje\Desktop\组态.ex	e							-	×
									î
	🖷 通讯口配置			-		×			
	设备端口号	本机端口号		配置结果					
		COM11		(COM1,CO	DM4)				
			>>>>						
			****						
						_			
	□ 保存配置			确定	取消	i			
									~



#### 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:

		Export screen		×
Export Type	Picture		○ PDF	
Storage location				
Format Selectio	PNG	~		
Width	800	Height	480	
Export				
□	ages ser screen istem picture istem form			
			Exp	port

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

	PF	N data		×
PFW	Start	0 En	d 2999999	
PFW[0] - P	FW[2999999]			
Add to	Delete	Modific	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.
	Tips     Image: Data range conflict!     OK
Modify	Modify the register value within the set address range
Set PFW	Select the PFW data segment, click Modify, or double-click the PFW data segment to open the data
value	setting window as shown in the following figure

	•				PFW	' data					_ □ >
		+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]	0	0	0	0	0	0	0	0	0	0
	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[00000660]	0	0	0	0	0	0	0	0	0	0
	PFW[00000680]	0	0	0	0	0	0	0	0	0	0
	PFW[00000690]	0	0	0	0	0	0	0	0	0	0
	PFW[00000700]	0	0	0	0	0	0	0	0	0	0
	PFW[00000710]	0	0	0	0	0	0	0	0	0	0
	PFW[00000720]	0	0	0	0	0	0	0	0	0	0
	PFW[00000730]	0	0	0	0	0	0	0	0	0	0
	Display format	xadecima	Set 0	Set FF		1	/ 3	Neo	t page [	Determine	Cancel
Decimal: data d	isplay in decir	mal fo	ormat								
Hex: data displa	y in hex form	at									
Set 0: set all dat	a in the setting	g segi	nent	to 0							
Set FF: Set all	data in the set	ting s	egm	ent to	FFF	F					
OK: make the s	ettings effectiv	ve									
OK. make the s	ettings enreett	. •									

### 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.

	System se	ettings	×
Paramete Monitor Interactiv	User righ Clock Equipmer	Engineer	
[Screen] Startup screen		~	
[Screen saver] Waiting time 1	✓ Minute		
<ul> <li>Display</li> <li>Turn off the backlight</li> </ul>		~	
[Mouse cursor]			
✓ Hide mouse cursor	Mouse cursor size 20X20(黑)	$\checkmark$	
[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 TCS-700-E	Horizontal - normal	🔿 Horizontal - rotate 180 deg	rees
del 135700-E	O Vertical - rotate 90	O Vertical - rotate 90 degrees	
[Description]			
Display model : TS5-700-E			^
Screen size : 7寸			
Resolution : 800 x 480			
Colour : 1677万			
Brightness : 200			
USB_A:1			
COM1 : RS232/RS485			
COM2 : RS232/RS485/RS422			
Ethernet : 1			
SD卡:无			~
[Zoom mode]			
Constant	ı		
○ Small ○ Large proportion	n		
Component width and height unchar	nged		
Parameter			
	De	etermine Cancel Appli	cation

Model	Display the current HMI model and display direction. If you want to modify the display model,
	you can click OK to take effect after selecting a new display model and setting the display
	direction correctly. The display direction defaults to normal horizontal display. In order to adapt
	to various occasions, we provide the options of $180^\circ$ rotation, $90^\circ$ clockwise rotation and $90^\circ$
	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		
	Parameter setting		
	Number of PSW:10000Input range 1-10000Number of PFW:3000000Input range 1-3000000Number of PSBs:10000Input range 1-10000ConfirmCancel		

■ Interactive

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

		System settings	X	
Paramete N	1onitor InteractivUser	righ Clock Equipme Engineer		
Conti	Control picture exchange			
Equip	本地设备	✓ Set		
Addre	PSW ~	0 0		
Data type	Word $\vee$ Unsignec $\vee$	ct designation		
🗌 Repo	rt current screen num	ber		
Equip	本地设备	✓ Set		
Addre	PSW ~	0 0		
Data	Word $\lor$ Unsignec $\lor$	et designation		
type		cruesignation		

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.

		Syst	em settings		×
Paramete M	onitor Interactiv Use	erright Clock Equi	pme Engineer		
Number	User name	Default password		User rights	Flag bit
0 ad	min	666666	管理员		
					1
	Delete		Add to	modify	
				Determine Car	Application

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 permission setting				×	
User name	Jser1	Password 12	3456		
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				~
		Determine	Cancel	Applicatio	on

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 ke	ey >
Function Appearance Security set Location	
Control ID FB0 Description	
Action Press Status V	
Start	
Functions	Optional functions
调用窗口[25001]	设置线圈
Add	设置数据
	四则运算
Delet	e数据传输
	画面切换
	调用窗口 关闭索口
Call window	
Basic Attributes Security settings	CSV
● Switch [25001]User login ~	配方
	配方
	周用
	打印
Pop up the password window automatica	lly. (If the target
Determine Cancel	Application
	Determine Cancel

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	$\times$	▲ 用户登录 ×
user 用户名 User1 〇		user 用户名 User1 〇
passwo商商		password <sup>码</sup>
login successful <sup>登录成功</sup> 登录 迁出 login logout		· logout successful 注销成功 登录 迁出 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

Indicat	or button	>
Basic prope Appearance Function bi Security	set Position	
Operation confirmation delay		
Confirmation before		
🗌 Key delay		
Display control		
Enable		
Enable control		
Enable		
User rights		
The permission will be cancelled aft	er the operation is completed	
When the user has no permission ra	nge, a prompt window will pop	o up
Hide the component when the user	has no permission range	
Required user 权限2	$\checkmark$	
	Determine	Cancel

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

权限提	T			$\times$
6	¥ 操作级别	<b>川高</b> ,	感没有此权限	₹
	用户登录		确定	
	user login		ok	

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

### Clock

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

	System settings	×
Paramete Monitor Interactiv User righ Clock	Equipme Engineer	
Disable clock setting		- 11
Clock source		-1
HMI internal		- 11
O Peripheral		- 11
		- 11
Write LINU clock to outernal device		
Write Yrite 注意		- 11
- Clock display format		- 11
Decimal system      Hexadecimal		- 11
Number of		- 11
synchroniz		
Equipment	Register	
		- 11
		- 11
		- 11
		- 11
		- 11
		- 11
		- 11
		- 11
		- 11
		-11
		- 11
	Determine Cancel Application	on

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

ramete N	Aonitor Interactiv User	righ Clock Equip	merEngi	neer		
	COM1	/=++				
	COM2	1后捷				~
	Not0	信捷 XC系列				
	Neto	信捷 XD/XL/XC	G系列(	Modbus RTI	))	
		New equipm	ent			
Serial	Equipment name	Equipment type	Port	Port type	Communication	Station
0	本地设备	本地设备	-	-	-	0
1	信捷 XD/XL/XG系列	信捷 XD/XL/XG	1	RS232	19200,8,偶校验,1	1

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					
	Essential information Essential information Essential information Equip 信捷 XD/XL/XG系列(Modbus RTU)2 Equip 信捷 XD/XL/XG系列(Modbus TCP)					
	Equip         信捷 XD/XL/XG系列(Modbus RTU)         Equip         信捷 XD/XL/XG系列(Modbus TCP)           Serial communication information         Network port communication information					
	Interfa RS232					
	Image: Second					
	Statio     Communi     1500     Retry       Timeout and packaging parameters     Delay     Interval     0					
	Communi 1000 Retry 3 Maximum 120 € Maximum 120 €					
	Delay     0     Interval     0       Maximum     120     Maximum     120         PSW     100					
	Do not export communication status i					
	PSB 100					
	Do not use communication mask addr					
	Advanced Confirm Auvalicea Commitm					
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	×
Paramet	ε Monitor Interactiv User righ Clock	Equipme Engineeri	
Nan	1e: 工程		
Auth	or:		
Remar	ks:		

### 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:

Edi	it	Parts	Mappin								
	Сор	у	Ctrl+C								
×	Shea	ar	Ctrl+X								
Ē	Past	e	Ctrl+V								
11	Dele	ete	Del								
<	Rev	oke	Ctrl+Z								
<	Rec	overy	Ctrl+Y								
2	Loo	kup	Ctrl+F	♠	<b>~</b>		¥	Ē	ΠĪ	$\bigcirc$	
	Fon	t substi	tution	Revoke	Recovery	Сору	Shear	Paste	Delete	Lookup	
Сору		Select	the target	component a	and copy th	he compo	onent. T	he diffe	erence b	etween the	cutting
		operat	ion and the o	utting opera	tion is that	the origin	al comp	onent n	o longer	exists, but a	fter the
		copy c	peration, the	original con	nponent still	exists. Tł	ne shortc	ut key i	s Ctrl+C		
Cut		Select	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							object		
		component, execute the "Paste" operation to successfully transfer or copy the target component								ponent,	
		shorcut keys Ctrl+V									
Delete		Delete	Delete target object, shorcut keys Delete								

#### Lookup

Undo

Redo

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

Undo history operation, shorcut keys Ctrl+Z

### 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).

Restore the history operation that was undone, shorcut keys Ctrl+Y

	Find	and replace	×			Find and rep	blace	×
(	• Lookup	🔿 Rep	lace		🔿 Lookup		Replace	
– Lookup – Search range	全部 <ul> <li>Bit address</li> </ul>	✓ ○ Word		– Lookup – Search range	全部 <ul> <li>Bit address</li> </ul>		∕ ○ Word	
Equipme nt Address type Exten Format (ra	本地设备 PSB	1	<ul> <li>System register</li> <li>Custom label</li> </ul>	Address type Exten Format (r	本地设备 PSB 0 ange): DDDD[范問	✓ ÷ ■:0-9999]	·	System register Custom label
Replace Equipme nt Address type Address Format (ra	本地设备 PSB ~ 0 0 ange):DDDD[Extent:0-9999]	Address	<ul> <li>System register</li> <li>Custom label</li> </ul>	Replace Equipme nt Address type Address Format (r	信捷 XD/XL/XG D 0 ange):DDDD[Exte	系列(Modbus RTU) Statior numbe ● □ Addr nt:0-16777215]	2 v	System register Custom label
	Lookup	Find next	Replace all	▶ <u>\$2[1;</u> ] (g]:1	位置 :[00001]页面1 :[00001]页面1	Lookup Find 名称 LBO LBO	Replace PSB:0 PSB:0	Replace all
		Determine	Cancel Application			Dete	rmine Cancel	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 replace	×	Find and replace				×
	🔿 Lookup	Replace		(	🔾 Lookup	• Re	eplace	
Lookup Search range	全部	~		– Lookup – Search range	全部	~		
	Bit address	⊖ Word			Bit address		d	
Equipme nt	本地设备	v 🗌 Syste	em register	Equipme nt	本地设备		✓ □ System register	
Address type	PSB v	Custo	om label	Address type	PSB v	•	Custom label	
✓ Exten	0	~ 0		✓ Exten	0	~ 0		
Format (r	ange) : DDDD[范围 : 0 - 9999]			Format (ra	ange) : DDDD[范围 : 0 - 999	9]		
Replace Equipme nt	本地设备	✓ 🗌 Syste	em register	Replace Equipme nt	本地设备		✓ □ System register	
Address type	PSB v	Custo	om label	Address type	PSB v	•	Custom label	
Address	0	Address		Offset	0	✓ Address		
Format (r	ange):DDDD[Extent:0-9999]			Format (ra	ange):DDDD[Extent:0-9999	9]		
	Lookup	Find next Replace	Replace all		Lookup	Find next	Replace Replace all	I

Case 1: When the range is checked and the address offset is not checked, all the addresses found in the range will be replaced with replacement addresses. If the search target is a-b and the replacement target is c, the replacement result is a-b replaced by c. For example, if the search range is set to 0x0-0x10 and the replacement address is 1x0, then all 0x0-0x10 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					
2	Address tag library							
•	Advanced feature settings							
[¥]	Hir	Hire purchase						
٩	Preferences							
£	Information 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.

					Addı	ress tag librar	у				×
С	) User defined la	abel 💿 Syste	em register () (	CodeSys标签	Displa	ay by category					
Sea	rch	Add	d to Delete	Delete all Copy	Import	export					
	Label name	Equipment	Station	Address type	Address	Data type	Reading and	Power off	Function		^
Þ	用户权限…	本地设备		SPSB			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		
									Dete	ermine	

■ User defined label

Address tag library	×
● User defined label ○ System register○ CodeSys拆签 □ Query mode	
By device     Equipment     Addres       Query method:     Press picture slash window	
Search Add to Delete Delete all Copy Import export	
Label name Equipment Station Address type Address Use picture Use control	
	Determine
	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	bit ● Word						
	Determine Cancel Application							
	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 specified 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
	Part
	✓ Show Component ID ✓ Display part address
	Text size 8 Vumber of display 3 V
	Text color Show Snap Lines
- 1	
	Determine Cancel Application
Display	Set whether to display ID on the component. The ID content is fixed and cannot be modified.
component ID	When checked, the ID will be displayed in the upper left corner of the component in the form of
	a corner mark. The difference between checking and not checking is as follows:
	Display the ID: Not display the ID:
Character size	Set the text size of component ID. The larger the value, the larger the text
Display	Set whether to display the component address on the component. If checked, the address used
component	by the component will be displayed in the upper left corner in the form of a subscript. The
address	difference between checking and not checking is as follows
	Display the address:
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
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:

Space: 20					: 20	)		space: 5	

### Backup

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

		Preference set	ting	>
Display	Grid	backups	memory	
Maximum te	nporar	15 (Th	nis item cannot take effect unt	til the p
✓ Enable s	heduled backu	ips ackup		
Scheduled	oackup 5	Minut		
		Determ	ine Cancel Applic	cation
				_

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	
(	Abo	out
2	Hel	р

About	Version description and copyright description of HMI editing software
	Editing tools for HMI —
	HMI editing tool
	Upper computer version : V1.1.2.230301A
	Lower computer version : V1.1.4.230202
	版权所有 ( C ) 2021-Xinje Electronic.Co.,Ltd
	Detailed Ok

### 3-4. Tool bar

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

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

+	Ê		1	◆	¢		X	Ē	Ū.	2	*		<b>&gt;</b>	\$	۲	2	<b>A</b>	24
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. Arial • 9 •	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.

	] 🔂 🔂 🛨 🛨  →   +	토 🖬 🗮 🛱 🕪 토	
--	------------------	-------------	--

8	Left aligned, horizontal left aligned
₽+	Align Center, align Horizontal Center
0	Right aligned, horizontal right aligned
•	Top alignment, horizontal top aligned
ŧ	Middle alignment, horizontal middle aligned
	Bottom alignment, horizontal bottom aligned
€	Lock: lock the specified component to the position, which cannot be moved by dragging the
	mouse

đ	Unlock to move the specified component
<u>↑</u>	Move up one unit, where one unit is the vertical spacing of the grid in the preferences
Ŧ	Move down one unit, where one unit is the vertical spacing of the grid in the preferences
<b> →</b>	Move right one unit, where one unit is the vertical spacing of the grid in the preferences
<b>←</b>	Move left one unit, where one unit is the vertical spacing of the grid in the preferences
IE	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
<u>ت</u>	Combination
<b>1</b>	Ungroup
<b>+</b> ]+]	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
	Move the specified part to the next layer
	Rectangle arrangement, multiple selected components are arranged according to the set
	rectangle
<b>₽</b> ₽	Point arrangement
	Rectangle linear arrangement
$\bigcirc$	Circular linear arrangement
۵,	Linear arrangement
P.	Polyline arrangement

# 3-5. Screen editing area

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

I BO	. •		: :		11	: :	1	ł	1	ļ	i.	•
P SI	Batch copy					2	-	ł	2	ł	÷.	
	Component common		11	: : :	::	11	1	ł	: :	Ì	Ì.	
	Shear Ctrl+	X	11			: :	1	ļ		ļ	Ì,	
	Copy Ctrl+	c				22	-	ł	2	÷	i.	
:::	Delete De	el	::	: : :	11	1	1	l	: :	Ĵ	i.	
	Locking	ŀ						ł	2	ł	i.	
:::	Arrangement	<u>ا</u> (	٥	То	ppi	ng						]:
	Attribute		ъ.	Bottom setting							ŀ	
			٦	Up	per	st	ory					:
			٦	Ne	xt f	loc	or					

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	Previ	ew						4	^
Patter	Woi	rd						~	
Equip	信捷		)/X	L/)	(Gž	系列	J (	~	1
Statio	1							_	
Addre	D							~	1
Addre	0								
	- 0	1	2	3	4	5	6	7	
000000	00							į.	
000000	10								
0000002	20	ŀ	ŀ			ŀ	ŀ		
0000004	40	i.		Ē	Ē			Ē	
000000	50								
000000	60 70	Ŀ				Ŀ			
000000	60 70	ł	┝	÷	÷	ŀ	H	÷	

## 3-7. Component area

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

### 3-8. Output window

Display the compilation process and results of the current project.

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

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

Output window	- 4 ×
Output ErrorlList	
O desidenti a farm	- 1 -
	• + ^
Output ErrorIList	
Error A warning 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
$\bigcirc$	Scale down the screen editing area
	Whether to display grid

# 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.



#### 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

	Straight line	x
Basic propSecurity	Position	
Control ID	LO	
Describe		
– Straight line Starting	End	
X:	423 X: 166	
Y:	280 Y: 268	
Start arrow	tart arrow Draw the end arrow End arrow · · · · · · · · · · · · · · · · · · ·	
Line		-11
Туре:	v	
Color:	· · · · · · · · · · · · · · · · · · ·	
Width:	v	
Transparent		

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 prog Security se Position				
─ Display control ✓ Enable When				
Equip     本地设备     V     Set       Addre     PSB     V     0     0				
Enable sta <sup>r</sup> ON v ct designation				
User rights I Hide the component when the user has no permission range Required user 权限1 v				

Display control	Use bits to control whether to display the part. When the condition is not met, the component				
	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 本地沿客				
	nt n Address per				
	type				
	Address 0 System register				
	Address [Extent: 0 - 9999]				
	Iomat				
	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				
	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 pror Security set Position         Position         X         coord         Y         coord         268         (H)         Animation         Lateral movement         Longitudinal movement         Locking
Position	Set the X and Y coordinate values of the line with the upper left point of the screen as the
	coordinate origin $(0, 0)$

X coordinate	Set the X axis coordinate value of the line
Y coordinate	Set the Y axis coordinate value of the line
Size	Set the width and height of the line
Width (W)	Set the width of the line
Height (H)	Set the height of the line
Animation	Set whether the line can be moved
Lateral	Set the horizontal display position of the line according to the value of the register, that is,
movement	modify the X axis coordinate value. X axis coordinate value=X position+the value of the
	current register
Longitudinal	Set the vertical display position of the line according to the value of the register, that is,
movement	modify the Y axis coordinate value. Y axis coordinate value=Y position+the value of the
	current register
Locking	Set whether it can be moved during editing. When "Locking" is checked, it cannot be moved
	during editing. You can unlock it by unchecking this item, or you can set it by pressing the
	shortcut keys Lock $\stackrel{\textcircled{1}}{\frown}$ and Unlock $\stackrel{\textcircled{1}}{\frown}$ 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

	Circular	
Basic propSecurity	se Position	
Control ID	C0	
Describe		
✓ Line		
Туре:	v	
Color:	▼	
Width:	v	
Transparenc	100 🗘	
A sector		
Fill	Solid color v Fill color v	
Gradient	从左到右 v End color v	
Hatch		
Pattern		
Transpare		
It is used for s	system management component and cannot be	operated by users
Can be used to	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					
		oint 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)					
		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	
Display control I Enable When 隐藏 V Equip 本地设备 V Addre PSB V 0 0 Enable sta ON V ct designation	
User rights ■ 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

	Rectangle	×
Basic propSecurity	v se Position	
Control I	D RO	
Describe		
– Rectangular	angle	
Fillet diame	eter: 0	
✓ Line		
Type:	v	
Color:	✓	
Width:	v	
Transpare	nc 100 🗎	
Rectangular	area	
Fill		
Fill	Solid color V Fill color	
Gradient	从左到右 v End color	<b>→</b>
Hatch		
Pattern		
Transpare		
ranoparo		

Control 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	×			
Basic pror Security se Position				
Display control ✓ Enable When 隐藏 ✓				
Equip     本地设备     ✓     Set       Addre     PSB     Ø     Ø				
User rights       Image: State of the state of				
Required user 权限1 permission range				

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

### Position

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

### 4-1-4. Arc

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

Basic property

		Arc		×
Basic prop Sector	Security se Positio	on		
Control ID Describe	A0			
Arc Starting	270	Long side:	86	
Termination Center	360	Short side	2	
<b>X</b> :	153			
Y :	247			
Line				
Туре:				
Color:			¥	
Width:			~ V	
Transparenc			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			
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°			
	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°			
	Long side	Set the long side of the arc			
	Short side	Set the short side of the arc			
	Center	The X and Y coordinate positions of the arc center are displayed and cannot be modified			
		Start angle 0° Start angle 0°			
		End angle 90° End angle 180°			
Line	Туре	Set the line type of arc, including solid line, long dotted line, short dotted line and point			
		line			

Color	Set the line color of the arc
Width	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.

			Arc	×
Basic prop Sect	or Security se Positie	on		
✓ Draw as se	ctor			
A sector Fill				
Fill	Solid color	~	Fill color	·
Gradient	从左到右	~	End color	·
Hatch pattern Pattern				
Transpare			100 💂 %	

Sector	Select "draw as sector", and set the fill option					
Fill	Set the fill color, fill style, and transparency of the sector					
Pattern	Can be filled with solid colors, gradients and patterns					
Transparency	Set the transparency of the sector by sliding the slider (the closer the slider is to the left,					
	the lower the transparency percentage, and the more transparent the component is)					
	Transparency 100% 0%					
The set fill sty	le color and transparancy can be previewed in the box below the transparancy					

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

Security setting 

Arc	x
Basic prot Sector Security se Position	
Display control ✓ Enable When	
Equip     本地设备     Set       Addre     PSB     0     0       Enable sta     ON     v     ct designation	
User rights I Hide the component when the user has no permission range Required user permission 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 st Position	Basic propSecurity si Position
Control ID B0 Describe	Control ID B0 Describe
Broken line     Polygon     Line	O Broken line
Type: v Color: v	Type:   v     Color:   v     Width:   v
Width: Vitansparenc 100 🗊	Transparenc 100 🕏
Arrow	Fill Solid color V Fill color
Image: Construction of the start arrow     Image: Construction of the start arrow       Start arrow     Image: Construction of the start arrow       Starting     Image: Construction of the start arrow	Gradient 从左到右 v End color v Hatch pattern v Pattern v 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	
Transparency		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
Polygon
Basic prog Security se Position
Display control I Enable When 隐藏 V Equip 本地设备 V Set Addre PSB V 0 0 Enable sta ON V ct designation
User rights I Hide the component when the user has no permission range Required user permission range

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.

Form	×
Basic propSecurity se Position	
Control I(T0	
Interval Rows : Contour Colum <sup>3</sup> Cequal width Outer frame Style Colou	
Grid  Grid  Show row separator  Style  Colou  Show column separator	
Style Colou	
Line width 1 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		
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		
Li	ine width	Set the width of table lines		

Security setting

Form	×
Basic pror Security se Position	
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	

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.

		Scale	X	
Basi	ic propSecurity se Position			
c	Control ID S0			
D	escribe			
S	tyle			
	Style 水平 ~			
S	cale			
	Line style	Line width	~	
	Line color			
	Main engraving10	Main scale leng <sup>30</sup>	•	
•	✓ Sub engravin	Sub scale leng		
	∠ Axis			
T	ick marks			
E	✔ Use			
	Integer bi 3	Decimal p0		
	Upper lim 100	Register		
	Lower lim <sup>0</sup>	Register		
	Туреface			
	Typ 微软雅黑 V	常规 >		
	Col Size	12 ~		
	Scale reverse sort			
L	.ocatio 上 ∨			
		Determine Cancel	Application	
Control ID	It is used for system mana	gement control and canr	not be operated	by users
Describe	Can be used to comment of	on the purpose of this con	mponent	
Style	Set the scale style, include	ding horizontal, vertical	, upper semici	rcle, lower semicircle,
	full circle, and custom circ	cle		
			TT:	
	0 10 20 30 40 50 60 70 80 90 100 horizon	ntal	100 90 80 70	<pre>clinit</pre>
	81-101 83 90	upper semicircle	38 8-	
		35 20 20 20 20 20 20 20 20 20 20 20 20 20	custom	8
	60 	Socaros cool	circic	10
		lower comisingle		
	10	lower semicircle		
	vertical full circle			
Line style	Set the line style of the s	cale, including solid lin	e, long dotted	line, short dotted line,
	and point line			
Line width	Set the line width of the se	cale		
Line color	Set the line color of the sc	ale		
Main scale	Set the main scale number	rs		
Main scale	Set the main scale length			

Scale

length

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

■ Security setting

Scale	x
Basic pror Security se Position	
Display control     Imable	
When 隐藏  V Equip 本地设备  V Set Addre PSB V 0 0 Enable sta ON V ct designation	
User rights I Hide the component when the user has no permission range Required user permission range	

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.

QR code	×
Basic propesecurity se Position	
Control ID Q0	
Describe	
Type selection	
● QR code	
Code selection	
BarcodeType QRCode ~	
CodingMode AscI	
CalibrationStand L(7%)	
Content	
○ Fixed content ● Register assignment	
Equip 本地设备 v Set	
Addre psw v 0 0	
er of ;tom data type	
regist	

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	
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       Image: Code (It is mainly used in the Internet, logistics information tracing, retail billing applications, etc. For example, the QR code presented by mobile payment is the most commonly used QR code type)         DataMatrix       Image: Code (Mainly used in the industrial field to achieve quality traceability)         PDF417       Image: Code (It is mainly used for certificate management, report (It is mainly used for certificate management)	
		management, etc)	

		Bar code (Mainly used for commodity barcode)			
	Coding mode	bet 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%) O(25%)			
		$\bigcirc$ Fixed conte H(30%)			
		Calibration standard of QR code: When you encode QR code, you also create some			
		redundant data, which will help QR reader read QR code accurately. Even if part of			
		it is unreadable data, it will not affect reading correct information.			
		There are four levels of error correction in the QR code, the lowest is			
		L: Calibrate 7% of the font size			
		M: Calibrate 15% of the font size			
		Q: Calibrate 25% of the font size			
		H: Calibrate 30% of the font size			
Content	Fixed content	Display fixed content (click the blank part to set the content)			
	Register	Dynamically specifying QR Codes with registers			
	assignment				
	Equipment	Select the current device port for communication			
	Address	Set the QR code monitoring address and whether there is offset			
	Number of	Set the number of registers (you can enter the corresponding number of registers			
	register	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	After checking, you can set the data type. DWORD-32 bits, DDWORD-64 bits			
	type				

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

QR code	×
Basic prop Security se Position	
Display control	
✓ Enable	
When 隐藏 v	
Equip 本地设备 v Set	
Addre PSB V 0 0	
Enable sta ON v ct designation	
User rights	
Hide the component when the user has no permission range	
Required user 权限1	
permission range	

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".

Picture
Basic propSecurity st Position
Control ID G0
Describe
Select Custom
V twinkle Flicker fre 0.5
✓ Rotate Rotation a 0
✓ 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	
▼ Transparent processing step 2	
Use specified c step 3	
Picture preview	
Determine Cancel Applicati	on

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



(4) Click OK to display as shown below



Security setting

Transparent processing

Picture	x
Basic prog Security se Position	
Display control I Enable When 隐藏 Equip 本地设备 Addre PSB Enable sta ON Ct designation	^
User rights I Hide the component when the user has no permission range Required user permission range	

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

Position

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

# 4-1-10. Dynamic picture

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

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

Animation materials

	Rotate animation	×
AnimatioAnir	matic Security Position	
Control ID	TA0	
Describe		
	Delete Move up Move insert modify	

Control ID It is used for system management control and cannot be operated by us		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	
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         ● Rotate       ● Rotate		✓ Desalination       ✓ Desalination         ∩ Rotate       ∩ Rotate         □       ∩ Rotate         □       □	
Rotate After checking, the picture can be rotated at will to achieve the target effect (where target effect eff		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  Rotate  Rotate Rotate Rotate  Rotate Rotate Rotate Rotate Rotate Rotate Rotate Rotate Rotate Rotate Rotate Rotate Rotate Rotate Rotate Rotate Ro	

## Animation

Rot	ate animation
Animatic Animatio Security Position	
Cycle time 1000 Millis Use	e addre PSW0
Switch mode One way v Switching order: ar v	
■ Start Signal Equip 本地设备 Addre PSB ~ 0	V         Set           0         0
ct de	signation
Trigger m(上升沿 v	
✓ End signal	
Equip 本地设备 Addre PSB v 0	✓ Set 0
ct de	signation
Trigger mc上升沿 v	

Cycle time		Set the time of a cycle (that is, all pictures are switched). You can set a constant or specify it	
		through a register	
Switch	One way	Pictures are displayed from the first to the last, and then from the first to the last	
mode	Return	Pictures are displayed in the mode of first to last, then last to first, and then first to last	
Swite	hing order	Set the switching order of the picture, which is specified by the picture number (1-10, 10-1,	
		or randomly set by the user)	
(	Order	Pictures are displayed in order	
Reve	erse order	Pictures are displayed in reverse order	
Random Pictures are displayed randomly without fixed order, and they are displayed in the		Pictures are displayed randomly without fixed order, and they are displayed in the order set	
	by the user, separated by English commas ","		
Start signal If checked, the animation starts when the specified coil is ON or OFF; If not checked		If checked, the animation starts when the specified coil is ON or OFF; If not checked, the	
animation will always act		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       X         Equipme       本地设备       > Statio 0         Address       PSB       > User defined label         Address 0       > System register         Address       [Extent: 0 - 9999]         format	
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 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

Rotate animation	x
Animatic Animatic Security Position	
Display control ✓ Enable When 隐藏 ✓ Equip 本地设备 ✓ Set Addre PSB ✓ 0 0 Enable sta ON ✓ ct designation	
<ul> <li>✓ Hide the component when the user has no permission range</li> <li>Required user 权限1 ✓</li> <li>permission range</li> </ul>	

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 v	97 经历时间:4.1秒 端点坐标:X=304;Y=203 经历时间:2.6秒 端点坐标:X=214;Y=297 经历时间:2.9秒 端点坐标:X=99;Y=208 经历时间:1.9秒 端点坐标:X=190;Y=233	

Control ID		It is used for system management control and cannot be operated by users	
Describe Can be used to comment on the		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 lin		
		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	×
Coordinate	Control	_
🗸 Keep i	moving	
Switch	h mode One way v	
✓ Sta	art signal	-11
Equip	本地设备 v Set	
Addre	PSB v 0 0	
	ct designation	
Trigge	er m ON V	
Re:	set signal	
Equip	本地设备 v Set	
Addre	PSB ~ 0 0	
	ct designation	
Trigge	er meRising edg V	

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 path;		
	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 V Statio 0		
	Address PSB V User defined label		
	Address 0 System register		
	Address [Extent : 0 - 9999]		
	format		
	Address tag		
	Address tag		
	Determine Cancel Application		
A ddroog	Sat the chiest address of the control start signal and whether it is affect (that is succified.		
Address	set the object address of the control start signal and whether it is offset (that is, specified		
	indirootiv		

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

#### Example:

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



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

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

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

(1) Click the "Mapping/Function Canvas" on the menu bar or the sicon 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 P	arts Mapping	Tool View H	elp		
Newly build Oper	Preservation Clos	se Revoke Recov	ery Copy Shear Paste Delete Lookup Download Online simulation Offline Simulator Compile System settings Data sampling Alarm entry Re	Cipe editing	E. »
Engineering tree		<b>Q</b> :	< [00001]页面1* · · · ·	Outline	φ×
finite constraints     finite constraint	n pock		<ul> <li>()</li> <li< td=""><td>☑ [00001页图1 函数图布]-MC0</td><td>f @</td></li<></ul>	☑ [00001页图1 函数图布]-MC0	f @
Control window		<b>Q</b> :			
Buryar Anitator Tapping Cralok fina Cralo fina Cralo fina Data processing Data processing Alarm dindau	Bar blinh Water numm Firr dar N Delunn Delun	Ein Value Bortanole Ein Diction Einstian canues			
XV line chart	Report form	Formula table	Output window		
Recine transmission Inta table Snecial narts	Bie chart	XV trend chart	Output ErrorILisi Compile window25016 Compile window25000 Number of compiled resource files:39 Compile window2500		
A la		<i>I</i> A	0Error , Owarning , ONews		
		Touch screen mo	✓   del: TSS-700-E Net0:信捷 XD/XL/XG系列(Modbus TCP) COM2:信捷 XD/XL/XG系列(Modbus RTU) COM1:信捷 XD/XL/XG系列(Modbus RTU) X:303 Y:528	Address Preview 😑 O	utline

(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 MC0
	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	メ 🔄 🔄 📼 🕤 💣 🔝 代 🧧 🥃 hear Copy Paste Delete Revoke 重做 Compile 直线替换 注释 取消注释			
<ul> <li>● 函数功能块</li> <li>● 全 没件</li> <li>● 读文件</li> <li>● DrawMap</li> <li>● DrawMapClear</li> </ul>	<pre>11 //clear the image 12 DCMapClear (1); 13 14 15 </pre>	~ ~		
Function block API fu • •	2			

## 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.

Fu	unction key			×
Function Appearance Security set P	osition			
Control ID FB0 Describe				
Action 按下状态 V				
Selected		Optional Featu	res	
调用函数	step 2	· 设置	线圈	
step 3	Add to	设置	数据	
函数调	用	×	算	
Basic properties Security setting			输	
功能函数 DrawMap DrawMap	✓ Edit	Function	换 口	
DrawMapClear	τĥ			
step 4			5V	
			5V	
Determine	Cancel	Application	方	
	step 1	·····································	调用	

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

Function Appearance Security set Posit	ion
	✓ Use pictures
	Status 0 v
DrawMap	Name button_05_a
·	Categorysvg
	Dimensic 80 × 42
Channe an anna an	More pictures
Change appearance	More pictures
Fill	·
State 0 🔹 🗹 Displ	lay text Apply fonts to each
Text     O Multiling	
Dra	wMap
	•
Typetace	単加して
	THE REPORT OF TH
Size 12	

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.

	Static text properties
	Basic propeSecurity se Position
r	Control ID ST0
	Describe
	Tevt     Multiling
	text Typeface Ty Times New Roman 、 常规 、 Co Size 12 、 Ali Middle Center 、 Adaptive size
	Frame Thi 无边框 v Style v Co 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
T. (	

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

# 

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

	Static text pro	perties	×	
Basic propeSecurity se	Position			Basic propeSecurity
Control ID ST0				Control ID ST
Describe				Describe
O Tevt	ultiling	新增	- 11 11	O Tevt
Enable			- 11 11	✓ Enable
				Form [II
	text			

Control ID	ST0		
Describe			
	Multiling		编辑
✓ Enable Form	[ID: 000]	v Num 1	~

## ■ Security setting

Static text properties		
Basic prope Security set Position		
Display control		
✓ Enable		
When 隐藏 V		
Equip 本地设备 v Set		
Addre psg v 0 0		
Enable sta <sup>ON</sup> v ct designation		
User rights		
Hide the component when the user has no permission range		
Required user 权限1 permission range		

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

Position

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

## 4-2-2. Dynamic text

Different characters can be displayed according to different register values.

1. Click "Part/Text/Dynamic Text" in the menu bar or 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 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".

	Dynamic text configuration	
	Basic prope Display Security se Position Control ID DTO Describe Read address Equip 本地设备	
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 dynamic text object address		
Equipment	Set the device port for communication		
Address	Set target register number		
Data type	Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD, Hex, Signed, Unigned,		
	Floating number		
Set	Click "Set" to enter the address setting interface, where you can set and use system registers		
	and user-defined tags. You can click the address tag library below or the project tree library		
	address tag library to set the tags used (see chapter 5-2 Address Tag Library for the use of		
	address tag library and user-defined tags)		
	Address Care Statio		
	nt Address PSW 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	Set the current address offset. The current register address changes with the indirectly		
assignment	specified register value, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). For example: the		
	current register address is PSW0, if the indirectly specified address is PSW100; When the		
	value of PSW100 register is 0, the register controlling this element is still PSW0; When the		
	value of PSW100 register is 1, the register controlling this element is PSW1 (and so on)		
Inquiry	Dynamic text configuration		
	Basic prop∉ Display Security s∉ Position		
	Control ID DT0		
	Peed address		
	Read address       Equip       本地设备       V   Set		
	Addre p <sub>SW</sub> v 0 0 Data		
	type by the type b		
	PSW PSW		
	SPSW SPSW		
	SPEW		
	Searchable address (the address bar of registers involved in the software will have input query,		
	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		
		Serial         Numerical value         Text description string         Add to           0         0         text1         Image: Serial string         <		
		1 1 test2 Delete		
		Move up		
		Move		
		Typeface		
		Ty 微软雅黑 V 常规 V		
		Ali Middle Center		
		Frame		
		Ini 元辺框 v Style v Co		
		可变字符串1		
		Determine Cancel		
Со	ntent	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 contents under		
		"Click/Double click" text description string from the text library, and click the ""		
		Text description string		
		Text1		
		You can enter the multilingual settings, or the		
		project tree - Library - Label Multilanguage - on the left side of the project 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		
	down	Move the target option down one physical location		
S	tate	You can check the dron-down list to set the font and horder corresponding to the		
6	late	corresponding register value (or click the "apply fonts to each state" button behind to set the		
		font and border in all states)		
Tvr	oeface	Set the text font size color and alignment (the position displayed in the box). You can check		
-) [		the adaptive size, that is, drag the mouse to change the size of the part, and the text size will		
		change accordingly		
Frame Set the thickness, style and color of the border		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.





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		
Basic prop Display Security se Position		
Basic prob Display Security se Position Display control ✓ Enable When 隐藏 ✓ Equip 本地设备 ✓ Set Addre PSB ✓ 0 0 Enable sta ON ✓ ct designation User rights ✓ Hide the component when the user has no permission range Required user 权限1 ✓		

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.

Numeric input attribute			
Basic proDa	ta inp Scale co Notice Appeara Security Position		
Contr	DIO DIO		
Descr	be		
✓ Read / write using different addresss       Read address       Equip     本地设备       Addre     PSW       Data     Word       Word     Unsignec       type     ct designation			
Write address			
Equip	本地设备 v Set		
Addre	PSW 🗸 0 0		
Data type	Word VUnsignec Ct designation		

Control ID	It is used for system management control and cannot be operated by users		
Describe	Can be used to comment on the purpose of this component		
Read/write using different	If not checked, the same address is used for reading and writing		
addresses			
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)		
	Address		
	Address		
	Address × Equipme 本地设备 × Statio 0		
	Address × Equipme 本地设备 v Statio 0 n Address PSW v User defined label		
	Address     ×       Equipme     本地设备     、     Statio     0       nt     Address     PSW     ✓     User defined label       Address     0     □     System register		
	Address     ×       Equipme     本地设备     、     Statio     0       nt     Address     PSW      User defined label       type     User defined label      System register       数据类型     Word     V     Unsigned		
	Address       ×         Equipme       本地设备       、       Statio       0         nt       0       n       0       0         Address       PSW       V       User defined label         Address       0       □       System register         数据类型       Word       Vunsigned       ✓         Address       [Extent : 0 - 9999]       ✓		
	Address       ×         Equipme       本地设备       、 Statio       0         nt       Address       PSW       User defined label         Address       0		
	Address       ×         Equipme       本地设备       、         nt       Address       Statio       n         Address       PSW       User defined label       User defined label         Address       0       System register         数据类型       Word       Unsigned       ×         Address       [Extent : 0 - 9999]        6		
	Address       ×         Equipme       本地设备       、 Statio       0         nt       Address       PSW       User defined label         Address       0		
	Address       ×         Equipme       本地设备       、 Statio       0         Address       PSW       User defined label         Address       0       System register         数据类型       Word       Unsigned          Address       [Extent : 0 - 9999]           Address tag       Determine       Cancel       Application		
	Address       ×         Equipme       本地设备       、 Statio       0         nt       Address       PSW       User defined label         Address       0       ○ System register         数据类型       Word       Unsigned       ✓         Address       [Extent: 0 - 9999]       ✓       Address tag         Determine       Cancel       Application		
Indirect assignment	Address       ×         Equipme       本地设备       、Statio         nt       Address       PSW         Address       PSW       User defined label         Address       0       System register         数据类型       Word       Unsigned       System register         数据类型       Word       Unsigned       Address format         Extent:       0.9999]       Address tag       Determine         Cancel       Application       Application		
Indirect assignment	Address       ×         Equipme       本地设备       、 Statio          nt       n           Address       PSW       · User defined label          Address       0            Address       0            Address       0            Address       [Extent:0-9999]            Address [Extent:0-9999]             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, 2, 2, 2, 2, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5,		
Indirect assignment	Address       ×         Equipme 本地设备       「「」」」         nt       「」」」         nt       「」」」         Address       PSW         Ype       User defined label         Address       ①         Address       ①         Address       ①         System register       ③         Øbetermine       Cancel         Application         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         Note the current register address is PSW0, if the indirectly specified		
Indirect assignment	Address       ×         Equipme 本地设备       「         nt       Address         Address       PSW         Vype       User defined label         Address       0         Address       0         K振笑型       Vord V Unsigned V         Address       Extent: 0 - 9999]         Image: Cancel Application       Address tag         Determine Cancel Application       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		
Indirect assignment	Address       ×         Equipme 本地设备       、         nt       Address         Address       PSW         Address       0         Address       0         System register         Wiggetter       Word         Unsigned       System register         Address       [Extent:0-9999]         Determine       Cancel         Application       Address tag         Determine       Cancel         Application       (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		

#### **Example:**

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

Read / write using different addresses		
Read / \	vrite address	
Equip	本地设备 v Set	
Addre	PSW 🗸 0 0	
Data type	Word V Unsignec Ct designation	

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)

✓ Rea	d / write using different addresses		
Read ad	dress		
Equip	本地设备 v Set		
Addre	PSW 🗸 0 0		
Data type	Word Vunsignec Ct designation		
Write address			
Equip	本地设备 v Set		
Addre	PSW ~ 1 0		
Data type	Word V Unsignec Ct designation		

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

Numeric input attribute			
Basic pro Data inpuScale co Notice Appeara Security Position			
Display Leading 0			
Number of digits			
Integer digit 4 📮 Decimal 0 📮			
Limit			
✓ Enable input upper limit			
Upper 9999 Lower 0			
limit Reg			
✓ Enable alert color			
Upper imit			
Lower			
Pattern O Bit control			
Input order			
After the input is completed, it			
Input order 1 Group 1			
Keyboard setting up			
Display upper and lower			
Keyboard number [25010]KeyBoard_Num_01 v			
Keyboard pop-up position Middle_Center V			
Determine Cancel Application			

Dis	splay	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 supp		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)	
Num	ber of	Set the integer and decimal digits displayed in the register	
di	gits		
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	

Dattam	There are tough control and hit control. Tough	control many to start the input measure by touching			
Pattern	There are touch control and bit control. Touch	control means to start the input program by touching			
	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 pen up, click ENT to input date, and click ESC.				
	state, when the coil is ON, trigger the keyboar	d to pop up, click ENT to input data, and click ESC			
	to cancel the keyboard pop up				
Input order	If it is enabled, the keyboard will jump to the	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			
	■ PSW2 ■ Enable input order	Enable input order PSW3			
	After the input is completed, it	✓ 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 c	rder is 1 and 2 respectively; PSW2 and PSW3 are in			
	same group, and the order is 1 and 2 respective	ely;			
	When you click PSW0, the keyboard will	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 check "No more input in sequence after input", the				
	keyboard will not jump to the next componen	t in the same group after completing the input at the			
	selected component. If you want to input, you	n need to click the next component again for input);			
	Similarly, enter PSW2 and PSW3.				
	Example 2 (bit control). The data input con	ntrols PSW0 PSW1 PSW2 and PSW3 are set as			
	follows	alois 15000, 15001, 15002 and 15005 are set as			
	Pattern	Pattern			
	O Touch   Bit control PSB0	○ Touch			
	Input order PSW0	Input order PSW1			
	Enable input order	Enable input order			
	Investor 1	Input order			
	Pattern O Touch	Pattern O Touch			
	Input order	Input order			
	PSW2	PS₩3 ✓ Enable input order			
	Input order	Input order			
	PSW0 and PSW1 are in same group, which ar	e 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 o				
	1 and 2 respectively;	· _ ·			
	When PSB0 and PSB1 are set to OFF clicking	PSW0. 1. 2 and 3 will not non up the keyboard			
	When PSB1 is set to OFF and PSB0 is set to ON the keyboard will jump out for PSW0 After				
	entering the value aliely ENT the least and	rill automatically jump to DSW1. After antering the			
	entering the value, click EN1, the keyboard v	And autoinatically 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
	<ul> <li>1. The keyboard suffix UL is the keyboard with upper and lower limits, such as [25009] KeyBoard_Num_01UL</li> <li>2. Users can also customize the keyboard.</li> <li>(1) Select the project tree - user form, right-click Add to create a new user form.</li> <li>User formAdd to</li> <li>(2) "Used as keyboard display" should be selected for name and size of user-defined system form.</li> </ul>
	Height 480         Overlay window         Top floor 元         Bottom 元         Pop up window         Image:
	keys. In the following example, 0-9, ESC and ENT keys are placed.

	1       1
4	Depent he numeric input control, and a newly created "User defined keyboard" will appear at
th	ne keyboard number. After selecting, click OK
	Keyboard setting up
	✓ Enable pop-up keyboard
	Display upper and lower
	Keyboard number       [25010]KeyBoard_Num_01         Keyboard po       [0500] User Defined keyboard         [25009]KeyBoard_Num_01UL       [25009]KeyBoard_Num_01         [25011]KeyBoard_Hex_01       [25011]KeyBoard_Hex_01
đ	At this time, click the numeric input control, and the displayed keyboard is the keyboard efined by yourself

■ Scale conversion

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

		Numeric ii	nput attribut	e ×	
Ba	sic pro Data	inp Scale cor Notice Appeara	Security Posi	tion	
	✓ Input s Data source	scale conversion	Conversi on value		
	Upper limit	9999	Upper limit	99999	
	Lower limit	0	Lower limit	0	
	Preview 设备值 0	Lower limit of HMI = 0 +( 0	Data source - 0	Upper limit Lower limit 9999 - 0 9999 - 0 Data Data	
	✓ Display Data source	y scale conversion	Conversi on value	source source	
	Upper limit	9999	Upper limit	9999	
	Lower limit	0  Reg	Lower limit	0  Reg	
	Preview — HMI 0	Lower limit of 设备值 = 0 +( 0	Data source	Upper limit Lower limit 9999 - 0 9999 - 0 Data Data source source	
				Determine Cancel	
Input scale conversion	The inpr conversi source at register. written it	ut data is obtained from on. To select this function and conversion value. The The data source is the data into the lower communication	n the origin on, you need to upper and ata input on tion device	hal data in the operating obj d to set the upper and lower l lower limits can be constant of the HMI, and the conversion after proportional conversion	ect register after limits of the data r specified by the value is the data
Display scale conversion	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 UNI after propertienel conversion.				
Upper lower limit	Limit the	e upper and lower limits of	of the input (	(can be specified through the re-	egister)



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 prc Data inplScale 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 Limit	Input scale conversion     Conversi       Data     on value       source     on value       Upper     9999       limit     Reg
✓ Enable input upper limit     ✓ Enable input lower limit       Upper     9999       limit     Lower	Lower 0 Lower 0 limit Reg
Reg     Reg       Enable alert color     Upper       Imit     winkle       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 Data Data source Source
Pattern © Touch O Bit control Input order D Enable input order	Image: Display scale conversion     Conversion       Data     Conversion       source     on value       Upper     9999       limit     Reg
	Lower 0 Lower 0 Iimit Reg
Keyboard setting up         Image: Chable pop-up keyboard         Display upper and lower         Keyboard number         [25010]KeyBoard_Num_01         Keyboard pop-up position         Middle_Center	Preview     Lower limit     Data source     Upper limit     Lower limit       HMI     of     设备值     source     9999     0       0     =     0     +(     0     -     0     )x       9999     -     0     0     Data     Data       0     a     Data     bata     source
Determine Cancel	Determine Cancel

Notice

	Numeric input attribute	×
Basic pro Data i	np Scale co Notice Appeara Security Position	
Before writAf	ter writi	
✓ Notifica	tion bit	
Write of	on 🔿 Write off	
Equip Addre	本地设备 く Set PSB く 0 0	
	ct designation	-
Equip Addre Data type Write value	本地设备 PSW V 0 0 Word V Unsignec Ct designation	

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.



Nume	eric input attribute	1	x
Basic pro Data inp Scale co Notice Ap	peara Security Posit	ion	
	✓ Use picture	res	
	Status	0	~
0000	Name	data_01	
	Catego	ŋsvg	
	Dimens	ic 80 × 30	
✓ Frame Border style Solid color	✓ Border	color	<b>v</b>
Туреface			
Ty 微软雅黑	∨ 常规	$\checkmark$	
Co	Size 12	$\sim$	
Ali Middle_Center V	Adaptive si	ze	

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

Basic prc Data inp	Scale co Notice Appeara Security Position
Display contro Communication Display control Display control Display control	
Equip Addre Enable	本地设备 · Set PSB · O O sta ON · ct designation
Enable contro Enable Equip Addre	本地设备 v Set Set
Enable User rights	sta <sup>I</sup> ON v ct designation
When the Hide the	e user has no permission range, a prompt window will pop up component when the user has no permission range
Required	

Operation

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 [Dv]=D [x+Dv 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.

	1 1 4 4		• • • • • • • • • • • • • • • • • • • •	1 1 1
I here are several combination	ns when logging ir	• I HAR the use at user	rights see chanter 3-3-	HILE
I HULL ALL SUVULAI COMDINALIO	ing which logging h	. If of the use of user	Tights, see chapter 5-5-1	
		1		

#### - 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				
$\square$ The permission will be cancelled after the operation is completed				
✓ When the user has	When the user has no permission range, a prompt window will pop up			
Hide the compone	ent when the user	has no permission range		
Required user	权限1	$\checkmark$		

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	是示			$\times$
	🗙 操作级别	<u></u> 临,悠	欧没有此权降	艮
	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 will	be cancelled af	fter the operation is completed	
When the user has	no permission r	range, a prompt window will pop up	
✓ Hide the compone	nt when the use	er has no permission range	
Required user	权限1	$\checkmark$	

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 will	be cancelled after t	the operation is completed	
✓ When the user has	no permission range	e, a prompt window will pop up	
Hide the component	nt when the user has	is 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	t			$\times$
Ø	操作级别	高,	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.

User rights		
The permission wi	II be cancelled a	after the operation is completed
When the user has	no permission	range, a prompt window will pop up
✓ Hide the component	ent when the us	er has no permission range
Required user	权限1	$\checkmark$

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       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
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
	Address X Equipme 本地设备 X I Address PSW V User defined label Address 0 System register 数据类型 Word V Unsigned V Address [Extent : 0 - 9999] 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)

Data display

	Numeric dis	play properties
Basic pror Dat	a displescale con Appearan Se	ecurity s Position
✓ Display	y 🔽 Leading 0	
- Number o	f digits	
Integ	ger digit 4	Decimal 0
– Limit –		
🗹 Enable	e alarm upper limit	Enable alarm lower limit
Upper	9999	Lower 0
limit	Reg	limit Reg
🗹 Enable	e alert color	
Upper limit	<b>~</b>	☐ twinkle
Lower limit	×	twinkle

	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	Enable alarm upper limit	Set the upper limit of alarm input, which can be specified by register
	Enable alarm lower limit	Set the lower limit of alarm input, which can be specified by register
	Enable alert color	Set the warning color of the upper and lower limits and whether it flickers

■ Scale conversion

	Numeric	display proper	ties	x
Basic pror Dat	a displ Scale convAppearan	Security s Posit	ion	
✓ Scale Data source	conversion	Conversi on value		
Upper limit	9999	Upper limit	9999	
Lower limit	0 Reg	Lower limit	0	
Preview	Lower limit	Data	Upper limit Lower limi	t
HMI	of 设备值	source	9999 - 0	
~	+(	- 0	99999 - 0	
			Data Data source source	

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

Numeric displa	y properties	×
Basic pror Data displ Scale con Appearan Securi	ity s Position	
	✓ Use pictures	
	Status 0 v	
****	Name data_01	
	Category svg	
	Dimensic 80 × 30	
Change appearance	More pictures	
☐ 🔽 Frame		
Border style Solid color V	Border color	
Typeface		
y 微软雅黑 >	常规	
Co Size 12	$\checkmark$	
Ali Middle_Center V	laptive size	

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

■ Security setting

Numeric display properties	x
Basic pror Data displ Scale con Appearan Security se Position	
Display control I Enable When 隐藏 V Equip 本地设备 V Set	
Addre PSB 0 0 Enable sta ON v ct designation	
<ul> <li>✓ Hide the component when the user has no permission range</li> <li>Required user permission range</li> </ul>	

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

2. 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.

	Character display properties
В	asic properAppearance Security set Position
	Control ID CD0
	Coding rules ASCII ✓ ☑ 空字符显示为空格 ✓ Pass ☑ High and low
	Read address     Set       Equip     本地设备     ✓       Addre     PSW     ✓       Numb     1       er of     ;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	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 bade B bade D
	ABCD is set to DWORD type of the same address.
	Input abcd to A normally, then A and C display abcd, and B/D displays badc because high/low
	byte conversion is checked.
	Input abcd to B normally. At this time, B and D display abcd, and A/C displays badc because
	high/low byte conversion is not checked.

	Note: 1. Taking Xinje PLC as an example, the display of characters in the monitor is consistent				
	with that of characters without checking high/low byte conversion.				
	2. High low byte conversion refers to the conversion of both input and display of character.				
	Check the character input of high-low byte conversion. When using the keyboard to input ab,				
	perform high-low byte conversion, write ba into the register, read ba from the register when				
	reading, and then perform high-low byte conversion to display ab				
Read address	Set the read/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 v Set				
	Addre D v 5000 1				
	Numb 1 DWord V				
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) V Statio 1				
	Address D Viser defined label				
	Address 5000				
	本方理教 1 DWord V				
	Address [Extent: 0 - 16777215]				
	format				
	Address tag				
	Determine Cancel Application				

■ Character input

	Basic pro Character Notice Appearar Securi	ty · Position	
	Pattern		
	Touch		
	Input order		
	After the input is completed, it		
	Input order 1	Group	
	Keyboard setting up □ ☑ Enable pop-up keyboard Keyboard number [25007]KeyBoard_As	sc_01U	
	Keyboard pop-up position Middle	e Center	
	*If an external USB keyboard is used, or the located in the direct / indirect window, or the same window with the current compo "use pop-up keyboard"	ne keyboard is the keyboard is in onent, do not check	
Pattern	There are touch control and bit control. Touch m	eans to start the input j	program by touching th
	component, and bit control means to start the inpu	ut program when the sp	ecified coil is ON. In th
	bit control state, when the coil reaches ON, trigg	ger the keyboard to pop	o up, click ENT to ent
	data and click ESC to cancel the keyboard non up		
	dutu; und ener EDE to euneer the reyoodra pop up		
put order	If it is enabled, the keyboard will jump to the cor	responding input compo	onent, it can set differe
put order	If it is enabled, the keyboard will jump to the cor groups.	responding input compo	onent, it can set differe
put order	If it is enabled, the keyboard will jump to the cor groups. Example 1 (touch control): The character input c	responding input compo component PSW0, PSW	onent, it can set differe
put order	If it is enabled, the keyboard will jump to the cor groups. Example 1 (touch control): The character input c set as follows:	responding input compo component PSW0, PSW	onent, it can set differe (1, PSW2 and PSW3 a
put order	If it is enabled, the keyboard will jump to the cor groups. Example 1 (touch control): The character input c set as follows:	responding input compo component PSW0, PSW	onent, it can set differe (1, PSW2 and PSW3 a PSW1
put order	If it is enabled, the keyboard will jump to the corgroups. Example 1 (touch control): The character input c set as follows: $\boxed{\frac{\text{Input order}}{\text{Input order}} + \frac{\text{PSW0}}{\text{Input order}} + \frac{1}{\text{Input order}} + 1$	responding input compo component PSW0, PSW	onent, it can set differe (1, PSW2 and PSW3 a PSW1 ed, it
put order	If it is enabled, the keyboard will jump to the cor groups. Example 1 (touch control): The character input c set as follows:	responding input component PSW0, PSW	onent, it can set differe (1, PSW2 and PSW3 a PSW1 red, it Group 1
put order	If it is enabled, the keyboard will jump to the cor groups. Example 1 (touch control): The character input c set as follows:	responding input component PSW0, PSW	onent, it can set differe (1, PSW2 and PSW3 a PSW1 ed, it Group 1
put order	If it is enabled, the keyboard will jump to the cor groups. Example 1 (touch control): The character input c set as follows: Input order PSW0 After the input is completed, it Input order PSW2 After the input is completed, it	responding input compo component PSW0, PSW Input order ✓ After the input is complete Input order	onent, it can set differe (1, PSW2 and PSW3 a PSW1 red, it Group 1 PSW3 red, it

Pattern O Touch	Pattern O Touch O Bit control PSB0
Input order	Input order
Input order 1	Input order 2
Pattern Touch  Bit control PSB1 PSW2	Pattern O Touch   Bit control   PSB1   PSW3
Input order	Input order
Input order	Input order 2

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	<ul> <li>Reverse</li> </ul>	O Instantaneous on	
Keyboard	Set w	hether to pop up the	keyboard, keyboa	rd style selection,	and keyboard pop-up position	
setting up						

Notice

	Character input properties
	Basic pro Character Notice Appearar Security Position
	Before writAfter writi
	✓ Notification bit
	Write on     Write off
	Equip 本地设备 v Set
	Addre PSB V 0 0
	ct designation
	✓ Notice word
	Equip 本地设备 v Set
	Addre pSW V 0 0
	Data Word V Unsignec Ct designation
Notice If	Enable the notice, you can choose to set the target coil ON/OFF before/after writing, or set the
tar	get register to a constant (notification word) before or after writing. If Enable is not checked
the	e notification function will not take effect

Appearance

Character input prop	oerties ×
Basic pro Charactel Notice AppeararSect	urity · Position
	✓ Use pictures
	Status 0
AA	Name data_0
	Category svg
	Dimensic 80 × 30
Change appearance	More pictures
✓ Frame	
Border style Solid color v	Border color 🔲 🗸
Typeface	
Ty 微软雅黑 >	常规 >
Co Size 1	2 🗸
Ali Middle_Center V	Adaptive size

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

Security setting

	Charac	ter input p	properties	5	x
Basic pro Characte	Notice	Appearar	Security s	Position	
Operation con	firmation	delay			
<ul> <li>Confirmat</li> </ul>	ion befor	e Waiti secor	ng time nds	1	•
Display contro	I				
✓ Enable					
When	隐藏	~			
Equip	本地设备			~	Set
Addre	PSB		~ O	0	
Enable	sta <sup>.</sup> ON	~	ct desig	nation	
Enable control					
<ul> <li>Enable</li> </ul>					
Equip	本地设备			~	Set
Addre	PSB		~ O	0	
Enable	sta ON	$\checkmark$	ct desig	nation	
User rights					
The perm	ission will	be cancell	ed after the	e operati	on is
When the	user has	no permiss	ion range, a	a promp	t
Hide the d	compone	nt when the	e user has r	io permi	ssion
Required	user	无		~	
			Determir	ne	Cancel

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

Position

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

# 4-2-6. Character display

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

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

Basic

Character display properties
Basic proper Appearance Security set Position
Control ID CD0
Describe
Coding rules ASCII v 口空字符显示为空格
Pass High and low
Read address
Equip 本地设备 v Set
Addre PSW V 0 0
Numb     1       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, 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 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	
D 1 11	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	
	during manifering, etherwise the sheresters will be displayed emergine to the high and law	
	but on of monitoring)	
Sat	Click "Set" to enter the address setting interface, which can also be used to set system	
501	Det Ulick "Set to enter the address setting interface, which can also be used to set syste	
	library	
	Addross	
	Equipme statio	
	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 proper appearance secu	
	✓ Use pictures
	Status 0 V
АА	Name data_01
7.01	Category svg
	Dimensic 80 × 30
✓ Frame	
✓ Frame Border style Solid color	r v Border color
Frame Border style Solid color Typeface	r v Border color
<ul> <li>✓ Frame</li> <li>Border style Solid color</li> <li>Typeface</li> <li>Ty 微软雅黑</li> </ul>	r v Border color v
<ul> <li>✓ Frame</li> <li>Border style Solid color</li> <li>Typeface</li> <li>Ty 微软雅黑</li> <li>Co ▲</li> </ul>	r v Border color v 学業規 Size 12 v

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

Security setting

Character display properties	×
Basic prope Appearance Security sett Position	
Display control I Display control I 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	

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  $\stackrel{\texttt{PX}}{\blacksquare}$  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.



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	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, 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		
	Address PSW V User defined label		
	type		
	合行頭奴 ⊥ Word ✓		
	Address [Extent: 0 - 9999] format		
	Address tag		
	Determine Concel Application		
	Determine Cancer Application		

Input

Chinese input
Basic prop Input Notice Appearand Security se Position
□ When password * is checked, the contents of the register are displayed as "**** "
Pattern
Input order
✓ Enable input order
After the input is completed, it
Input order 1 Group
Keyboard setting up ✓ Enable pop-up keyboard
Keyboard number [25007]KeyBoard_Asc_01U v
Keyboard pop-up position Middle_Center V
Keyboard preview
<sup>60</sup> <sup>KB0</sup> KB1 KB2 KB3 KB4 KB5 KB6 KB7 KB8 KB9 KB40 1 2 3 4 5 6 7 8 9 0 Backspace
KB10 KB11 KB12 KB13 KB14 KB15 KB16 KB17 KB18 KB19 KB43 KB43
KB49 KB20 KB21 KB22 KB23 KB24 KB25 KB25 KB27 KB28 KB29 Caps A S D F G H J K L Enter
KB41 KB30 KB31 KB32 KB33 KB34 KB35 KB36 KB45 KB45 KB45 KB46 KB48
KB50 Shift KB42 Space KB38 KB39 KB47 - + KB47

Password	After checking, the user will not see the entered to	ext, and the text will be displayed as "* * *"
Pattern	There are touch control and bit control. Touch r	neans to start the input program by touching the
	component, and bit control means to start the inp	out program when the specified coil is ON. In the
	bit control state, when the coil reaches ON, trig	ger the keyboard to pop up, click ENT to enter
	data, and click ESC to cancel the keyboard pop up	р.
Input order	If it is enabled, the keyboard will jump to the co	rresponding input component, it can set different
	groups.	
	Example 1 (touch control): The Chinese input co	mponent PSW0, PSW1, PSW2 and PSW3 are set
	as follows:	
	Input order PSW0	Input order PSW1
	After the input is completed, it	After the input is completed, it
	Input order 1 🖉 Group 1 🖢	Input order 2 Group 1 🗘
	Input order PSW2	Input order PSW3
	After the input is completed, it	✓ 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 orde	er is 1 and 2 respectively; PSW2 and PSW3 are in
	same group, and the order is 1 and 2 respectively.	
	When you click PSW0, the keyboard will pop	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 PSW3	1 (if you check "No more input in sequence after
	input", the keyboard will not jump to the next co	omponent 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 PSW1
Input order	Input order
Input order	Input order 2
Pattern O Touch  Bit control PSB1 PSW2	Pattern O Touch   Bit control PSB1 PSW3
Input order	Input order
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 O Set off O Reverse O Instantaneous on
Keyboard	Set whether to pop up the keyboard, keyboard style selection, and keyboard pop-up position
setting	

Notice

	Chinese input	x
Basic prop In	put Notice Appearant Security st Position	
Before wriaf	ter writ	
✓ Notifica	tion bit	
Write of the other sectors and the other sectors are also been sectors and the other sectors are also been sectors and the other sectors are also been	on O Write off	
Equip	本地设备 v Set	
Addre	PSB    0 0	
	ct designation	
✓ Notice	word	
Equip	本地设备 v Set	
Addre	PSW ~ 0 0	
Data type	Word V Unsignec Ct designation	
Write	0	
Value		

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

■ Appearance

Chines	se input	×
Basic prop Input Notice AppearandSe	ecurity se Position	
	✓ Use pictures	
	Status 0 v	
ф	Name data_01	
	Category svg	
	Dimensic 80 × 30	
Change appearance	More pictures	
✓ Frame		
Border style Solid color V	Border color	
Typeface Ty 微软雅黑 Co Size 12 Ali Middle_Center V A	常规  ✓ ✓ daptive size	

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
Basic prop Input Notice Appearan Security se Position
Operation confirmation delay
Confirmation before Waiting time seconds
Display control
✓ Enable
When 隐藏 V
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 v 0 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

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.

	Chinese display ×
Basic prope	PrAppearance Security set Position
Contr	ol ID TD0
Descr	ibe
Codir rule	GB2312
- Read ad	ldress
Equip	本地设备 v Set
Addre	PSW v 0 0
Numb er of	1 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	It defaults to GB2312 and cannot be modified				
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				
	Addross				
	Address				
	Address ×				
	Address × Equipme 本地设备 v Statio 0 n Address · · · · · · · · · · · · · · · · · ·				
	Address × Equipme 本地设备 v Statio 0 n Address PSW v User defined label				
	Address     ×       Equipme 本地设备 、 Statio 0 n     0       Address PSW 、     User defined label       Address 0     System register				
	Address     X       Equipme 本地设备     Statio 0       nt     Statio 0       Address     PSW       Address 0     User defined label       Address 1     System register       寄存器数 1     Word V				
	Address     ×       Equipme 本地设备 、 Statio 0 n     Statio 0 n       Address PSW 、     User defined label       Address 0     System register       寄存器数 1     Word 、       Address [Extent : 0 - 9999]     Statio 0 n				
	Address     ×       Equipme 本地设备 、 Statio 0 n       nt       Address       PSW 、       User defined label       Address 0       System register       寄存器数 1       Word 、       Address       [Extent : 0 - 9999]				
	Address     X       Equipme 本地设备 、 Statio 0 n     0       Address PSW 、     User defined label       Address 0     System register       寄存器数 1     Word 、       Address [Extent:0-9999]				
	Address       ×         Equipme nt nt Address       *       Statio 0 n         Address       PSW ~       User defined label         Address 0       System register         Address 1       Word ~         Address [Extent : 0 - 9999]       Address tag				
	Address       ×         Equipme       本地设备       ✓         nt       Address       O         Address       PSW       ✓         Address       O       ○         Address       O       ○         Address       O       ○         Address       O       ○         Address       [Extent: 0 - 9999]       ○         Address tag       O       O         Determine       Cancel       Application				

Appearance

Chinese displa	у	×
Basic prope Appearance Security set Position		
Use St N.	pictures tatus 0 v ame data_01	
	ategon svg imensic 80 × 30	
Change appearance	More pictures	
Fill pattern Solid color V Fil	ll color	
✓ Frame Border style Solid color ∨ Bo	order color	
Typeface Ty 微软雅黑 《 常规 Co Size 12 Ali Middle_Center 《 Adaptive s	v v size	

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

Chinese display	×
Basic prope Appearance Security sett Position	
Display control	
✓ Enable	
When 隐藏 Y	
Equip 本地设备 v Set	
Addre PSB V 0 0	
Enable sta ON v ct designation	
User rights	
$\checkmark$ 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.

## 4-2-9. 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.

	Indicator light ×
Basic prope	Appearance Security sel Position
Contro	ID LIO
Descrit	be
Read add Equip Addre	dress 本地设备 V Set PSB V 0 0
	ct designation
logic I logic	Positive logic O Negative logic
✓ twinl	kle
•	On status flashes Off status flashes
	Flicker frequency 0.1 秒

Control 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
Read address	Set the read address
Equipment	Current equipment port for communication
Set	Click "Set" to enter the address setting interface, where you can set and use system registers
	and user-defined tags. You can click the address tag library below or the project tree - library -
	address tag library to set the tags used (see chapter 5-2 Address Tag Library for the use of
	address tag library and user-defined tags)
	Address
	Equipme 本地设备 V Statio 0
	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 number
Indiraat	Set the surrout address offset. The surrout soil address shanges with the indirectly specified
maneet	Set the current address onset. The current con address changes with the indirectly spectrum $r_{\rm exc} = 0.1, 2, 2$ .) For excerning the current of the curr
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

	Indicator light
	Basic prope Appearance Security set Position
	OFF     Name     lamp_05_b       Category svg     Dimensic 60 × 60
	Change appearance More pictures
	State     O     Image: Constraint of the state o
	OFF
	Typeface Ty 微软雅黑    常规 Co
earance	You can check whether to use pictures. If you check, you can set the indicator in the $(0, 1)$ two states. After selecting the state in the wrow

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

	arance Security set Position
ic proper pper	
Display contro	
<ul> <li>Enable</li> </ul>	
When	隐藏
Equip	本地设备 v Set
Addre	PSB V 0 0
Enable	sta ON v ct designation
User rights —	
✓ Hide the d	component when the user has no permission range
	477 7781 4
Required	User WRRL V
permissic	in 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.

		Indicate	or button		x
asic prope	Appearance Fi	unction bi Security	set Position		
Contr	ol ID LB0				
Descr	ibe				
Rea	d / write using	different addresses	5		
Read / v	vrite address				
Equip	本地设备		∨ Set		
Addre	PSB	✓ 0	0		
		ct designa	tion		
– Operati ම	on Set on	○ Set off	○ Reverse	O Instantaneous on	
logic —	Positive logic		O Negative l	ogic	
🗌 twii	nkle				
۲	On status flas	hes	Off status f	lashes	
		Flicker frequency	0.1 秒	~	
	÷				

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)

Equ	ipment	Current equipment port for communication				
A	ldress	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				
		Address PSB V User defined label				
		Address 0 System register				
		Address [Extent : 0 - 9999]				
		format				
		Address tag				
		Determine Cancel Application				
<b>T</b> 11	•					
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 PSW 100;				
		when the value of PSW 100 register is 0, the coil controlling this element is still PSB0;				
		when the value of PSW 100 register is 1, the coil controlling this element is PSB1 (and				
Outri	C. ( ON					
Operation	Set UN	Set the control coil to logic 1 state				
	Set OFF	Set the control coil to logic 0 state				
	Reverse	Set the control coll to the opposite state				
	Instantaneous	when the key is pressed, the coll is in logic 1 state, and when the key is released, the				
T	- ON	coil is in logic 0 state				
L	ogic	Select positive logic or negative logic (positive logic: coil is on in ON state, coil is off				
	• • •	in OFF state; negative logic: coil is off in ON state, coil is on in OFF state)				
Tv	vinkle	Select whether to flash, including ON status flashing, OFF status flashing and flashing				
		trequency setting				
Enab	le 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

		Ind	icator butto	n		x
Basic p	rope Appearance Fund	tion bi Secu	rity set Posi	tion		
			✓ Use	pictur	es	
			S	tatus	0 ~	
	OFF		N	ame	lampbutton_06_b	
			C	ategor	svg	
			D	imensi	60 × 60	
	Change appea	arance			More pictures	
	Fill		_		·	
State	0	• •	Display text	Арр	bly fonts to each	
• т	evt O Multil	ng				
			OFF			
-Type:	face			_		
	微软雅黑	~	常规	~		
Ali		Size	12	*		
	Middle_Center V					

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

Function binding

_		Indicator button
Basic prope A	ppearance Function I	birSecurity set Position
Кеу	When pressed $~ \lor$	
		Add to
		Delete
		Move
		Move

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

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

	函数调用			
功能函数	✓ Edit Function			
<ul> <li>● 串行执行</li> <li>○ 并行执行</li> </ul>				
	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 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 2
	Equip     本地设备     Set       Addre     pSB     0     0
	Enable station
	Equip     本地设备     Set       Addre     PSB     1     0       Enable sta <sup>I</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
	<ul> <li>Hide the component when the user has no permission range</li> <li>Required user 权限1 </li> </ul>
	Determine Cancel Application
Operation	The waiting time (s) can be set. If this option is checked, a pop-up window "Are you sure to
confirmation	execute this operation" will pop up when operating components. If you do not click "Confirm"
delay	or "Cancel" within the set waiting time, the pop-up window will disappear by itself and this operation will fail. If you click "OK" within the waiting time, the operation is successful. If
V are del	you click "Cancel", the operation is invalid.
Display control	The operation will not take effect until the set delay time is long pressed
Display control	component will be hidden
Enable	When checked, display control will be enabled
When validation	Set the display of the component when validation fails
fails	1 J
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 indicator	×
Basic properAppearance Security set Position	
Control ID ML0	^
Register   Word register  Multi bit	
Read address	- 11
Equip 本地设备 v Set	
Addre pSW V 0 0	
Data Word V Unsigner V	- 11
Number of States 3	
State Condition twinkle Frequence	y
0 PSW0 == 0 /	
$1  PSW0 == 0 \qquad \qquad /$	- 11
2         PSW0 = 0         /           3         其他(错误)         /	_
- Attribute	
Read == V A None V A 0 Use re	
Illegal	
<	>
Determine Cano	el

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 Vuser defined label				
	Address 0 System register				
	Address [Extent: 0 - 9999]				
	format				
	Address tag				
	Determine Cancel Application				

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 curr	the current coil address is PSB0, if the indirectly assigned address is PSW100; When the			
	value of	f PSW100 register is 0, the co	oil controllin	g this eleme	ent is still PSB0; When the
	value of	f 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 displ	ay table will	l synchronously increase or
	decreas	e the number of statuses	1	2	5
State display table	After se	etting in the lower attribute co	lumn, you c	an directly o	observe 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	44 × 3	*** 5			
register	4A 323 3				1
register	状态	条件	闪烁	频率	
	0	D0 == 1		0.1秒/次	
	1	D0 < 2		0.1秒/次	
	2	D0 <= 3		/	
	3	D0 < 2 And D0 > 1		/	
	4	D0 < 2 Or D0 > 1		/	
	5	其他 (错误)		/	
	属性				
	● 范围 ○ 位				
	读取值 < V A None V A 2 回 使用寄存器				
	「乙酸	☑ 闪烁 频素 0.1 秒 ✓			

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

None: only one numerical value. Such as status 0, 1, 2.

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

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

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

(2) Bit: take PSW100 as an example.



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

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

	When PSW100.2 is ON, PSW100 flashes at the frequency of 1 second/time and the font					
	display status is 2.					
	When PSW100 3 is OFF_PSW100 font displays status 3					
	When $PSW100.4$ is OFF $PSW100$ flashes at the frequency of 2 seconds/time and the fort					
	display status is A					
	If the status of DSW100.0 DSW100.4 is inconsistent with the set conditions. DSW100 fort					
	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 ? X					
	控件ID ML0					
	描述					
	寄存器模式 ○ 字寄存器 ● 多位组合					
	读取地址 没 各 合体 VD/VL/VC系列/Ukodbur DTID 、 20要					
	位数4 (1) 间接指定					
	0         多位组合 == 1         ☑         0.1秒/次					
	1 多位组合 < 2 2 0.1秒/次					
	2 多位组合 <= 3 / / / / / / / / / / / / / / / / / /					
	4 多位组合 < 2 Or 多位组合 > 1 /					
	5 其他(错误) /					
	读取值 < V A And V > V B A 2 □ 使用寄存器					
	非法输入 💿 显示错误状态 🔿 显示当前状态 🗌 错误通知					
	As shown in the figure above, the number of digits set is 4. The coil states of M0 M1 M2.					
	and M3 represent different values. The minimum number is 0 and the maximum number					
	is 15					
	(1) When M0 is on and others are off it represents the value 1					
	(2) When M1 is on and others are off, it represents the value 2					
	(2) when M1 is on and others are off, it represents the value $2$					
	(3) When M2 is on and others are off, it represents the value 4					
	(4) When M3 is on and others are off, it represents the value 8					
	(5) When all are off, it represents the value 0					
	(6) When it is fully lit, it represents the value 15					
	And so on					
Illegal input	When the value of the register does not meet any of the set states, the checked state (error					
	state or current state) will be displayed, and the error notification can be selected (the set					
	coil light will be on when illegal input occurs)					



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

Appearance 

Multi s	tatus indicator	x			
Basic prope Appearance Security set Po	sition				
状态0	<ul> <li>✓ Use pictures</li> <li>Status</li> <li>0</li> <li>✓</li> <li>Name multilamp_01_a</li> <li>Categorysvg</li> <li>Dimensic 60 × 60</li> </ul>	^			
Change appearance  Fill  State  Tevt  Multiling	More pictures				
状态0					
Typeface Ty 微软雅黑 ~ Co Size	常规 ✓ 12 ✓ Determine Cancel	~			

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

Multi status indicator	x
Basic prope Appearance Security sett Position	
Display control	
✓ Enable	
When 隐藏 V	
Equip 本地设备 v Set	
Addre psg v 0 0	
Enable sta ON v ct designation	
User rights	
Hide the component when the user has no permission range	
Required user 权限1 ~ ~ permission range	

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

#### Position

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

## 4-2-12. 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.

Кеу	×
Basic prope Appearance Function bi Security set Position	
Control ID BTO	
Write address Equip 本地设备 v Set	
Addre pSB v 0 0	
ct designation	
Action     O Set off     O Reverse     O Instantaneous on	
□ 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 control		
Write address	Set the write in address		
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		
	Equipme nt 本地设备 v D D D D D D D D D D D D D D D D D D		
	Address type User defined label		
	Address 0 System register		
	Address [Extent:0-9999] format		
	Address tag		
	Determine Cancel Application		
T., J'	4 Set the summer eddress effect. The summer call eddress showers with the indirection		
Indirect assignmen	Set the current address offset. The current coll address changes with the indirectly specified register value, that is $D_{x}[D_{x}] = D[x+D_{x}] value](x, x=0, 1, 2, 3)$ . For example,		
	specified register value, that is, $Dx [Dy] = D [x+Dy value] (x, y=0, 1, 2, 5)$ . For example,		
	value of PSW100 register is 0, the coil controlling this element is still PSR0: 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		
Instantaneo	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		
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			
Audio Resource Library			



	К	ey		x
Basic prope AppearanceFunction b	oi Security s	et Position		
		✓ Use pictur Status	o v	
OFF		Name Categoi	button_05_a	
		Dimensi	<b>c</b> 80 × 42	
Change appearance	e		More pictures	
State 0 v	🗸 Displa	y text Ap	ply fonts to each	
Tevt     O     Multiling				
	0	FF		
Typeface		受切		
	Size 12	<b>形</b> 规 ,	* *	
All Middle_Center V				

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

Function binding

		Кеу	×
Basic prope	Appearance Function	birSecurity sel Position	
Key	When pressed v		
		Add to	
		Delete	
		Move	
		Move	

Same to chapter 4-2-10 indicator button.

Security setting

Кеу
Basic prope Appearance Function bi Security set Position
Operation confirmation delay Confirmation before Waiting time 1
🗌 Key delay
Display control <ul> <li>Enable</li> </ul>
When 隐藏 v
Equip 本地设备 v Set
Addre pSB v 0 0
Enable station v ct designation
Enable control
✓ Enable
Equip 本地设备 v Set
Addre pSB v 0 0
Enable sta <sup>ON</sup> 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

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 Fun	ction bin Security sett Position
Contro	ol ID MB0	
Register	O Word registe	er
– Read ad	dress 本地沿冬	v Cat
Addre	中SB	<ul><li>✓ 0</li><li>✓ 0</li></ul>
Number o States	of 3	A Y
Curren state	0	✓ Set value 1 ✓
State	Set value	Action
0	1	PSB0置ON; PSB1置OFF; PSB2置OFF;
1	2	PSB0置OFF; PSB1置ON; PSB2置OFF;
2	4	PSB0置OFF; PSB1置OFF; PSB2置ON;

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

	Address
	Equipme 本地设备 v Statio 0 n Address psp. v U Uter defined label
	type
	Address [Extent · 0 - 9999]
	format
	Address tag
	Determine Cancel Application
Word register	The register value in different states can be set (as shown in the figure below, the current
	state can be pulled down to set the value in each state. When the state is 0, the value of
	PSW0 is 1; when the state is 1, the value of PSW0 is 2; when the state is 2, the value of
	PSW0 is 4)
	Multi state key
	Basic propert Appearance Function bin Security sett Position
	Control ID MB0
	Describe
	Register
	Word register      Multi bit
	Read address
	Addre psw y 0 0
	Data Word V Unsigner V ct designation
	Number of
	States Current
	state 0 Set value 1
	State Set value Action
	0 1 PSW0置1
	1         2         PSW0直2           2         4         PSW0置4

■ Appearance

Mu	lti state key
Basic proper Appearance Function bin Se	ecurity sett Position
Change appearance ✓ Fill State 0 ✓ ✓ Di	✓ Use pictures         Status       0         Name       lampbutton_24_a         Category svg       0         Dimensic 80 × 80       More pictures         isplay text       Apply fonts to each
● Tevt ● Multiling Typeface Ty 微软雅黑 ~ Co Size	状态 <b>0</b> <sup>常规</sup> v 12 v
0.20	

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	×
Basic proper Appearance Function bindSecurity 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 Confirmation before Waiting time Key delay
Display control 「 Enable When 隐藏
Equip 本地设备 v Set Addre PSB v 0 0
Enable sta <sup>ON</sup> v ct designation
Enable control
Addre     PSB     V     0     0       Enable station     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

	Character key	×
asic propeAppearan	ceSecurity set Position	
Control ID KB0		
Describe		
Keyboard entry		
Input ASCII 0x 31	1	
_		
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 X
	Basic prope AppearanceSecurity set Position
	Image: Status       0       ✓         Name       keyboard_01_a       Category svg         Dimensic 60 × 42       0       ✓
	Change appearance More pictures
	State 0 • Jisplay text Apply fonts to each
	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
Basic prope Appearance Security set Position
Operation confirmation delay
✓ Key delay Delay time: 01s
Display control
✓ Enable
When 隐藏 v
Equip 本地设备 v Set
Addre pSB v 0 0
Enable station v ct designation
Enable control
✓ 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 ✓

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

F	unction key	×
Function Appearance Security set F	Position	
Control ID FB0		
Describe		
Action 按下状态 V	•	
启动声音		
Selected		Optional Features
设置线圈PSB0		设置线圈
设置数据 PSW0	Add to	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	→山C3V
		函数调用
		Determine 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	
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 fe	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

Operati	on	-			
Set	on	<ul> <li>Set off</li> </ul>	() N	egate	
Addre	本地设备 PSB	✓ 0	✓ Settin		

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
Equipn	nent	Current equipment port for communication
Addre	ess	Set 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 (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       nt     n       Address     PSB       Address     User defined label       Address     0       Address     [Extent: 0 - 9999]       Image: State of the state of
Security setting	Determine       Cancel       Application         Set the user's permission range and whether to pop up a prompt window when there is no permission         Set coil       X         Basic Attributes       Security settings         User permission       User permission         When the user has no authority, a prompt window will pop up       User permission
	Permissions Vone V Determine Cancel Application

(2) Set data

		Set data	×
Basic Attribut	es Security settings		
Operati	on		
۲	Set Constant	O Plus	O Minus
– Write ac Devic	dress 本地设备	∽ Sett	in
Addre	PSW 🗸	0	
Data type	Word V Unsignec V	Indirect	
		Determine	Cancel Application

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)		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 t		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		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 s		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
Address		Set the target coil address
Data 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 psw v User defined label		
	Address 0 System register		
	教婦突型 Word ♥ Unsigned ♥ Address [Extent:0-9999]		
	format		
	Address tag		
	Determina Concel 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		
	When the user has no authority, a prompt window will pop up		
	Permissions None		
	Determine Cancel Application		

# (3) Arithmetic

		Arith	metic	×	
Basic Attri	outes	Security settings			
– Operati ම	on — +	0 -	○× ○÷		
Left ope	erand	🗌 Use reç	Right operand		
– 🗌 Enal	Enable upper limit     Enable lower limit				
Write ad	dress				
Devic	本地	备	✓ Settin		
Addre	PSW	✓ 0			
Data type	Word	✓ Unsignec ✓ ☐ Indirec	t		
Preview PSW0 = 0 + 0					
			Determine Cancel Applica	tion	

Operation	From left to right, add (+), subtract (-), multiply (×), Divide (÷)		
Left operand	Sets the value of the left operand, which can be a constant or specified by a register		
Right operand	Sets the value of the right operand, which can be a constant or specified by a register		
Enable upper limit	Function key - for upper limit of the arithmetic object register, you can enter a constant or		
	specify it by the register		
Enable lower limit	Function key – for lower limit of the arithmetic object register, you can enter a constant or		
	specify it by the register		
Write address	Set the write in address		
Equipment	Current equipment port for communication		
Set	Click "Set" to enter the address setting interface, where you can set and use system		
	registers and user-defined tags. You can click the address tag library below or the project		
	tree - library - address tag library to set the tags (see chapter 5-2 Address Tag Library for		
	the use of address tag library and user-defined tags)		
	Address		
	Equipme 本地设备 V Statio 0		
	Address PSW V User defined label		
	Address 0 System register		
	数据类型 Word V Unsigned V		
	Address [Extent : 0 - 9999]		
	format		
	Address too		
	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	es Security settings	
Transmis sion type	e • Word O Bit register	
Register	1	
Source ad	dress	
Devic	本地设备 v Settin	
Addre	PSW V 0	
Data	Word V Unsigner V	
type		
Destinatio	n address	
Devic	本地设备 v Settin	
Addre	PSW V 0	
Data	Word V Unsigner 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		
	type User defined label		
	Address 0 System register		
	Address [Extent: 0 - 9999]		
	format		
	Address tag		
	Determine Consel Amiliation		
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		

	Data transmission	×
Basic Attributes       Security settings         User permission	o authority, a prompt window will pop up v	

### (5) Screen switch

Jump to the specified screen.

	Swit	ch so	cree	n			×
Basic Attributes	Security settings						
Start							
○ 前幅画面							
⊖ Screen							
🗌 Pop up th	e password win	dow	auto	matica	lly. (I	f the tar	get
	Determi	ne	(	Cancel		Applica	ation

System startup display screen		
Jump to the original screen		
Select the screen ID to jump to		
If checked, and the screen to be switched has higher authority, the user login window will		
pop up automatically		
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 V		
Determine Cancel Application		

(6) Call window

Switch or pop-up the specified window.

	Call window
Basic Attributes	Security settings
Switch	[25001]User login v
🔿 Pop up	
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	
O Close all v	vindows	
Close the	[25001]User login v	
	Determine Cancel Application	on

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

Close the window		
Basic Attributes       Security settings         User permission		
Determine Cancel Application		

# (8) Import csv data

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

	导入CSV数据
Basic proper	ties Security setting
- 源文件 - File location	n OSB drive
文件名称	尔 CE.csv
	● 固定文件名 ○ Date specifies the ○ Register
数据块首	\$\$\$\$.5.1
Equip	本地设备 v Set
Addre	PSW v 0 0
Numb	1 type
Data capaci	ity 100
Data cor	ntent Title Data turne Data format 合戦 Integer Decimal
<ul> <li>✓ 执行状</li> <li>✓ 执行结</li> <li>✓ 执行结</li> <li>✓ 执行结</li> </ul>	Add to Delete Move up Move down 大态 PSB0 部果 PSW0 过程 PSW0
	Determine Cancel Application

Source	File	You can only import from the USB flash disk		
file	location			
	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		
address		as the internal register PSW or PFW of the HMI		
Equipment		Current equipment port for communication		
Address		Set target register number		
Custom	Data Type	If it is not checked, the default type is Word, and you can also select Dword or DDword;		
		Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,		
		Unigned value, Floating number		
Data	capacity	Data capacity to be imported each time (maximum data capacity 65535)		
Data	content	Select the same title, data type, data format, number of words, integer digits, and decimal		

	digits as the table to be imported			
Add to/delete	Add/delete imported row information			
Move up/down	Change the order of added lines			
Execution status	The bit indicates whether it is in the import status. When it is ON, it indicates that it is in the			
	import status. After the import is successful, the OFF status will be restored			
Execution result	The running result of the import operation is represented by the value in the register;			
	: Import succeeded; 1: Wrong file name; 2: Error file index; 3: The file path does not exist;			
	4: File creation failed			
Execution process	The implementation progress of the import is indicated by numerical display (the progress is			
	indicated by a numerical value between 0 and 100, and 100 indicates completion)			
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

Data

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

	■ Section Control Control 目的 目的 日本	
	Basic properties Security setting	
	数据源首地址	
	Equip 本地设备 v Set	
	Addre psw v 0 0	
	Numb 1 type	
	目标文件	
	File	
	文件名称 CE.csv	
	● 固定文件名 ○ Date specifies the ○ Register	
	Data capacity 100	
	Data content	
	Serial         Title         Data type         Data format         个数         Integer         Decimal	
	Add to Delete Move up Move down	
	□ 执行状态	
	□ 执行结果	
	山市过程	
	Determine Cancel Application	
ta source start	Set the data type and first address of the export data, which is generally set as the intern	al
11	bet the data type and first address of the export data, which is generally set as the interin	-
address	register PSW or PFW of the HMI	
Equipment	Current equipment port for communication	

	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				
	File name	an be set as a fixed file name (the file name is defined by itself), a file name specified			
		by the date, or a file name specified by the contents of the register (the file name only			
		supports characters, not Chinese, and cannot contain special characters)			
Data c	apacity	Data capacity to be exported each time (maximum data capacity 65535)			
Data c	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			
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				
	与出CSV数据 ×				
		Basic Attributes Security settings			
		User permission			
		User Required			
		Permissions None V			

# (10) Upload recipe

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

		Upload recipe	×	
	Basic At	ibutes Security settings		
	配	方源 V Recipe Register		
	Wo nur per	rd Iber line		
	Reci Dev Ado Dat typ	pe upload address ic 本地设备		
		Determine Cancel Ap	oplication	
Recipe sour	ce	Data upload object register address (click recipe configuration	on to set rel	evant information
		about the recipe, and refer to chapter 4-6 recipe		
Register		When this option is checked, the value in the register can be	used to con	trol 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		and cannot be modified		
Recipe	Equipment	Current equipment port for communication		
upload 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       Address         Fquipme       Statio         Number of address       Statio         User defined label       System register		
		教験会社 数据会型 Word v Unsigned v Address [Extent:0-9999] format Determine Cancel Application		
	Address	Set the target register address		
	Data type	yte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,		
		nigned 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			
Securit	y setting	Set the user's permission range and whether to pop up a prompt window when there is no		
		permission		
	Upload recipe × Basic Attributes Security settings User permission When the user has no authority, a prompt window will pop up User Required Permissions None			

# (11) Recipe download

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

Recipe source	lata 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 unload and download of recipe group 1 is performed at this time)					
Words	n on lin o	The upload and download of recipe group 1 is performed at this time)				
and cannot be modified						
Desires	E	and cannot be modified				
Recipe	Equipment					
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				
		ee - norary - address tag norary to set the tags (see chapter 5-2 Address Tag Library for ie use of address tag library and user-defined tags)				
		the use of address tag library and user-defined tags)				
		Address × Equipme 本地设备 、 Statio 0 n Address PSW 、 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 target register address				
	Data type	yte-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					
Securit	y setting	Set the user's permission range and whether to pop up a prompt window when there is no				
		permission				
		Download recipe				
		Basic Attributes Security settings				
		User permission				
		Liser Required				
		Permissions None V				

### (12) Call function

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

function call					
Basic Attribute	Security settings				
Function al	✓ Edit Function				
● Serial executior○ Parallel execution					
	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			
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			
	Determine Cancel Application			

■ Appearance

Function key				
Function Appearance Security set Po	sition			
	✓ Use pictures			
	Status 0 🗸			
OFF	Name button_05_a			
	Categorysvg			
	Dimensic 80 × 42			
Change appearance	More pictures			
► ▼ Fill				
State 0	an law taut Apply fonts to each			
state U V D	Isplay text Apply long to each			
Typeface				
	常规 ✓			
Ali Middle_Center V	12 *			

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	
Operation confirmation delay Confirmation before Waiting time Key delay	
Display control	
✓ Enable	
When 隐藏 Y	
Equip 本地设备 v Set	
Addre pSB V 0 0	
Enable sta ON 🗸 ct designation	
Enable control	
✓ Enable	
Equip 本地设备 v Set	
Addre pSB v 1 0	
Enable sta ON 🗸 ct designation	

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

Enable	When checked, display control will be enabled	
When validation	Set the display of the component when validation fails	
fails		
Enable state	Set ON status to be valid or OFF status to be valid.	
	For example: if the equipment is checked as shown in the above figure, the bit control is PSB0,	
	and hide is selected when validation fails, and the enabling status is ON, then when the 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.

#### 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
Pat	tern Function Position
C D	ontrol ID FF0 escribe
- A0	ction mode
	Screen
	○ Screen
	⊖ Coil
	○ Continuo
	○ First scan after
-	It is used for system management control and cannot be operated by users

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	

When the screen is called, each scan will execute relevant functions
When the "Timing (seconds)" or "Continuous" option is selected, the "Timing/Continuous
Mode Coil Limit" can be selected to set the control coil, that is, when only this coil is set to
ON/OFF, this function executes
For the first scan after downloading the screen, relevant functions are executed once, and
the simulation is invalid
The first scan after the system is powered on and started, and the relevant functions are
executed once, and the simulation is invalid
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.
b行旗反直 · · · ·
· 设 备 本地设备 ✓
刻油突型 Dwora ✓ Fioat ✓ □ 间按油正
确定取消 应用
<ul> <li>● 数值逻辑条件</li> <li>PSW0</li> <li>小数位数</li> <li>0</li> </ul>
== ~ 0

■ Function

Functional domain		
Pattern Function Pos	on	
Selected function	Optional 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	
	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
Optional features		Select the corresponding function, click the "Add" button to add the function item to the
		left list. Double click the selected function to enter the setting window

# (1) Set coil

		Set coil		×
Operation Set on		○ Set off	Negate	
Write address Devic 本地设备 Addre PSB		✓ 0	✓ Settin	
		Determi	ine Cancel Appli	cation

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
Equipn	nent	Current equipment port for communication
Addre	ess	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 n
		Address psB v User defined label
		Address 0 System register
		Address [Extent : 0 - 9999] format
		Address tag
		Determine Cancel Application

#### (2) Set data

Operati	on		
•	Set Constant	O Plus	O Minus
Write ad	idress		
Devic	本地设备	✓ Se	ettin
Addre	PSW v	0	
Data	Word ∨ Unsignec ∨		
type		Indirect	

Operation	Constant	The specified value setting of the specified object is equivalent to the data setting (it can be set as a constant or specified through a register).		
	Plus	You can set the value added each time (it can be set as a constant or specified through the		
		register), and set the increment value and upper limit value and whether to cycle		
	Minus	You can set the value of each decrement (which can be set as a constant or specified		
		through the register), the decrement value, the lower limit value and whether to cycle		
Write a	address	Set the write in address		
Equip	oment	Current equipment port for communication		
Add	lress	Set the target coil address		
Data	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 psw v User defined label		
		Address 0 System register		
		教研读型 Word V Unsigned V Address [Extent: 0 - 9999]		
		format		
		Address tag		
		Determine Concel Application		
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

	Arithmetic	x			
– Operati	on + ○ - ○ × ○ ÷				
Left ope	erand Right operand Use reç				
– 🗌 Enal	ole upper limit Enable lower limit				
- Write ad Devic Addre	ddress 本地设备				
Data type	Word V Unsignec Indirect				
– Preview	Preview PSW0 = 0 + 0				
	Determine Cancel Application				

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       ✓       Statio       0         nt       Address       PSW       ✓       User defined label         Address       0       O       System register
	数据类型 Word V Unsigned V Address 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)

# (4) Data transmission

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

	Data transmission	x
Transmis	S   Word   Bit register	
Register	1	
Source ad	ldress	
Devic	本地设备 v Settin	
Addre	PSW V 0	
Data type	Word V Unsignec V	
Destinatio	n address	
Devic	本地设备 v Settin	
Addre	PSW V 0	
Data type	Word V Unsignec V	
	Determine Cancel Application	on

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 fo
	the use of address tag library and user-defined tags)
	Address
	Equipme 本地设备 v Statio 0 n
	Address type User defined label
	Address 0 System register
	数据类型 Word V Unsigned V
	Address [Extent: 0 - 9999] format
	Address tag
	Determine Cancel Application
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 th
	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)

(5) Screen switch

Jump to the specified screen.

<ul> <li>Start</li> <li>前幅画面</li> <li>Screen</li> <li>Pop up the password window automatically. (If the Determine Cancel Application</li> </ul>	Switch screen
<ul> <li>前幅画面</li> <li>Screen</li> <li>Pop up the password window automatically. (If the</li> <li>Determine Cancel Application</li> </ul>	● Start
<ul> <li>Screen</li> <li>Pop up the password window automatically. (If the</li> <li>Determine Cancel Application</li> </ul>	○ 前幅画面
<ul> <li>Pop up the password window automatically. (If the</li> <li>Determine Cancel Application</li> </ul>	⊖ Screen
Determine Cancel Application	Pop up the password window automatically. (If the
	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	

(6) Call window

Switch or pop-up the specified window.

	Call window	×
• Switch	[25001]User login	~
O Pop up		
Pop up the	e password window aut	omatically. (If the
	Determine Cano	cel Application

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

#### (7) Close window

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

	Close the window
	O Close all windows
	● Close the [25001]User login ∨
	Determine Cancel Application
Close all the window	All windows of the current screen can be closed
Close window	The window number to be closed can be set

#### (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			x
<ul> <li>Source file</li> <li>File</li> <li>location</li> <li>File</li> <li>name</li> </ul>	<ul> <li>U disk</li> <li>CE.csv</li> <li>Fixed file</li> </ul>	🔿 Date spe	cify the file	) Register		
Data block Devic 4 Addre 9 Regist 1	k first address — S地设备 SW	✓ 0 Word	<ul><li>✓ Settin</li><li>_String ✓</li></ul>			
Data capacity — Data cont	100					
No.	Title	Data type	Data format	number	Integer Decir	mal
Executi	Add	Delete	Move up	Move dow	m	
Execution Execution	on results					
	on process					
			Determine	Cancel	Applicati	on

Source	File	You can only import from the USB flash disk
file	location	
	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
Ac	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 value,
		Unigned value, Floating number
Data	capacity	Data capacity to be imported each time (maximum data capacity 65535)
Data	content	Select the same title, data type, data format, number of words, integer digits, and decimal
		digits as the table to be imported
Add	to/delete	Add/delete imported row information
Move	up/down	Change the order of added lines
Execut	tion status	The bit indicates whether it is in the import status. When it is ON, it indicates that it is in the
		import status. After the import is successful, the OFF status will be restored
Execut	tion result	The running result of the import operation is represented by the value in the register;
		0: Import succeeded; 1: Wrong file name; 2: Error file index; 3: The file path does not exist;
		4: File creation failed

Execution process	The implementation progress of the import is indicated by numerical display (the progress is
	indicated by a numerical value between 0 and 100, and 100 indicates completion)

### (9) Export csv data

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

Devic	rce fist address ★ 배상간호		V Settin		
Addre	平地反音 PSW	× 0. Wo	rd String V		
Regist	1				
		51			
– Target Fi	le				
File location	U disk				
File name	CE.csv				
	• Fixed file	🔿 Date sp	pecify the file	) Register	
Data capacit	100				
Data con	tent				
No.	Title	Data type	Data format	number	Integer De
	Add	Delete	Move up	Move	lown
- Execut	Add	Delete	Move up	Move c	lown
Execut	Add ion status	Delete	Move up	Move o	lown
Execut	Add ion status ion results	Delete	Move up	Move o	lown
Execut Execut Execut	Add ion status ion results ion process	Delete	Move up	Move c	lown

Data source start		Set the data type and first address of the export data, which is generally set as the internal
address		register PSW or PFW of the HMI
Equipment		Current equipment port for communication
Address		Set the target register address
Custom Data Type		If it is not checked, the default type is Word, and you can also select Dword or DDword;
		Byte-8Bit, Word-16Bit, DWord- 32Bit, DDWord -64Bit, BCD format, Hex, Signed value,
		Unigned value, Floating number
Target file	File	Only the USB flash disk position can be selected for export
	location	
	File name	It can be set as a fixed file name (the file name is defined by itself), a file name specified
	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
	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	Iocation 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 to be exported each time (maximum data capacity 65535)
Data ca Data c	Iocation       File name       apacity       ontent	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 to be exported each time (maximum data capacity 65535) Select the same title, data type, data format, number of words, integer digits, and decimal
Data ca Data c	location       File name       apacity       ontent	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 to be exported each time (maximum data capacity 65535) Select the same title, data type, data format, number of words, integer digits, and decimal digits as the table to be imported

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.

	Upload recipe	x
配 方 រ	Recipe Register	
Word numbe per line	r	
Recipe	upload address	
Devic	本地设备 v Settin	
Addre	PSW V 0	
Data type	Word VUnsignec V	
	ире transier сотприетон нау	
	Determine Cancel Application	on

Recipe source		Data upload object register address (click recipe configuration to set relevant information		
		about the recipe, and refer to chapter 4-6 recipe		
Reg	ister	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 psw v User defined label		
		Address 0 System register		
		数据类型 Word V Unsigned V		
		format		
		Address ton		
		Autress 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	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	

# (11) Recipe download

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

	Download recipe	ĸ
配方	源 V Recipe Specified	
Word numbe per lin	er	
Recipe	download address	-1
Devic	本地设备 v Settin	
Addre	PSW V 0	
Data type	Word v Unsignec v Indirect	
	ире паняна сотприенот нау	
	Determine Cancel Application	

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 服 类型 Word V Unsigned V 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		
comple	tion flag			

#### (12) Call function

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

	function call
	Function alEditFunction
	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

Security setting

功能地	或						?	×
	模式		功能	安全设置	位置			
<b>[</b>	使能控制 ☑ 启用3	脸证						
	设	备	本地设备			$\sim$	设置	
	地	址	PSB	~	0	0		
	启用	状态	on ~		🗌 间接	<b>新た</b>		
	启用	状态	ON V			對指定		

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.

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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 input	×
asic pro <mark>(</mark> Appea	rar Scale and Notice Security Position	_
Control ID Describe	SIO	
-Read address		
Equip 本地 Addre PSW Data Word type	没备 ✓ Set ✓ ✓ 0 0 ✓ Unsignec ✓ ct designation	
Attribute Maxim um	Minimu m value	
	Register     Register control	
Directi on	w right V Minimu m scale 1	
_	1 Timinimum scale	
It is	used for system management component and cannot be oper-	ated

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 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
Indired	et 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
	Γ	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
		You can get the share as give of the value cash time you may a the glider
	dographo the	You can set the change size of the value each time you move the sider
	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

	Sliding input
	Appearance of slide rail Height setting 30 • Width setting 260 • Style selection Backgroun d color Border • Fill color •
- 1	Slider appearance Width setting 30 + Height setting 50 +
	Backgro und

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 input	х
Basic Attı Appearar	Scale and Notice	Security Location	^
─ ✓ Display scale			
Scale position	◉ 上方	○ 下方	
Major scale equal fraction Minor scale equal fraction Line	3	Major scale length Minor scale length q	
Scale mark cold		✓ Scale mark s ✓	
Scale mark wid	1	$\checkmark$	
Show numer	ic marks	Decimal 2	
Fo -	· • •		
	Imes New Roman		
	¥	Size 12 V	
Display perce	entage		
Show axis			

Display scale	If checked, scale will be displayed; if unchecked, scale will not be displayed
Scale position	Set the scale display position, which can be displayed above or below the slider
Scale	Set the number and length of major and minor scales
Line	Set the color, style, and width of tick marks
Show numeric	Set the display format of the scale mark. Choose one of the two display methods
markers/display percentage	
Show numeric markers	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
Display percentage	You can set the font, size, color, font style, horizontal and vertical alignment of the
	displayed percentage
Display axis	Set whether the axis is displayed at the bottom of the scale

Notice

Basic pro Appe	earar Scale and Notice Security Position
Notice	
Before writ	Ing After writing
✓ Notifica	tion bit
Write	on O Write off
Equip	本地设备 v Set
Addre	PSB    0 0
	ct designation
✓ Notice	word
Equip	本地设备 v Set
Addre	PSW ~ 0 0
Data	Word V Unsignec Ct designation
type	
Write	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 Attı Appearaı Scal	e and Notice Security sLocation	^
Display control		_
✓ Enable		
When 隐	<b>贰 ~</b>	
Devic 本地谈	备 v Settin	
Addre PSB	✓ 0	
Enable Sta ON	✓ Indirect	
Enable control		
✓ Enable		
Devic 本地设	备 v Settin	
Addre PSB	✓ 1	
Enable Sta ON	✓ Indirect	
User permission —		
Cancel permissi	on after operation	
A prompt winde	w pops up when the user has no permission range	
Hide this comp	onent when the user has no permission scope	
User permissio	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 V Statio 0			
	Address PSB V User defined label			
	Address 0 System register			
	Address [range : 0 - 9999]			
	format			
	Determine Cancel Application			
enable state	Set the ON status to be valid or the OFF status to be valid.			
	For example, if the device is checked as shown in the figure above, the bit control is PSB0, the			
	selection is hidden when the verification fails, and the enable status is ON, then when the			
	PSB0 status is ON, the component is normally displayed, and when the PSB0 status is OFF,			
	the component is hidden and not displayed.			
enable control	The bit limit can be set (the enabling state of the enable control can be customized). Only when			
	the enabling conditions are met can the component be used normally (as shown in the figure			
	above: When the PSB1 is in the ON state and the trigger conditions are met, the component			
	can be used; if the PSB1 is in the OFF state, even if the trigger condition is met, the component			
	is still unavailable)			
user permission	Set a controlled permission level. After setting the permission range of the required user, the			
	following two functions can be checked as required:			
	(1) After the operation is completed, the user's permission will be cancelled: If this option is			
	not checked, the corresponding level password will need to be entered each time the			
	component is operated. After checking, only one successful entry is required.			
	(2) When the user has no permission range, a prompt window will pop up.			
	(3) Hide the component when the user has no permission range.			

Refer to chapter 4-2-3 for the use of permission functions.

#### Location

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

#### 4-2-18. Drop down menu

Call the pull-down window, click the selected key to set the register value, and close the pull-down window.

1. Click the menu "Parts/Key/Dropdown Menu" or the drop-down menu icon in control window's basic

parts bar ", move the cursor to the screen, click the left mouse button to place, click the right mouse button, or use the ESC key to cancel the placement. Modify the length and width of the component through boundary points.

- 2. When setting attributes, you can set them in the attribute box that pops up when placing components, or you can double-click the "drop-down menu" or select the "drop-down menu" and right-click to select "basic attribute" for attribute settings.
- Basic attribute

Drop-down menu	×
Basic Attrit	^
Control ID DM0	
Description	
Mode Drop-down m	
Read address	1
Devic 本地设备 v Settin	
Addre psw v 0	
Data Word V Unsignec V Indirect	
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Edit Ocommand mode	
Number <sup>3</sup> Pop up mcDown V Label content is multilingual	
Index corresponding value label content Move up	
1 1 1 Move	
3(error) 具他	
trol ID It is used for system management control, and cannot be operated by users	
cription Can be used to comment on the purpose of this control object	
node two modes: drop down menu, list box style	
drop down menu: click to show all the options	
list hox style: it can show all the options without clicking	
ist ook style. It can show an the options without cheking	
drop down menu 2	

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 Statio O O O O O O O O O O O O O O O O O O O
	Address     [range root 5555]       Address     Label       Determine     Cancel       Application
indirect	Set the current address offset. The current register address changes as the indirectly specified
designation	register value changes, that is, $Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3)$ . Example: The 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 register address
	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)

	Number3     Pop up m(Down)     Image: Label content       Index     corresponding value     label content       0     0     0       1     1     1       2     2     2       3(error)     其他	: is multilingual Move up Move
move up	Move the specified option up	
move down	Move the specified option down	
command mode	de After selecting the command mode, the control will display the user l User Permissions, and the read address above will also become gray a this item is only for display purposes and does not affect the use of op Read address Devic 本地设备 Voic Voic Voic Voic Voic Voic Voic Voic	ist set in System Settings - nd cannot be set; Note that erating permissions
	○ Edit	

Appearance

D	rop-down menu
Basic Attril Appearance Notice Security se Location	n
Status 0 Arrow Style Status 1 Arrow Style Arrow background	Name menu_01_a category svg Size 16 × 16
Color Selected Item Background cc	▼ ▼ Border ►
Font settings Index labe 0    Copy Fo 微软雅黑 Co	y this property to each General v 12 v

status 0 arrow style	Select the appropriate arrow style in the gallery
status 1 arrow style	Select the appropriate arrow style in the gallery
arrow back ground	Select the appropriate arrow background style in the gallery
color	You can set the color, background color, and border color of the selected item
font settings	"You can set the font, font style, size, font style, color, and display position of the font in the
	control through the number of the drop-down index label (you can click "Copy this property to
	each" to format the font in all states)"

#### ■ Notice

			Drop-	down menu		
	Basic Attril Ap	opearan Notice S	ecurity se Location			
	Error mes	sage				
	✓ Not	ification bit				
	• Wr	ite on	C	) Write off		
	Dev	/ic 本地设备		✓ Settin		
	Ad	dre <sub>PSB</sub>	~ O			
			Indired	ct		
	l —					
	✓ Not	ice word				
	Dev	/ic 本地设备		✓ Settin		
	Ad	dre <sub>PSW</sub>	<ul><li>✓ 0</li></ul>			
	Dat	a Word V Un	signec 🗸 🗌 Indirec	ct		
	Cyp					
	Wr val	le to 0				
error messa	nge If En	able is checked	when the value	of the read address is ar	unset corresponding	value (that is
•1101 111•000	other	numbers that a	re not set to 0, 1	1, 22, 33, and 4), it will	write ON or OFF to	the target coil
	or wr	ite a constant to	the target regis	ter: If Enable is not che	ecked, the notification	function will
	not ta	ke effect	0.0	,		
	N	Imberb	Y Pop u	pm(Down ∨	Label content i	s multilingual
			corresponding			
		Index	value	label content		wove up
		0	0	0		
		1	11	1		Move
		2	22	2		
		3	33	3		
		4 5(error)	4 其他	4		
		Jenor	19416			

Drop-down menu
Basic Attril Appearan Notice Security se Location
Operation confirmation delay
Confirm before Waiting time second
Display control
When 隐藏 V
Devic     本地设备     Settin       Addre     pSB     0
Enable Sta ON V Indirect
Enable control       Image: Control       Image: Control       Image: Control
Devic     本地设备     Settin       Addre     pSB     0
Enable Sta ON V Indirect
User permission Cancel permission after operation A prompt window pops up when the user has no permission range
<ul> <li>Hide this component when the user has no permission scope</li> <li>User permission Permission1 v</li> <li>range</li> </ul>

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.

# 4-3. 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	x
Basic	Att Appeara Security Location	
Co	ontrol ID TE0	
De	escription	
Ti	ne format	-11
C	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	
description	Can be used to comment on the purpose of this control	
time format	Set the time format, including "12 hour system" and "24 hour system", with 4 for	ormats

Appearance

\_\_\_\_

			✓ Us	e pictur	es
				Status	0
				Name	data_01
				categor	svg
				Size	80 × 25
✓	Border				
<b>D</b> -	rder style Pur	re color	✓ Bo	rder col	or
BC					
Font					

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

Time	×
Basic Att Appeara Security Location	
Display control	
When 隐藏 v Devic 本地设备 v Settin Addre PSB v 0 Enable Sta ON v Indirect	
User permission Hide this component when the user has no permission scope User permission range	

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

#### Location

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

#### 4-3-2. 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	ecurity Location
Control ID DE	0
Description	
Date format Forma t M/D/Y	✓ ligit year
Show week	k
ontrol ID	It is used for system management control, and cannot be operated by use

description		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

c Att Appeara Security Location			
	✓ Use pictur	es	
	Status	0	~
	Name	data_01	
	categor	svg	
	Size	80 × 25	
✓ Border			
Border style Pure color	✓ Border co	blor	~
ont	[]		
o 微软雅黑 >	General 🗸		
	15 🗸		

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

Date	x
Basic Att Appeara Security Location	
Display control ✓ Enable When 隐藏 ✓ Devic 本地设备 ✓ Settin Addre PSB ✓ 0 Enable Sta ON ✓ Indirect User permission ✓ Hide this component when the user has no permission scope User permission Permission1 ✓	

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

#### Location

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

## 4-3-3. 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.



	The Conduit ×
Basic Attrit Col Des Action I Direc I Spee I O I I I I I I I I I I I I I I I I I	Appearan Security st Location  httrol ID P0  scription  mode  Ways flowing Bit limited  tion  forward Reverse  d  Constant speed 1  Register assign PSW0
control ID	It is used for system management control, and cannot be operated by users
description	Can be used to comment on the purpose of this control
action mode	Set the action mode of the fluid, including always flow and bit limited
bit limited	Action mode • Always flowing
device	Device port currently communicating
address	Set target coll number

setting	Click "Se	Click "Settings" to enter the address setting interface. This interface allows you to set			
	and use sy	and use system registers and user-defined tags. You can click the address tag library or			
	project tre	project tree - library - address tag library below to set the tags used (see 5-2 Address			
	Tag Libra	ry for the use of	address tag lib	rary and user-defined tags)	
			Address	×	
	Device	本地设备		✓ Statio n No.	
	Address type	PSB	~	User defined label	
	Address	0		System register	
	Address	[range : 0 - 9999]			
	Tormat				
				Address Label	
			Datama		
			Determi	Application	
Indirect designation	Set the c	urrent address	offset. The cur	rent coil address changes	with the indirectly
	specified	register value, t	hat is, Dx [Dy]	=D [x+Dy value] (x, y=0, 1	, 2, 3). Example:
	The curre	nt coil address i	is PSB0, if the	indirectly specified address	is PSW100; When
	the value	of the PSW100	register is 0, th	e coil that controls this elem	nent remains PSB0;
	When the	value of the PS	W100 register	is 1, the coil that controls th	is element is PSB1
	(and so or	ı)			
flow condition	Select the	action mode of	the fluid to be	ON or OFF (only available w	when bit limited)
read address	Set the co	ontrolled coil ac	ldress and set	whether there is an offset (	this option is only
	available	when bit limited	.)		
direction	Set the flo	w direction of t	he fluid, includ	ing forward and reverse direct	ctions
speed	Set the flo	w speed of the	fluid. You can 1	nanually set a constant speed	d or set a register to
	control the	e speed.			
	(When the	e speed set in th	e register is "0	, flow at the lowest speed of	f 1, when set to 25,
	flow at the	e highest speed	of 25.)		

# ■ Appearance

The	Conduit	×
Basic Attri AppearandSecurity se Location	The Conduit Height Border 20 😨 Backgrou 20 🐨 Border v	*
Slider Style Rectangle v Width 4 3 State OFF 8 Backgr 3	Inter	

Set the border width ratio of the pipe
Set the background color of the pipe
Set the color of the pipe periphery
Set the style of the slider, including rectangles and arrows
Set the width of the slider
Set the height of the slider
Set the interval of the slider
Set the slider in two states: ON or OFF
Set the color of the slider in both ON/OFF states
-

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

#### Security setting

The Conduit	×
Basic Attril Appearan Security se Location	^
Display control I Enable When 隐藏 V Devic 本地设备 V Settin	
Addre PSB V 0	
Enable Sta ON 🗸 🗌 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.



	Dashboard	x
Basic Attrib	range Appearan Security se Location	
Control	ID D0	
Descript	tion	
Read add	Iress	-11
Devic	本地设备 v Settin	
Addre	PSW V 0	- 11
Data type	Word V Unsignec I Indirect	

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	device	Select the device port currently communicating with			
address	setting	Click "Setting" 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 PSW V User defined label			
		Address 0 System register			
		数据类型 Word V Unsigned V			
		Address [range : 0 - 9999] format Address Label			
		Determine Cancel Application			
	address	Set the monitoring address of the instrument, and set whether to offset the address (i.e.			
	1	indirectly specify)			
	data type	Byte-8Bit; Word-16Bit; DWord-32Bit; DDWord-64Bit; BCD; Hex format; Signed;			
	indiract	Unigned; Floating number			
	maneet	Set the current address offset. The current register address changes as the indirectly specified register value abanges that is $D_{x}$ [Dy]=D [y+Dy value] (y = 0, 1, 2, 2)			
	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			
		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)

# Range

	Dashboard	x
Basic Attril range Appearan Security se Loo	ation	^
Range		
Maximum ra 100	Minimum rang 0	
✓ Use PSW0	Use	
Display color:	Fan ring widt <sup>4</sup> €	
Fan ring radit 50 🖨		
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 va 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

D	ashboard ×
Basic Attril range AppearandSecurity st Locat	ion
	Dial style:
	Directio Clockwise
	Starting ang0
	End angle: 360
	Transparei 100
	Syncopation dial
Needle style	
Needle style	V Interior color:
Axis	
Pivot style:	Interior color:
Scale	
✓ Display scale Scale positi Outside	Scale color
Main engravii7	Major scale leng7
Secondary er	Sub scale lengtl <sup>4</sup>
Sign	
○ No display	number O Display percentage
Integer poi 3 De	ecimal pc0

dial style	You can select a dial style in the drop-down box
direction Set the direction indicated by the needle, clockwise or counterclockwise	
starting angle	Set the starting angle of the meter $(0^{\circ}-359^{\circ})$
end angle	Set the ending angle of the meter $(0^{\circ}-360^{\circ})$
transparency	Set the transparency of the dial. (Tick off the syncopation dial to set the
	transparency.) You can complete the setting by sliding the slider. The closer the
	slider is to the left, the smaller the value, and the more transparent the component
syncopation dial	It is possible to cut off the dial that is not in the starting and ending angles

needle	needle style	You can select a needle style in the drop-down box
style	interior color	Set the internal color of the needle
axis	pivot style	You can select a pivot style in the drop-down box
	interior color	Set the interior color of the pivot
	external color	Set the outer frame color of the pivot
scale	display scale	Check to set whether to display the scale (if you check not to display the scale, the
		mark set below will not be displayed either)
	scale position	Set the position of the scale, including inside, outside, and center
	scale color	Set the color of the scale
	main scale	Set the number of divisions for the main scale
	division	
	main scale	set the main scale length
	length	
	subscale	Set the number of divisions for the subscale
	division	
	subscale length	set the subscale length
sign	no display	When checked, no numbers or percentages will be displayed on the instrument
	display number	When checked, the number is displayed on the instrument
	display	When checked, the percentage is displayed on the instrument
	percentage	
	integer position	Set the integer digits of the display number (valid when marked as "Display
		Number" or "Display Percentage")
	decimal position	Set the decimal places for displaying numbers (valid when marked with "Display
		Numbers" or "Display Percentage")
	font	Set the font, color, and size of the displayed numbers (valid when marked as
		"Display Numbers" or "Display Percentage")

Dashboard	x
Basic Attril range Appearan Security se Location	^
Display control Enable	1
Devic     本地设备     Settin       Addre     pSB     0       Enable Sta ON     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.

#### 4-3-5. 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.



	Electric machinery	
Basic AttAp	opeara Security Location	
Control II	D M0	
Descripti	on	
-Read add	ress	
Devic z	本地设备 v Settin	
Addre p	PSB v 0	
	Indirect	
logic		
Positive	ve logic O Negative logic	
<b>I</b> Flash		
On status flashes     Off status flashes		
Flicker freqt 0.1 秒 V		

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	

	f address tag library and user-defined tags)		
	Address		
	Device 本地设备 V Statio 0		
	Address PSB V User defined label		
	Address 0 System register		
	Address [range : 0 - 9999]		
	format		
	Address Label		
	Determine Cancel Application		
address	et the monitoring address of the motor and set whether the address is offset (i.e. indirectly		
	pecified)		
indirect specify	et the current address offset. The current register address changes as the indirectly specified		
	egister value changes, that is, Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). Example: The		
	urrent register address is PSW0, if the indirectly specified address is PSW100; When the		
	alue 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)		
logic	elect positive or negative logic when displaying motor status		
flash	elect whether to blink and whether to blink in a certain state, such as ON state flashing and		
	DFF state flashing		
flicker frequency	et the frequency of blinking		

# ■ Appearance

Electric machinery			×
Basic Att Appeara Security Location			
	Use pictures Status 0 Name motor_0	∨ )3_a	
	category svg Size 100 × 10	00	
Bol Change appearance	Border color	<b>v</b>	

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

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.

	Bar chart	x
Basic AttribA	Appearan range Scale and Security se Location	
Control	ID BC0	
Descrip	tion	
Devic	dress 本地沿安	
Addre	本地設置 PSW Y 0	
Data	Word V Unsignec V	
type	Indirect	

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 Vser defined label			
		Address 0 System register			
		数据类型 Word V Unsigned V			
		Address [range : 0 - 9999]			
		Tormat			
		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 ×				
Basic Attri Appearand range Scale and Se	Appearance			
	<ul> <li>Oradgitudi</li> <li>Direction</li> <li>Show up</li> <li>Show down</li> <li>Show Left</li> <li>Show Right</li> </ul>			
Style				
Bar chart 自定义 style:	~			
✓ Border ✓ Backgroun d	<ul><li>▼</li></ul>			
Fill Fill color:				
Pattern filling      Style:      Gradual	Foregrou v nd color:			

appearance		Select the appearance of the bar graph, and you can choose between straight bars or		
		sectors		
str	aightbar	The style of a regular bar chart		
di	irection	Set the bar graph indication direc	ection, including up, down, left, and right display	
а	sector	Displayed as a fan, starting angle	e and coverage angle can be set	
proportion of	of inner and outer	Change the display radius of the	e sector by changing this value (scale range: 1-99)	
rings				
1	••			
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 cha	hart	
	background	Set the background color of the b	bar chart	
fill	fill color	Choose a fill color		
pattery filling		Set a fill style, and set the foreground color		
gradual Choose whether		Choose whether to gradient fil	ill, 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 transpare			
		foreground color is)		

✓ Gradual         Style:       From left to right       Foregrou nd color:         Transparency:       39 ♀
Using a gradient from left to right as an example to set transparency (0-255)
transparency: 0 255

Range

Bar chart ×
Basic Attril Appearan range Scale and Security se Location
range Maximum: 100 Register
Minimum: 0 Register
✓ Target interval
Target value: 50 Register
Error range (±) 10 Register
Target interval v color
☑ Alarm range
Alarm upper 90 Register
Alarm lower 10 Register
Exceed the upper limit
Fill color:
Exceeding the lower limit
Fill color:

range Set the display range of the bar graph		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		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		register	

	alarm lower	Set the minimum alarm value of the bar graph, which can be specified by setting a
	limit	register
	color	Set the lower alarm range liquid color
exceed the	fill color	Set the color of liquids exceeding the upper limit
upper limit		
exceed the	fill color	Set the color of liquids exceeding the lower limit
lower limit		

■ Scale and mark

		Bar chart		×
Basic Attril Appearan	range Scale and Secr	urity se Location		
✓ Scale				
Scale position: Main engraving Secondary engraving	●外 ○内 12 Maj leng 5 Sut	gth: p scale 5 gth:		
Scale style				
Scale mark color Scale mark width	Sca style	le mark e	~	
Number Display Integer bits:	Decimal 3 Decimal	0		
Fo微软雅黑	~	General 🗸		
Co	Size	12 ~		
<ul> <li>Display percent</li> </ul>	age			
Fo微软雅黑	~	General 🗸		
Co	Size	12 ~		
Axis				
Show axis				

scale		Set whether to display the scale and select a scale style
scale	e 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
scale 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

Bar chart ×
Bar chart       ×         Basic Attri Appearan range Scale and Security se Location         Display control         Image         Display control         Image         Devic         Addre         PSB         Image         User permission         Image         User permission         Permission         Permission         Permission         Permission         Permission         Permission         Permission         Permission         Permission

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 (1) 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	x			
Basic Attrit		^			
Control ID BU0 Description					
Enabling conditions Word	⊖ bit				
Read address Devic 本地设备 Addre PSW ~ Data Word ~ Unsignec ~ type	Settin       0       Indirect				
Trigger conditions V 0					
<ul> <li>Ring mode</li> <li>Make a sound</li> </ul>	O Continuous 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	g conditions	Set the enabling condition to "word" or "bit"			
read address	enabling condition is word	Enabling conditions ● Word			
	enabling condition is bit	Enabling conditions			
device		Select the device port currently communicating with			
	setting	Click "Settings" to enter the address setting interface. This interface allows you to set and use system registers and user-defined tags. You can click the address tag library or project tree - library - address tag library below to set the tags used (see 5-2 Address Tag Library for the use of address tag library and user-defined tags)			

		Address					
		Device	本地设备			~	Statio n No.
		Address type	PSW		$\checkmark$		User defined label
		Address	0				System register
		数据类型	Word v	Unsigned	~		
		Address format	[range : 0 - 99	99]			
							Address Label
					Determine	Can	cel Application
	address	Set the obje	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 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: T	he current re	egister add	ress is PSW0,	if the i	ndirectly specified address is
		PSW100; V	When the val	ue of the P	SW100 regist	er is 0,	the register that controls this
		component	remains PSV	W0; When	the value of the	ne PSW	100 register is 1, the registe
		that control	s this compo	nent is PS	W1 (and so on	)	
trigger condition		If the enabling condition is "Word", the setting that meets the conditions					
		">,<,=,!=,>	=,<=a certai	n value" is	s valid; If the	enabli	ng condition is "bit", setting
		"OFF" or "ON" is valid					
ring mode	make a sound	When the c	onditions are	e met, only	one sound is r	nade	
	continuous	Keep ringin	g when cond	ditions are	met		
	sound		-				

	Sound	x	
	Basic Attril Security se Location	^	
	Enable control ✓ Enable Devic 本地设备 ✓ Settin Addre PSB ✓ 0 Enable Sta ON ✓ Indirect		
enable	The bit limit can be set (the enabling state of the enabling control can be cust	omize	d). 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	e com	ponent can be
	used; if PSB0 is in the OFF state, even if the trigger condition is met, the	e com	ponent is still
	unavailable)		

Location 

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

## 4-3-8. Backlight

This control is used to determine whether to display the backlight. When the backlight control coil is triggered, the screen backlight is turned on, which means exiting the screen saver black screen. If the screen saver is not entered or set to display the screen, this function is invalid. This component is invisible and is not visible when downloaded to the HMI.

1. Click the backlight icon in the menu bar "Parts/Industry/Backlight" or 💷 in the control window's device

bar, move the cursor to the screen, click the left mouse button, click the right mouse button, or use the ESC key to cancel placement.

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

	Backlight	×
Basic AttribSe	ecurity se Location	
Cont	rol ID BL0	
Desc	ription	
– Enabling	g conditions	
Read ac		
Addre	本地设备 PSW ✓ 0	
Data type	Word VUnsignec Indirect	
Trigge	r conditions 🗸 0	
Backligh	nt action	
(	Extinguish O Awaken	

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   bit Read address Devic 本地设备   v Settin Addre PSW   v 0 Data Word v Unsignec v Indirect					

enabling condition is bit		Enabling conditions			
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 0			
		Address PSB V User defined label			
		Address 0 System register			
		Address format [range : 0 - 9999]			
		Address Label			
		Determine Cancel Application			
	address	Set the object address of the control backlight and whether it is offset (i.e. indirectly			
		specified)			
	data type	Byte-8Bit; Word-16Bit; DWord- 32Bit; DDWord -64Bit; BCD code; Hex format;			
	. 1. (	Signed; Unigned; Floating number			
	indirect	Set the current address offset. The current register address changes as the indirectly specified register value changes, that is $D_{x}[D_{x}] = D[x+D_{x}] + D[$			
	specify	Specified register value changes, that is, $Dx [Dy] = D [x + Dy value] (x, y=0, 1, 2, 5).$ Example: The current register address is PSW0 if the indirectly specified address is			
		PSW100: When the value of the PSW100 register is 0, the register that controls this			
		component remains PSW0; When the value of the PSW100 register is 1, the register			
		that controls this component is PSW1 (and so on)			
trigger condition		If the enabling condition is "Word", the setting that meets the conditions			
		">,<,=,!=,>=,<=a certain value" is valid; If the enabling condition is "bit", setting			
		"OFF" or "ON" is valid			
backlight action		Set the backlight actions, including turning off and waking up			

	Backlight	×
Basic Attril Security se Enable control ✓ Enable Devic Addre	Location 本地设备 V Settin PSB V 0	^
Enable	Sta ON v Indirect	
ol The bit limit ca	n be set (the enabling state of the enabling control can be cus	stom

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

#### Location

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

#### 4-3-9. Fan

1. Click the fan icon in the menu bar "Parts/Industry/Fan" or 🔄 in the device bar of the control window,

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

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


		Fan ×
		Basic AttribAppearan Security st Location
		Description
		Action mode
		Enabling conditions
		● Word ○ bit
		Read address
		Devic 本地设备 v Settin
		Data Word V Unsigner V
		type Indirect
		Trigger conditions V 0
		- Direction of rotation
		Forward O Reverse
		Rotational speed
		● Constant (%) 10 v
		○ 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
		○ Keep rotating
		Enabling conditions
		© word O bit
		Read address
		Addre psw v 0
		Data Word V Unsigner V
		type Indirect
_		
_	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)
ļ	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 V Statio 0 n No.					
	Address type 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 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

	Fan	×
Basic Attri Appearan Security se Location		^
	✓ Use pictures         Status       0         Name       fan_05_a         category       svg         Size       100 × 100	~
Change appearance	More pict	ures
Border style Pure color 🗸 🗸	Border color	~

change appearanceSet display appearanceuse picturesSet whether to use pictures.You can set the appearance of clicking in three states (0, 1, 2). After selecting the state in the<br/>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	x
Basic Attril Appearan Security se Location	^
Display control ✓ Enable When 隐藏 ✓ Devic 本地设备 ✓ Settin Addre PSB ✓ 0 Enable Sta ON ✓ 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.

### 4-3-10. Agitator

1. Click the agitator icon in the menu bar "Parts/Industrial/Agitator" or 🔀 in the control window's device bar,

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

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



		Agitator
	В	asic Att Appeara Security Location
	- 1	Control ID RA0
	- 1	Description
	- 1	
		Read address Devic 本地设备  V Settin
	- 1	Addre pSB v 0
		Indirect
	- 1	logic
	- 1	Positive logic     O Negative logic
	- 1	Direction of rotation
		Forward     Reverse
		Rotation speed
		• Constant (%) 10 ~
		Controlled by register
cor	ntrol ID	It is used for system management control, and cannot be operated by users
des	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
		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
		Address X Device 本地设备 Y Ratio 0
		Address     X       Device 本地设备     Statio 0       Address     PSB       V     User defined label
		Address     X       Device 本地设备     Statio 0       Address type     PSB       Address 0     System register
		Address     X       Device 本地设备     Statio n No.       Address type     PSB       Address 0     System register
		Address     X       Device     本地设备     Statio     0       Address     PSB     User defined label       Address     0     System register       Address     [range: 0 - 9999]     Image: 0 - 9999]
		Address     X       Device 本地设备     Statio 0       Address type     PSB       Address 0     User defined label       Address format     [range : 0 - 9999]
		Address     X       Device     本地设备     Statio     0       Address     PSB     User defined label       Address     0     System register       Address     [range : 0 - 9999]     Image: 0 - 9999]
		Address       ×         Device       本地设备       、         Address       PSB        User defined label         Address       0        System register         Address       [range : 0 - 9999]           Address Label
		Address       ×         Device       本地设备       ×       Statio       0         Address       PSB       ×       User defined label         Address       0       □       System register         Address       [range : 0 - 9999]       □       Image: 0         Address       Image: 0       Image: 0       Image: 0         Address       <
		Address       ×         Device       本地设备       、         Address       PSB       、         Address       0
	address	Address       ×         Device 本地设备       Statio         Address       n No.         Address       User defined label         Address       System register         Address       [range: 0 - 9999]         Address Label       Determine         Cancel       Application
	address	Address       X         Device 本地设备       No.         Address       PSB         User defined label         Address       System register         Address       System register         Address       Image: 0 - 99999         Determine       Cancel         Application       Set the coil address that controls the action of the agitator, and set whether there is an offset (i.e. indirectly specified)
	address	Address       X         Device 本地设备       、Statio         Address       、Statio         Hype       、User defined label         Address       、System register         Address       、System register         Address       「range : 0 - 9999]         Format       Cancel         Application         Set the coil address that controls the action of the agitator, and set whether there is an offset         (i.e. indirectly specified)         Set the current address offset. The current register address changes as the indirectly specified
	address indirect specify	Address       ×         Device 本地设备       、 Statio         Address       、 No.         Address       User defined label         Address          Image: Cancel       Application         Determine       Cancel       Application         Set the coil address that controls the action of the agitator, and set whether there is an offset       (i.e. indirectly specified)         Set the current address offset. The current register address
	address indirect specify	Address       X         Device 本地设备       Statio         Address       Image: 0         Set the coil address that controls the action of the agitator, and set whether there is an offset (i.e. indirectly specified)         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 PSW100; When the
	address indirect specify	Address       ×         Device 本地设备       、 Statio 0         Address       PSB         Vype       User defined label         Address       0         Determine       Cancel         Application       0         Set the coil address offset. The current register address changes as the indirectly sp
	address indirect specify	Address       X         Device ####################################

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		^
n n	✓ Use pictures	
	Status 0 🗸	
	Name agitator_04_a	
	category svg	
	Size 90 × 180	
Bol	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 th			
	upper right corner, click "Change Appearance" or click "More Pictures" to select custor			
	images to change the appearance;			
border	Set border style and color			

Security setting

Agitator	x
Basic Att Appeara Security Location	^
Display control Image: Display control Image: Devic 本地设备 Devic 本地设备 Addre PSB V 0 Enable Sta ON V Indirect User permission Image: Devic 本地设备 User permission scope User permission Permission 1 V range	

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

Location

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

### 4-3-11. Water pump

This control is used to simulate the operation process of the on-site water pump. When the target coil reaches the specified state, the water pump starts to operate.

1. Click the water pump icon in the menu bar "Parts/Industry/Water Pump" or 🙆 in the control window's equipment bar, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or click ESC to cancel placement. Modify the length and width of the border through boundary points.

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





		Water pump	×
asic Att Ap	opeara Security Location		^
Cont Desc	rol ID WP0		
- Read ad	ldress		
Devic	本地设备	✓ Settin	
Addre	PSB v 0		
		Indirect	
logic —			
	Positive logic	Negative logic	
- Directio	n		
	Forward	○ Reverse	
Speed			
	Constant (%)	10 ~	
0	Controlled by register		

con	ntrol ID	It is used for system management control, and cannot be operated by users						
des	cription	Can be used to comment on the purpose of this control						
read	device	Select the d	Select the device port currently communicating with					
address	setting	Click "Sett	ings" to ent	er the address s	etting interface. Th	his interface allows y	you to set and	
		use system	registers a	nd user-defined	tags. You can cl	ick the address tag	library or the	
		project tree	e - library -	address tag libra	ary below to set th	he tags used (see 5-2	2 Address Tag	
		Library for	the use of a	ddress tag librar	y and user-defined	tags)		
				Add	dress	×		
		Device	本地设备		*	Statio n No.		
		Address type	PSB	~		User defined label		
		Address	0			System register		
A fc		Address format	[range : 0 - 9	999]				
			Address Label					
				C	Determine Cano	Application		
	address	Set the co	ntrolled add	lress of the wa	ter pump, and se	t whether there is a	an offset (i.e.	
		indirectly specified)						
	indirect	Set the curr	ent address	offset. The curre	ent register address	changes as the indire	ectly specified	
	specify	register val	ue changes,	that is, Dx [Dy	]=D [x+Dy value]	(x, y=0, 1, 2, 3).	Example: The	
		current reg	ister address	s is PSW0, if th	e indirectly specif	ied address is PSW1	00; When the	
		value of the	e PSW100 r	egister is 0, the	register that control	ols this component re	emains PSW0;	
		When the value of the PSW100 register is 1, the register that controls this component is						
	PSW1 (and so on)							
logic 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

	✓ Use pictures	
	Status 0	~
	Name pump_01_b	
N.H.M.	category svg	
	Size 95 × 110	
Change appearance	Border color	

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	х
Basic Att Appeara Security Location	^
Display control I Enable When 隐藏 V Devic 本地设备 V Settin Addre PSB V 0 Enable Sta ON V Indirect User permission I 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.

### 4-3-12. 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
	Control ID V0
	Description
	✓ Read / Write use different address
	Read address
	Devic 本地设备 v Settin
	Addre PSB v 0
	Indirect
	Write address
	Devic 本地设备 v Settin
	Addre pSB v 0
	Indirect
	Action
	Conduction Close On / off On when pressed
	– logic –
	Positive logic     Negative logic
	Direction
	Forward     Reverse
	Speed
	● Constant (%) 10 ∨
	O 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
ad/write use	You can check whether to use a different address for reading/writing (refer t

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

	Valve		x
Basic Att Appeara Security Location			
	✓ Use picture	S	
	Status	0 ~	
	Name	valve_05_b	
	category	svg	
	Size	110 × 85	
Boi	Border co	olor v	

change appearance	Set display appearance
use pictures	Set whether to use pictures
status	There are two optional states, 0 and 1, to set the state of the control
name	Display the name of this control
category	Display the category of this control
size	Displays the current size of the control
border	Set border style and color

Security setting

Valve	×	
Basic Att Appeara Security Location		
Operation confirmation delay          Image: Confirm before       Waiting time         Image: Confirm before       Image: Confirm before		
□ Key delay Display control ✓ Enable When 隐藏 ✓ Devic 本地设备 ✓ Settin Addre PSB ✓ 0 Enable Sta QN ✓ Indirect		
Enable control ✓ Enable Devic Addre PSB ✓ 0 Enable Sta ON ✓ 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		

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 e	entry		×
Alarm group Group 0[2]:Group0			^	
Group				
Add Modify Insert Delete Delete	all Copy Paste Import E	Export		
Select Alarm No. Eme	raency Triager conditions	Alarm content	Sound	
Group 0:Gr 0 Low	PSB0 ON	tempearture high	Disable	
Group 0:Gr 1 Low	PSB0 ON	overvoltage	Disable	- 11
				_
Historical event saving				
Storage location				
● H ○ U				
Export Control				
File				
File alarmEdit				
● Fixed file ○ Date ○ Register				
Storage capacity				
65535 € Count ✓				
When the storage space is insuffic	ient			
Stop saving Overwr	ite old records			
✓ Data retention days				
Retention c1	у			
Save				
Select	Project	Move up		
✓	No.	inore up		
	Alarm Trigger Date	Move down		
<	Alarm Trigger Time	WOVE DOWIT		<b>,</b> `
		Determine Ca	Application	on

■ 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

1.1		
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	

copy	Tick the alarm information to be copied in the front box
paste	Paste the copied information, and the pasted alarm information will be displayed on the last
	line
import	Import an edited Excel file from your computer
export	Export the alarm information edited in the software as an Excel file to the designated location
	in the computer

Before clicking Add, you must first select an alarm group in the group, otherwise a prompt to select an alarm group will pop up, as shown in the following figure:



After clicking Add, you can add alarm signals and corresponding alarm information in the pop-up window, as shown in the following figure:

Alarm entry	×
Alarm group 0 Name Emergency Low V serial	
Trigger condition • Bit · · · Vord register S	
Read address	
Devic 本地设备 v Settin	
Addre pSB v 0	
Indirect	
ConditionsUN	
Alarm content	
Text     Multiling	
	- 1
overvoltage	- 11
overvolage	- 11
	- 1
Terret paritari	
	-6
Sound	
Buzzer timeout (1	
Alarm pop-up window	
Determine Cance	
Determine Cance	

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 Statio 0 n No.
	Address type Vser defined label
	Address 0 System register
	Address [range : 0 - 9999]
	lomat
	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
		Name Monitor address setting
		value2 Variable value1
		Address Value
		type Devic 本地沿客
		Addre PSW V 0
		Data Word Vinsignec Indirect
		Data format
		Integer 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
		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	
ala	rm pop-up	When checked, the selected window will be displayed on the touch screen when the alarm is
	window	triggered
		Alarm pop-up window
		Pop up wir[20002]Local informa: V
		Pop up cycle     Pop up once
		○ Pop up cycle
		✓ Close the window after the alarm

pop up	Select the window to pop up, and it will pop up on the touch screen after the
window	alarm is triggered
pop up cycle	Popup once: only pop up once. After clicking Close, the window will not pop
	up again even if the alarm does not disappear
	Popup Cycle: After the alarm is triggered, the window will pop up. When the
	window is closed and the alarm signal does not end, it will pop up again at
	the set cycle. The default cycle is 1000 milliseconds, that is, 1 second (the
	pop up cycle unit can be customized in milliseconds/seconds/minutes)
close the	After checking, if the window has not been manually closed since it pops up,
window after	it will actively close the window when the alarm signal disappears
the alarm	

# Historical event saving

and the second second			
Historical event saving			
Storage location			
● H ○ U			
Export Control /0	Control address information		
File			
File alarmEdit			
● Fixed file ○ Date	○ Register		
Storage capacity	1		
-When the storage space is ins	ufficient		
Stop saving Over	erwrite old records		
✓ Data retention days			
Retention c1	Day		
Save			
Select	Project	^	Move up
	No.		
	Alarm Trigger Date		Movo down
✓	Alarm Trigger Time		WOVE DOWN

Set whether to store the selected alarm information in the touch screen. When checked, the generated alarm information will be stored in the touch screen. You can use the alarm list to display historical alarm information.

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
C*1	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	up to 200 characters)
Data Specify File	The stored file name is named with a date, such as the file exported on May 20, 2021, with
Name	the file name 20210529
Dynamically specify	Set a register address and the stored file will be named after the contents of the register
file name	When selecting a dynamically specified file name, you need to select a string type register
	such as character input and Chinese input. (File names support up to 200 characters)
storage capacity	Set the total amount of collected data information
	Maximum storage capacity 65535 pieces
when the storage	Stop saving or overwriting old records when the storage space is insufficient
space is insufficient	
stop saving	When checked, stop saving data when the storage space is insufficient
overwrite old	When checked, when the storage space is insufficient, it will continue to save and overwrite
records	the old records
data retention days	The default time for storing files on the screen is 1 day. After the time expires, the files will
	be deleted. The maximum retention time for files can be set to 1000 days
save	Set the stored items and sorting, and select serial number, alarm trigger date, alarm trigger
	time, alarm information, confirmation time, alarm times, and alarm recovery time



Note: Whether you choose "Fixed File Name" or "Dynamically Specify File Name" for a saved file name, the following characters are not supported for file names: //: \*? " <> |-#; \$! @ & ().

## 4-4-2. Alarm display

Display historical alarm information in a table, allowing you to query records for a certain period of time.

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

Basic Attribu Display Appearance Alarm quen Security set Location Control ID AD0 Description Alarm source Display group range Use title Use title Use title Tevt Multiling Table title List title List Data Synchronize language font styles Fo Times New Roman General Co Size 12 Kow h30		Alarm display	×
Control ID AD0 Description Alarm source Display group range  ✓ 254 ✓ Alarm entry  ✓ Use title  ✓ Tevt  Multiline   Table title List title List Data Synchronize language font styles  ✓ Times New Roman ✓ General ✓ Co ✓ Size 12 ✓ Ali Middle_Center ✓ Row h30  ✓	Basic Attribu	Display Appearance Alarm query Security set Location	
Description Alarm source Display group range Use title  Tevt Multiling  Table title List title List Data Synchronize language font styles Fo Times New Roman General  Co Size 12  Row H30  Co	Control ID	ADO	
Alarm source Display group range Use title Text Multiling Table title List title List Data Synchronize language font styles Fo Times New Roman General Co Size 12 Row H30 Co	Description	n	
✓ Use title         ● Text         ● Multiling         ■         Table title       List Data         Synchronize language font styles         Fo         Times New Roman         General         Co         Size         Ali         Middle_Center	Alarm sourc Display group rang	$\frac{0}{254}$ v Alarm entry	
Table title       List title       List Data       Synchronize language font styles         Fo       Times New Roman       General       V         Co       Size       12       V         Ali       Middle_Center       Row H30       Image: Content of the style of the styl	✓ Use title		
Table title       List Data       Synchronize language font styles         Fo       Times New Roman       General          Co       Size       12          Ali       Middle_Center       Row h30       \$	• Tevt		
Table title       List Data       Synchronize language font styles         Fo       Times New Roman       General         Co       Size       12         Ali       Middle_Center       Row h30			
Table title       List Data       Synchronize language font styles         Fo       Times New Roman       General          Co       Size       12          Ali       Middle_Center       Row h30       \$			
Table title       List title       List Data       Synchronize language font styles         Fo       Times New Roman       ✓       General       ✓         Co       ✓       Size       12       ✓         Ali       Middle_Center       ✓       Row h30       ✓			
Table title       List title       List Data       Synchronize language font styles         Fo       Times New Roman       General          Co       Size       I2          Ali       Middle_Center       Row H30			
Table title     List title     List Data     Synchronize language font styles       Fo     Times New Roman          ✓         General         ✓           ✓         General         ✓         Ali       Middle_Center     ✓     Row h30          ✓			
Fo     Times New Roman     ✓       General     ✓       Co     Size       Ali     Middle_Center	Table title	List title List Data Synchronize language font styles	
Co Size 12 V Ali Middle_Center V Row h30	Fo Times	New Roman v General v	
Ali Middle_Center V Row h 30	Co	Size 12 V	
	Ali Middle_	_Center ✓ Row h30	

Control ID	It is used for system management control, and cannot be operated by users
description	Can be used to comment on the purpose of this control
alarm source	Set the source of the alarm and customize the alarm group range to be displayed (if the selection
	range is 0-0, only the alarm information selected for the 0th group will be displayed, and other
	groups will not be displayed)
use title	When checked, the table title is displayed at the top of the table
text	Edit title content
multiling	If you want the title to be displayed in multiple languages, check this option to directly launch an
	existing multilingual library or add a new multilingual library (see 5-1 Label Multilingual for
	specific usage of multilingual libraries).
font	Set the font, color, size, alignment, and row height of the table title/list title/list data. You can
	check to use the same font. After checking, the color, size, alignment, and line height of the three
	fonts should be consistent.

### Display

			Alarm display	
Bas	sic Attrib	Display Appearance Alarm q	uery Security set Location	
	Alarm mod	le Real time		
	Number of Tota	alarms al number 100 テ en	Imber of tries per page 10	
	Use	<ul> <li>Auto-fit column width</li> </ul>		
	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
114	✓	Alarm times	Alarm times	104
Ι.	Moveu	p Move dow	n Restore default	
	Move u Time sort -	p Move down	n Restore default	
	Move u Time sort -	p Move down nological order O Reverse chr format Date YY/MM/DD v	n Restore default ronological Time HH:MM:SS	×
alarm	Move u Time sort Ochror Date time t n mode	p Move down nological order O Reverse chr format Date YY/MM/DD V Select whether the inform	n Restore default ronological Time HH:MM:SS mation displayed in the current	The second secon
alarm	Move u Time sort O Chror Date time t n mode I time	p Move down hological order O Reverse chr format Date YY/MM/DD V Select whether the inform When checked, the ala	n Restore default ronological Time HH:MM:SS mation displayed in the current rm information displayed in	Int table is real-time or historical. In table is real-time alarm informat
alarm	Move u Time sort Ochror Date time t n mode	p Move down hological order O Reverse chr format Date YY/MM/DD V Select whether the inform When checked, the ala display, that is, only the	n Restore default ronological Time HH:MM:SS mation displayed in the current urm information displayed in information currently in the	nt table is real-time or historical. the table is real-time alarm informat alarm state is displayed, and the comple
alarm	Move u Time sort - O Chror Date time t n mode I time	p Move down hological order O Reverse chr format Date YY/MM/DD V Select whether the inform When checked, the ala display, that is, only the alarm information conte	n Restore default ronological Time HH:MM:SS mation displayed in the current rrm information displayed in the ent will not be displayed.	Int table is real-time or historical.
alarm rea	Move u Time sort Ochror Date time t n mode I time story	p Move down hological order O Reverse chr format Date YY/MM/DD V Select whether the inform When checked, the ala display, that is, only the alarm information conte When this option is sele	n Restore default ronological Time HH:MM:SS mation displayed in the curren urm information displayed in e information currently in the ent will not be displayed.	nt table is real-time or historical. the table is real-time alarm informat alarm state is displayed, and the comple isplay real-time alarm information, but a
alarn rea	Move u Time sort - O Chror Date time t n mode I time story	p Move down hological order O Reverse chr format Date YY/MM/DD V Select whether the inform When checked, the ala display, that is, only the alarm information conte When this option is sele display alarm informatio	n Restore default ronological Time HH:MM:SS mation displayed in the curren rm information displayed in information currently in the ent will not be displayed. weted, the table will not only d on for the history of ended ala	Int table is real-time or historical. In table is real-time alarm informat alarm state is displayed, and the comple isplay real-time alarm information, but a urms in the table.
alarn rea	Move u Time sort - Ochror Date time f n mode I time story total	p Move down hological order O Reverse chr format Date YY/MM/DD V Select whether the inform When checked, the ala display, that is, only the alarm information conte When this option is sele display alarm information Set the total number of a	n Restore default ronological Time HH:MM:SS mation displayed in the current run information displayed in information currently in the ent will not be displayed. acted, the table will not only d on for the history of ended ala alarm messages displayed.	Int table is real-time or historical. In the table is real-time alarm informat alarm state is displayed, and the comple isplay real-time alarm information, but a arms in the table.

alarms number of Set the number of alarms displayed on the current page.

entries per When the number of pages per page is set to be less than the total number of pages, buttons or scroll bars are displayed on the side of the table to click or scroll to view information that is not page displayed on the current page.

information	use	After checking, click "" be	elow the	setting	bar (see	the figure	e below) to e	nter
		multilingual settings, or the management (see 5-1 Label N	e project Iultilingu	tree - al for sp	Library ecific usa	- Label age).	Multilingual	for
		Title Title Description	Settings					
		No.						
		Trigger date						
		Trigger time						
		Alarm information						

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

	column width	automatica	automatically adjust to the most suitable size based on the project image.			
	Set the dis	Set the displayed information content, and you can select serial number, alarm trigger date.				
	trigger time alarm information confirmation time (only available in history mode) alarm times					
	and alarm r	nd alarm recovery time (only available in history mode)				
	project	ct Edit the display items for each column of the table				
	project	No	Displays the number of the table column			
		trigger	ger Date when the alarm was generated			
		date				
		trigger	reger The time when the alarm occurred			
		time				
		alarm	n Preset content in alarm entry			
		info	reset content in diarm entry.			
		confirm	The time at which the confirmation operation	ation 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. (7)	This item is not available when		
		time	time the mode is selected as real-time).			
		If you need	d to adjust the order of items, you can clic	k the "Move Up, Move Down"		
		button. If y	you need to restore the default sorting, you	a can click "Restore Default".		
	title	Set the titl	le name for each column, which is consi	stent with the project name by		
	description	default. Yo	default. You can change it to a name that meets your own requirements as needed.			
	column	Set the co	Set the column 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 ala	arm 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 a	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 a	t the bottom	of the table.	information will be displayed		
reverse	In contrast	to the chron	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	at the top,	that is, the latest alarm information is	sequence.		
	displayed a	bove the tab	ble.			
date time format	Set the form	nat of date a	ind time.			
enable confirm	Select whet	ther to perfo	orm information confirmation. This optio	n is only available if the alarm		
	mode is sel	ected as His	story.			
mode	Set the met	hod of infor	mation confirmation.			
single click	When check	ked, an auto	omatic confirmation will be generated whe	en an alarm message is clicked,		
	and a confin	rmation time	e will be generated.			
double click	When chec	ked, an aut	omatic confirmation will be generated w	hen you double-click an alarm		
1	message, ar	nd a confirm	nation time will be generated.	1 1 1		
long press	When chec	ked, an ala	rm message will be automatically confir	med when long pressed, and a		
	confirmation time will be generated.					

information hiding	After checking, specify a register to control the display of alarm information, as shown in the						
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 as						
	listory).						
	✓ Enable Confirm						
	Mode <ul> <li>Single click</li> <li>Double-click</li> <li>Long press</li> </ul>						
	Information hiding control						
	Bit0 (hide confirmed information); Bit1 (hide recovered information); Bit2 (hide unrecovered informatic						
	he 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.						
	f the information control register is set to psw0						
	Hide confirmed information: Binary: 0001; Decimal: 1, psw0 Enter 1 to hide confirmed nformation; Hide recovered information: binary: 0010; Decimal: 2, psw0 Enter 2 to hide recovered						
	information;						
	Hide unrecovered information: binary: 0100; Decimal: 4, psw0 Enter 4 to hide unrecovered						
	information;						
	To hide confirmed and recovered information: binary: 0011, decimal: 3, psw0 Enter 3 to hide;						
	The rest are hidden in the same way.						

■ Appearance

	Alarm display
Bas	ic Attribi Display Appearance Alarm query Security set Location
Τá	able
	Backgrov V Title descript V
E	✔ Outer frame
	Line style V Line color
	Line width 1
	✓ Show grid
	Line style V Line color
	Line width 1 v
	When the alarm is triggered
	text Backgr
	✓ Alarm confirm
	text Backgr
	✓ Alarm recovery
	text Backgr
table	Set the color of the table border and background.
ackground	Set the background color of the entire table.
background	Set the background color of the table header row. If the header is not checked, th

	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,		
		shed lines, points, and point lines, as shown in the figure.		
	line color	t the line color for the table outline.		
	line width	Set the line width of the outer frame.		
show grid	Choose whe	ther to display the grid within the table.		
	line style	Set the line style of the grid of the table. You can select straight lines, dashed lines,		
		points, and point lines, as shown in the figure.		
	line color	Set the line color for the table grid.		
	line width	Set the line width of the grid.		
when the alarm	Set the text display color and background color of the corresponding alarm information content			
is triggered	when the 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

The information found will be displayed in the alarm display table. If you need to use this function, you can directly check "use the query function".

Alarm display	
Basic Attribi Display Appearance Alarm query Security set Location	
Pictur	
✓ Use the query function	
Query method	
● Query by date	
○ Register control query	
Query settings	
Query control	
PSBO	
Query date	

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
hursday , March ∨	Register control

You can also select "Register Control" to dynamically set the query address. As shown in the following figure, if you set a header address, such as PSW0, the query address will occupy a total of 3 addresses from PSW0 to PSW2, where PSW0 represents the year, PSW1 represents the month, and PSW2 represents the day, all of which are single word unsigned numbers. For example, PSW0=2021, PSW1=5, and PSW2=29, the alarm record information on May 29, 2021 will be queried.

Query sett	ings					
Query	control					
	PSBO					
Query d	late					
	hursday , March 🗸 🗹 Register contro 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 : Day (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.



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.

Query time period			
From Thursday , March V 10	Hol <sup>0</sup>	Minute	Second
To Thursday , March V 11	Hot 0	Min 26	Second
✓ Register control	PSW0		
PSW0 ~ PSW5 Represe	nt start time	Year/Month/D	Day Ho
PSW6 ~ PSW11 Repres	ent end time	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.

[		
Group	~	Register control

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

Group	~	<ul> <li>Register conti</li> </ul>	PSW0

### (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.

Level	Low	~	Register control	
			Register value(0~3) represent alarm level low, normal, high a	

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

(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.

Ouery method	
Query by date Query b	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	
Query register	
PSW0	
PSW0 ~ PSW11:根据不同的	9查询方式,最多占用12个字

■ Security setting

Alarm display	x
Basic Attribi Display Appearance Alarm query Security sett Location	
Display control ✓ Enable When	
Devic 本地设备 V Settin Addre PSB V 0	
Enable Stalon V Indirect	
✓ Enable	
Devic     本地设备     Settin       Addre     pSB     0	
Enable Sta ON V Indirect	
User permission	
<ul> <li>A prompt window pops up when the user has no permission range</li> <li>Hide this component when the user has no permission scope</li> </ul>	
User permission 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 Display Security Location         Control ID         Alarm source         Display         group range         I Use         Select         Project         Trigger time         I Use         Select         Project         Trigger time         I Tring source         Restore default         Time sort         Date time format         Date imme format		Dynamic alarm bar					
control ID       DA0         Description		Basic Attr Displa					
Description         Alarm source         Display         Over range         Move down         Restore default         Time sort <t< th=""><th></th><th>Control ID</th><th>DA0</th><th></th><th></th><th></th></t<>		Control ID	DA0				
Alarm source         Display         Output         Select         Project         Trigger date         Move up         Move down         Restore default         Time sort         Other on the format         Date         W/MM/DD         Time         HEMM:SS         Moving sg         Speed1         Ontrol ID         It is used for system management control, and cannot be operated by users         description         Can be used to comment on the purpose of this control         alarm source         Set the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)         use       If the alarm bar displays content in multiple languages, check this option to directly launch an existing multili		Description					
control ID       It is used for system management control, and cannot be operated by users         description       Can be used to comment on the purpose of this control         alarm source       Set the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)         use       If the alarm bar displays content 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)         project       Edit the display items for each column of the table         No.       Display the sequence number of the table         No.       Display the sequence for the table column         If you need to adjust the trigger date       If you need to adjust the order of items, you can click the "Move Up,		- Alarm source					
Image: Select Project Title Title Description         Image: Select Project Trigger date         Image: Trigge: Trime		Display group range	0 ~ ~ 254 ~	Alarm entry			
Select       Project       Title Title Description         Image: Control ID       It is used for system management control, and cannot be operated by users         description       Can be used to comment on the purpose of this control         alarm source       Set the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed)         use       If the alarm bar displays content in multiple languages, check this option to directly launch an existing multilingual libraries)         project       Edit the display items for each column of the table         No.       Display the sequence number of the table column         If igger time       If you need to adjust the order of items, you can trigger time         Tiring the went the alarm was generated       order of items, you can trigger time		Use					
Image: Second		Select Project Title Title Description					
Image: Trigger date       Trigger time         Image: Trigger time       Time sort         Image: Time sort       Chronological order         Date time format       Date Time         Date Time sort       Time thet:MM:SS         Image: Time sort       Time         Moving sp       Speed1         Moving sp       Speed1         Control ID       It is used for system management control, and cannot be operated by users         description       Can be used to comment on the purpose of this control         alarm source       Set the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)         use       If the alarm bar displays content 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)         project       Ed		No. No.					
Image: Trigger time       Trigger time         Trigge: time </th <th></th> <th colspan="4">Trigger date Trigger date</th> <th></th>		Trigger date Trigger date					
Image: Adam montation       Adam montation         Alarm times       Alarm times         Alarm times       Alarm times         Alarm times       Alarm times         Move up       Move down         Restore default       Time sort         Date time format       Date time format         Date WY/MM/DD       Time HH:MM:SS         Moving sp[Speed1          M		Trigger time Trigger time					
Move up       Move down       Restore default         Time sort       © Chronological order       Reverse chronological order         Date time format       Date W/MM/DD       Time HH:MM:SS         Moving sp       Speed1       V         Date time information for the selected group 0 will be displayed, and other groups will not be displayed)       Not be displaye0         Multi-language							
Move up       Move down       Restore default         Time sort       Chronological order       Reverse chronological order         Date time format       Date (Y//MM/DD )       Time HH:MM:SS )         Moving sp       Speed1       Moving sp         Control ID       It is used for system management control, and cannot be operated by users         description       Can be used to comment on the purpose of this control         alarm source       Set the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)         use       If the alarm bar displays content 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)         project       Edit the display items for each column of the table         No.       Display the sequence number of the table column       If you need to adjust the order of items, you can click the "Move Up,         trigger time       Time when the alarm was generated       click the "Move Up,							
Time sort       Image: Chronological order       Reverse chronological order         Date time format       Date time format       Date time format         Date W//MM/DD       Time HH:MM:SS       Image: Chronological order         Moving sp Speed1       Moving sp Speed1       Image: Chronological order         Control ID       It is used for system management control, and cannot be operated by users         description       Can be used to comment on the purpose of this control         alarm source       Set the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)         use       If the alarm bar displays content 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)         project       Edit the display items for each column of the table         No.       Display the sequence number of the table column       If you need to adjust the order of items, you can click the "Move Up,		Move up Move down Restore default					
Image: Chronological order       Reverse chronological order         Date time format       Date W/MM/DD         Date W/MM/DD       Time HH:MM:SS         Moving sp       Speed1         Moving sp       Speed1         Control ID       It is used for system management control, and cannot be operated by users         description       Can be used to comment on the purpose of this control         alarm source       Set the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)         use       If the alarm bar displays content 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)         project       Edit the display items for each column of the table         No.       Display the sequence number of the table column       If you need to adjust the order of items, you can criteringer time         trigger time       Time when the alarm was generated       order of items, you can click the "Move Up,		Time sort <ul> <li>Ochronological order</li> <li>Reverse chronological order</li> </ul> Date time format         Date       YY/MM/DD         YY/MM/DD       Time					
Date time format         Date YY/MM/DD         Date YY/MM/DD         Moving spSpeed1         Moving spSpeed1         Control ID         It is used for system management control, and cannot be operated by users         description         Can be used to comment on the purpose of this control         alarm source         Set the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)         use       If the alarm bar displays content 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)         project       Edit the display items for each column of the table         No.       Display the sequence number of the table column       If you need to adjust the order of items, you can click the "Move Up,         trigger time       Time when the alarm was generated       click the "Move Up,							
Date W/MM/DD Time HH:MM:SS         Moving sp Speed1         Moving sp Speed1         Control ID         It is used for system management control, and cannot be operated by users         description         Can be used to comment on the purpose of this control         alarm source         Set the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)         use       If the alarm bar displays content 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)         project       Edit the display items for each column of the table         No.       Display the sequence number of the table column       If you need to adjust the order of items, you can click the "Move Up,         trigger time       Time when the alarm was generated       click the "Move Up,							
Moving sp Speed1       Moving sp Speed1         control ID       It is used for system management control, and cannot be operated by users         description       Can be used to comment on the purpose of this control         alarm source       Set the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)         use       If the alarm bar displays content 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)         project       Edit the display items for each column of the table         No.       Display the sequence number of the table column       If you need to adjust the order of items, you can click the "Move Up,         trigger time       Time when the alarm was generated       order of items, you can click the "Move Up,							
Moving sp Speed1       ✓         control ID       It is used for system management control, and cannot be operated by users         description       Can be used to comment on the purpose of this control         alarm source       Set the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)         use       If the alarm bar displays content 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)         project       Edit the display items for each column of the table         No.       Display the sequence number of the table column         If you need to adjust the order of items, you can chick the "Move Up,							
control IDIt is used for system management control, and cannot be operated by usersdescriptionCan be used to comment on the purpose of this controlalarm sourceSet the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)useIf the alarm bar displays content 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 		Moving sp <sup>S</sup> l	peed1 v				
descriptionCan be used to comment on the purpose of this controlalarm sourceSet the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)useIf the alarm bar displays content 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)projectEdit the display items for each column of the tableNo.Display the sequence number of the table columntrigger dateDate when the alarm was generatedTime when the alarm was generatedorder of items, you can click the "Move Up,	control ID	It is used for	system management control, a	nd cannot be operated by	users		
alarm sourceSet the source of the alarm and select a group from the alarm input (if the selection range is 0-0, only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)useIf the alarm bar displays content in multiple languages, check this vion to directly launch an existing multilingual library or add a new multilingual library (see 5-1 Label Multilingual for specific usage of multilingual libraries)projectEdit the display items for each column of the tableIf you need to adjust the order of items, you can trigger timetrigger timeTime when the alarm was generatedclick the "Move Up,	description	Can be used	to comment on the purpose of	this control			
only the alarm information for the selected group 0 will be displayed, and other groups will not be displayed)use multi-language existing multilingual library or add a new multilingual library (see 5-1 Label Multilingual for specific usage of multilingual libraries)projectEdit the display items for each column of the tableNo.Display the sequence number of the table columnIf you need to adjust the order of items, you can click the "Move Up,trigger timeTime when the alarm was generatedother "Move Up,	alarm source	Set the sourc	e of the alarm and select a gro	up from the alarm input (i	f the select	tion range is 0-0,	
be displayed)useIf the alarm bar displays content 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)projectEdit the display items for each column of the tableNo.Display the sequence number of the table columntrigger dateDate when the alarm was generatedtrigger timeTime when the alarm was generated		only the alar	m information for the selected	group 0 will be displayed	l, and othe	r groups will not	
use multi-language isiting multilingual library or add a new multilingual library (see 5-1 Label Multilingual for specific usage of multilingual libraries)projectEdit the display items for each column of the tableNo.Display the sequence number of the table columnIf you need to adjust the order of items, you can click the "Move Up,trigger timeTime when the alarm was generatedclick the "Move Up,		be displayed)	)				
multi-languageexisting multilingual library or add a new multilingual library (see 5-1 Label Multilingual for specific usage of multilingual libraries)projectEdit the display items for each column of the tableNo.Display the sequence number of the table columnIf you need to adjust the order of items, you can click the "Move Up,trigger timeTime when the alarm was generatedclick the "Move Up,	use	If the alarm	irectly launch an				
specific usage of multilingual libraries)         project       Edit the display items for each column of the table         No.       Display the sequence number of the table column       If you need to adjust the order of items, you can trigger date         trigger time       Time when the alarm was generated       order of items, you can click the "Move Up,	multi-language	e existing multilingual library or add a new multilingual library (see 5-1 Label Mult					
projectEdit the display items for each column of the tableNo.Display the sequence number of the table columnIf you need to adjust thetrigger dateDate when the alarm was generatedorder of items, you cantrigger timeTime when the alarm was generatedclick the "Move Up,	0.0	specific usag		C			
No.Display the sequence number of the table columnIf you need to adjust thetrigger dateDate when the alarm was generatedorder of items, you cantrigger timeTime when the alarm was generatedclick the "Move Up,	project	Edit the displ					
trigger dateDate when the alarm was generatedorder of items, you cantrigger timeTime when the alarm was generatedclick the "Move Up,	No.	Display the sequence number of the table column If vou need					
trigger time Time when the alarm was generated click the "Move Up,	trigger date	Date when th	items, you can				
	trigger time	Time when the	he alarm was generated		click th	e "Move Up,	

alarm	Preset content in alarm entry	Move Down" button. If				
information		you need to restore the				
alarm times	Display the total number of times this alarm occurred	default sorting, you can				
		click "Restore Default"				
time sort	Set the information display mode and select whether the latest alarm is displayed before or after					
chronological	According to the sequence of alarm time generation, the display generated first is displayed first,					
order	and the display generated later is displayed last, that is, the latest alarm information is displayed					
	at the end					
reverse	Contrary to the chronological order, the alarm generated first is displa	ayed at the bottom, and the				
chronological	alarm generated later is displayed at the top, that is, the latest alarm information is displayed in					
order	front of the alarm bar					
date time	Set the date and time format					
format						
moving speed	The higher the speed number, the faster the scrolling speed					

When use multiple languages is checked, "..." will be displayed in the lower right corner of the title description. Clicking it will jump to the multi language library setting interface to set multiple languages.

✓ Use							
Select	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 Location							
✓ Outer frame	/ Outer frame						
Outer frame color V							
✓ Fill							
Fill color	Fill color						
L							
Font settings							
<ul> <li>Font settings</li> </ul>							
Font settings Fo 微软雅黑	✓ General ✓						
Font settings Fo 微软雅黑 Co	<ul><li>✓ General ✓</li><li>✓ Size 12 ✓</li></ul>						

outer frame		Set the outer frame color of the dynamic alarm bar
fill fill color		Set the background color of the dynamic alarm bar
transparency		You can complete the setting by sliding the slider (the closer the slider is to the left, the
		lower the transparency percentage, and the more transparent the component)
font setting		You can set the color, size, and alignment of the font (you can also check autofit size, which
-		means that dragging the mouse changes the size of the component, and the text size changes

accordingly)
·

Security setting

Dynamic alarm bar	x
Basic Att Display Security Location	
Display control ✓ Enable When 隐藏 ✓ Devic 本地设备 ✓ Settin Addre PSB ✓ 0 Enable Sta ON ✓ 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.

# 4-5.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 sampling							
	Sampling Grou	ıp 0[1]:1	~	Name 1	New	Delete Edit s	ampling group nam	
l	Add Modify I	insert Delete	Delete all Copy	Paste Import Export				
	Sampling grou	n No.	Address	Sampling	Cycle tridder address	Acquisition control	Clear address	
L						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 above
	or below

delete	Delete selected sampling information
delete all	Delete all sampling information for this group
copy	Copy selected sampling information
paste	Paste the copied information, and the copied information will be displayed on the last line
	of the current sampling group
import	Import excel file from your computer
export	Export all the sampling information edited in the software to the designated location on
	the computer as an Excel file

# Add information

After clicking "Add"/"Modify", the window shown below will pop up, where you can edit the sampling information.

Data sampling	×
Basic Attributes	
No. 1 Descri	^
Acquisition control	
Collection mo 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	
Addre pSW v 0	
type	
Save	
Storage location	
HMI O U disk	
Export Control	
File	
File nam simpleFile	
$ullet$ Fixed file name $\bigcirc$ Date specify the file $\bigcirc$ Dynamically specify the file name	
Storage capacity	
80000 Coun V About0.20MB	
Mining full treatment mode	
● Loop cover○ Stop when full collection	
Collection full notification	
Clear Data	
✓ Data retention days limit Retention 7 ♀ Day	
Save	
Select Project Maria un	~
Determine Cancel Application	

No.	The number of this sampling group is displayed and cannot be edited
description	Set the description of the sampling group for use only as a note for project editing
acquisition control	Acquisitic PSB0 Acquisitio OFF V

	After checking, set a c	oil address and start collecting data only when the coil meets the collection
	conditions (can be set	to ON/OFF)
acquisition	select on or off	
condition	Acquisitio	¥
	ON	
	on Trigger OFF	nn
collection	Set the mode, cycle, tr	igger or fixed mode of data collection
mode	periodic acquisition	Collect with a fixed cycle, and set the sampling time. The sampling units are
		(0.1 seconds/second/minute)
		Collection m Periodic acquisition Trigger acquisition Fixed mode
		Cameline 1 0.1 second ¥
		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.
		the conditions to "<" ">" "<=" "!=" a fixed value to take affect
		If you do not need a fixed value you can select register assignment to
		dynamically specify the value
		Collection m Periodic acquisition Irigger acquisition Fixed mode
		Word O bit
		Read add   PSW0   Cond    V   0   Register assignment
		Bit address trigger acquisition: After selecting a bit address, you can set the
		condition to "ON ->OFF", "OFF ->ON" to take effect.
		○ Word ● hit
		ON->OF
		OFF->ON
	fixed mode	Set a fixed time period for collection only
	nixed mode	Collection mo p in the period for concerton only
		Time from 16 V Hol33 V Minute Hol34 V 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

Basic Attribute	Channel setting							
		New Inser Dele Mov Mov						
Channel	Address	Type Format word number Name Description						
1	PSW0	Word Vunsigned 1 Channel1						
2	PSWU	word • Unsigned • I Channel2						
1	1.							
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						
	setting	g 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 se the tags used (see 5-2 Address Tag Library for the use of address tag library and user-defined tags)						
		Device       本地设备       、       Statio       0         Address       PSW        User defined label         Address       0        System register         数据类型       Word       Unsigned          Address       [range : 0 - 9999]           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 or 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 sele	cted data type,	the system will aut	comatically increment and		
		number	cannot be i	nodifie	d				
		description	Custom de	scriptio	on text				
storage	storage set the mode of data sto								
	storage capacity		Storage of 80000 Set the tota is "count" automatica	capacity al amou or "Ml lly con	Coun V ant of collected B". Regardless vert it to anoth	About0.20MB d data information s of which unit is se er unit and display in	tored. The selectable unit elected, the software will t later.		
	loop cover		The collec	tion w	ill continue af	ter reaching the set	t capacity, and the touch		
		11 4 4 4	screen will		the earliest col	lected data to store i	iew data		
	mining ful mode	ll treatment	When the a Mining fu	icquisit III treati cover(	non reaches the ment mode ) Stop when fu	e set storage capacity	<i>i</i> , the storage is full		
			Colle	ction	PSB0				
			✓ Clear	Data	PSB0	Mode ON->OFF	~		
			collection	Set a c	coil, and when	the acquisition reacl	nes the set capacity, set on		
				Set o	ll	the electric method	When the set conditions		
			clear data	are mo	et, the collecte "ON ->OFF", '	d data will be clear OFF ->ON")	ed (the conditions can be		
save	To set the	storage loca	tion, you ca	an sele	et HMI or US	B flash disk, or use	a register to specify the		
	storage loc is HMI; WI Save Storage loc	ation. For exhen PSW=3,	the storage	ou set t locatio	he register PS n is a USB flas	W0, then when PSW h drive	/0=1, the storage location		
	File nam simpleFile								
	Fixed file name      Date specify the file      Dynamically specify the file name								
	Storage capacity 80000 🗘 Coun V About0.20MB								
	Mining full	treatment mode	9						
	Loop co	over() Stop whe	en full collectior	ו					
	Collecti	on PSB0							
	Clear Da	ata PSBO	ModeON	·>0FF	×				
	✓ Data ret Save	tention days lim	It Retention	/	Day				
	Select	Proi	iect			Moveup			
	v	No.	,			wove up			
		Date	2			Move down			
		Time Colle	e ect data						
						Default			

	Storage location of sampling information during simulation:
	(1) Save to USB flash drive: Software directory Temp/Run/storage/udisk/sample
	(2) If you choose to save to the HMI: software directory Temp/Run/db/sample, the saved file in this
	saving method cannot be directly opened for viewing. To view, you need to export to a USB flash
	drive through the export control register, and then view the exported file in the path saved to the
	USB flash drive
export control	Set the register for HMI export control (if set to PSW0, three consecutive addresses with PSW0 as the
	first address control different states), and click "Control Address Information" to preview
	Control address information
	命令:PSW0
	1.Export sampling data to U disk
	2:Export sampling data to U disk and clear the
	近点.Fow1 The numerical value of 1~100 indicates the
	结果:PSW2
	0:Data being exporting
	1:Export succeeded
	2:导出设备不存在 3:L 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
	using "Register Specified Storage Location".
	2. When inputting 1 or 2 to the command register, the database can be controlled to be exported to a
	USB flash drive, and the exported file format is xjdb. The xjdb to csv convert tool can be opened by
	double clicking on the software root directory \Tool\XJDbTool\XJDbTool.exe, which is set as the
	default opening method for xjdb. After opening, enter the path name of the csv, and click "Export" to
	convert the xjdb format file to a csv format file.
file name	Set the name of the stored file, with which the system will store data
fixed file	The stored file name is fixed, that is, the name set in the file name (the file name supports up to 200
name	characters)
date specify	The stored file name is named with a date, such as the file exported on May 29, 2021, with the file
the file	name 20210529
dynamically	Set the register address, and the stored file will be named after the contents of the register. When
specify the	selecting a dynamically specified file name, you need to select a string type register such as character
file name	input and Chinese input. (File names support up to 200 characters)
storage	Stop saving or overwriting old records when the storage space is insufficient
capacity is	
not enough	
stop when full	When checked, stop saving data when the storage space is insufficient
collection	
loop cover	When checked, when the storage space is insufficient, it will continue to save and overwrite the old
	records
data retentive	The default time for storing files on the screen is 7 days. After that time, the files will be deleted. File

days limit	retention time can be set to a maximum of 1000 days
save content	Set the stored items and sorting. The saved content can be selected from serial number, date, time, and
	collected data. You can move the saved content up, down, and restore the default sorting operation.

Note: Whether you choose "Fixed File Name" or "Dynamically Specify File Name" for a saved file name, the following characters are not supported in the file name: //: \*? " <> |-#; \$! @ & ().

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				>
Basic Attribute	e Channel settin	Ig								
	_						New	Inser Dele	Mov	Mov
Channel	Address	Туре		Format		word number	Name	Description		
1	PSW0	Word	•	Unsigned	-	1	Channel1			
2	PSW1	Word	-	Unsigned	-	1	Channel2			
3	PSW2	Word	•	Unsigned	•	1	Channel3			

# 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	nfiguration		×
sic Attribute	Display S	cale display Que	ery Security settin L	ocation		
Control IE	TC0					^
Descriptio	on					
	<b>•</b> • • •					
Display m	De Real time	e () Histo	ory			
Data capa	C_100	10				
<ul> <li>Displa</li> <li>Time r</li> </ul>	y points per period displa	10				
0						
Data cour						
Samplin	ce	<ul><li>✓ No.</li></ul>	~	Data		
Informatio	on MO (an ata			II. Chan an an I'm	Classication of the second	
Acquisitio	on IVIU (on sta	usition 1c Drov	rage mo Collecting fu	ill, Stop samplin	Clear acquis MO 1: ng	
Channel	election	IISILION IS FIE				
channers			<b>D</b> + +	word		
Select	Channel	Address	Data type	number	Description	
Curve			✓ curve style			
Line width			~			
Data						~
						>
				Det	ermine Cancel	> Application

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 Information Acquisition M0 (on state) Acquisition Cycle acquisition 1s Preservatio SD card				
ahannal	Select the data showneds to display from the compline group, and each showned is displayed as a				
selection	separate curve. Uncheck those that do not need to be displayed				
	Channel selection				
	Select Channel Address Data type word number Description				
	Curve   color   color   Line width     Data   Max   0   Register assignment   Min   0   Register assignment				
curve color	Set the curve color of the selected channel				
curve style	Select the curve style of the selected channel, including polylines, points, and dotted lines				
line width	Set the line width of the selected channel				
data	Set the curve display maximum and minimum values for the selected channel. You can set fixed				
	data or select register assignments				

Display

	Trend chart configuration
Basic Attribute Display Scale display Trend chart background	Query     Security settin     Location       Scale area        background
<ul> <li>✔ Grid</li> <li>X-axis grid equal fraction</li> <li>Y-axis grid equal fraction</li> <li>1</li> </ul>	Thi ck
<ul><li>✓ Zoom (%) PSW0</li><li>✓ Page turnin PSW0</li></ul>	For example, PSW0 represents the scaling percentage ratio, for example, PSWC

trend chart	Set the background color of	f the trend chart
background		
scale area	Set the background color of	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	
Numerical display * Display the coordinates of the selected point	When selecting the historical mode, clicking a point on the trend chart will display the current value of the point, as shown in the figure on the right show items content description select background color	100       描述内容       坐标范围       当前值         日期       day       2022/05/12         67       时间       \$       13:13:12         曲线1       0.00~100.00       0         33       一       曲线2       0.00~100.00         0       -       -       -         2022/05/12       2022/05/12       2022/05/12         13:13:08       13:13:11       13:13:14    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
	font color	Set the font color
	data line 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
zoom	Select whether to scale the	curve. After checking, set the register address to represent the scaling
	ratio with the register value	
	✓ Page turnin     PSW0	For example, PSWU represents the scaling percentage ratio, for example, PSWC
page turning	Set the register address to ovalue	dynamically control the page turning of the curve based on the register

■ Scale display

Trend chart configuration
Basic Attribute Display Scale display Query Security settin Location
Scale display ✔ X-scale
Axis / scale cold
Major scale equa Main engravin 10
$\checkmark \text{ Minor scale equ} 1 \qquad \qquad  Sub \text{ engraving}^6 \qquad \qquad $
✓ Use timescale
✓ Display dat (YY/MM/DD ∨ ✓ Display tim HH:MM:SS ∨
Fo 微软雅黑    General
Siz 12 V
V-avis scale
Axis / scale co
Major scale equa 3 💭 Main engravin 10
✓ Minor scale equ 1 $\clubsuit$ Sub engraving 6 $\clubsuit$
○ No display ● Display nur○ Display percent
Scale range: © Custom () Use channel max min () Show all channel ranges
Fo 微软雅黑
Siz 12 V
Determine Cancel Application

X scale	axis/scale color	Set the display color for the X axis and scale
	major scale	Set the number of segments for the X-axis major divisions
	segment	
	main scale length	Set the display length of the major divisions
	sub scale	When checked, the sub scale will be displayed on the control, where the number of
	segment	sub scale segments is set
	sub scale length	Set the display length of the sub scale
use time scale		When checked, it will be displayed in the control with a time scale
display date		When checked, the date will be displayed on the time scale
display time		When checked, the time will be displayed on the time scale
font		Set the font for scale display
	size	Set the size of the scale display text
Y scale	axis/scale color	Set the display color for the Y axis and scale
	major scale	Set the number of segments for the Y-axis major divisions
	segment	
	main scale length	Set the display length of the major divisions

sub scale		When checked, the sub scale will be displayed on the control, where the number of	
	segment	sub scale segments is set	
	sub scale length	Set the display length of the sub scale	
scale 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	
integer bit		After selecting the display flag, you can set the integer digits displayed as needed	
decimal bit		Set the number of decimal places to display numbers as needed	
scale 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

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.

	Trend chart configuration	×
Basic Attribute	Display Scale display Query Security settin Location	
✓ Pictur	PSB0 Export conditi ON->OFF V Export Format PNG V	
✓ Use the d	query function	
Query met	hod	
Quer	y by date O Query by time perio Press channel	
🔿 Regi	ster control query	
Query sett	ings	
Query	control	
	PSBO	
Query	late	
	Friday , March $\checkmark$ Register control	

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.



(2) Query by time period: Enter the start time and end time to query. After the query trigger bit is turned on, the filtered results will be automatically displayed.

Query method		
Query by date Query by	time perio Press	channel
$\bigcirc$ Register control query		
Query settings		
Query sentrol		
Query control		
PSB0		
Query time period		
From Friday , March 🗸	10 Hol 34	Minute Secc
To Friday , March V	11 Hot34	Min <sup>6</sup> Secc
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, 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.

Query time pe	riod					
From	Friday	, March $\vee$	10	Hor34	Minute	Secc
То	Friday	, March $\vee$	11	Hot 34	Min 6	Secc
		Register co	ontro	PSW0	]	
Example: PSW0~PSW5: from time year, month, day,					lay,	
PSW6~PSW11: refers to the time year, month, da						

(3) Query by channel: Select or dynamically specify the number of channels to query the records of corresponding channels.

Query method Query by date	○ Query by time perio Press channel
🔘 Register control qu	ery
Query settings	
Query control	
PSB	0
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 method	
○ Query by date ○ Query by time perio○ Press channel	
Register control c PSW0 Register value 0: by date 1: by time period 2: by channel	4
Query settings	
Query control	
PSBO	
Query register	
PSW0	
Example: PSW0~PSW11: According to different query methods, it can take u	p to 12

Security setting

Trend chart configuration	x
Basic Attribute Display Scale display Query Security setting Location	
Display control ✓ Enable When  陰藏 ✓	
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 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.

Basic attributes

	XT IIIC Churc	
Basic Attrit Data Disp	play Security se Location	
Control ID X0		
Description		
• Periodic	○ Trigger type	
Sampling pe <sup>1</sup>	Second V	
Control settings		
─ Control settings ─ ✓ Suspend compared	PSB0 Trigger co <mark>ON ∨</mark>	
⊂ Control settings — ✓ Suspend co ✓ Clear contr	PSB0 Trigger co ON ∨ PSB0 Trigger co Rising € ∨	

contr	rol ID	It is used for system management control and cannot be operated by users.
desci	ription	Can be used to comment on the purpose of this control.
sampling	periodic	Set the sampling period and collect it regularly according to the cycle time. The cycle time
mode		defaults to 1 second, and can be adjusted as needed (collection unit: 0.1
		second/second/minute).
	trigger	Set a bit register and select the rising or falling edge as the trigger condition. When the
	type	address reaches the trigger condition, a piece of information is collected.

		O Periodic       Trigger type
		Triqger address         Devic       本地设备       ✓         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 PSB User defined label Address [range:0-9999] Determine Cancel Application
	indirect	Set the current address offset. The current coil address changes with the indirectly specified.
	specify	register value, that is, $Dx [Dy]=D [x+Dy value] (x, y=0, 1, 2, 3). Example: The current$
	1 5	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 chart				
Basic	XY line chart         Number of 3         Y addicate comes from the same data area         Image: Statistics       Occupied PSW0-PSW19       XY axis coordinate point address c         Channel settinox:       Occupied PSW0-PSW19       XY axis coordinate point address c         Channel settinox:       Occupied PSW0-PSW19       XY axis coordinate point address c         Upper       Image: YLPSW2       XLPSW2       YLPSW2         Varia       Image: YLPSW2       YLPSW2       YLPSW2         Upper       100       Register control       Register control         Vuppei       100       Register control       Register control         Vuppi       100       Regis					
N	umber o <sup>3</sup>					
	XY axis data c	comes from the same data area				
	Channel X	Caddress Data type Data format Y address Data type Data format				
	2	PSW0 Word V Unsigned V PSW1 Word V Unsigned V				
	3	PSW0 Word V Unsigned V PSW1 Word V Unsigned V				
C	hannel settino: curve styl	S       Occupied PSW0-PSW19       XY axis coordinate point address or X0:PSW0       Y0:PSW1         X1:PSW2       Y1:PSW3       X2:PSW4       Y2:PSW5         Line width        Line style				
	pper and lowe X axis	er limits of range				
l	uppe 100	Lowe 0 Register control				
	Yaxis 100	Register control Lowe 0				
	eference line					
	Reference	setting Curve				
	ine					
number of channel	Set the nu	umber of channels (the maximum number of channels is 16), and each chann				
	correspond	ds to a curve (by clicking $\square$ , the number of channels below will increase of				
	decrease a	ccordingly).				
XY axis data	If X and	Y are selected from the same data area, assuming the set address is n, the				
comes from the	coordinate	is of data point 1 are $(n, n+1)$ , data point 2 is $(n+2, n+3)$ , and data point 3 is $(n+3)$				
same area	n+5) If X and X	V are not selected from the same data area, assuming that the address set for the				
	avis is a at	are not selected from the same data area, assuming that the address set for the not the address set for the V axis is h, the coordinates of data point 1 are $(a, b)$ , da				
	noint 2 is (	(a+1, b+1) and data point 3 is $(a+2, b+2)$				
	X address	Set the object for the X axis				
	Y address	Set the object of the Y axis (can be set when XY axis comes from the same da				
	1 4441 655	area is not checked).				
	data type	Set the data type of the collection object. You can choose from 8-bit, 16-b				
	71-	32-bit, or 64-bit data types.				
	data	Set the data format of the collection object, and you can select decima				
	format	hexadecimal, floating point, and unsigned numbers.				
channel setting	Each chan	nel can be set with a different curve style, line color, width, and line type.				
upper and lower	Display range of X and Y axis data objects.					

upper

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

## Display

color

		XY line chart
Basic Attril Data	Display Security se Loca	ation
Line chart b	ac Jay	Scale area bacl.
<ul> <li>Scale displa</li> <li>✓ X-scale</li> <li>Scale as</li> </ul>	y	
Main sc scale e	ale equal fraction 📄	Sub scale scale equal fraction
Scale	ength 10 🖨	Scale length 10
Scale mar	k	
O No	display   Display	number O Display percentage
Inte	ger di 5 🔽	Decimal D
Fon	Arial	¥
Cole	or 🗾 🗸	Size 12 v
✓ Y-axis sca	le	
Scale co	olor	
Main so	ale	✓ Sub scale
scale e	equal fi <sup>3</sup>	scale equal fraction
Scale	ength 10	Scale length 10
Scale mai	k	
O No c	lisplay 💿 Display	/ number 🔘 Display percentage
Integ	ger di 5 📮	Decimal Di 2
Font	Arial	~
Cold	r 🗸 🗸	Size 12 v
art background	Set the background	color of the line chart.
color		
rea background	Set the background	color of the scale area.

	grid display	Set whether the	grid is displayed.			
grid	grid display       Set whether the grid is displayed.         grid       X axis grid equal       Sets the number of grid divisions for the X axis.         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.         Uine chart bac       Scale area bac         Y-axis grid equal       Set the grid color.         Uine chart bac       Y-axis grid equal         Y-axis grid equal       Set the grid color.         Wine style       Line style         Uine style       Line color         Set the grid color       Set the display color for the X axis and scale.         main       scale         equal fraction       main         main       scale         grid the checking, display sub scale on the co					
display	Yaxis grid equal	Sets the number	r of grid divisions for the Y axis.			
	line style	Set the line style	e, including solid line, dotted line, dot line, thick line, and so on.			
	line color	Set the grid cold	or.			
		Line chart bac ✓ Grid display X-axis grid eq	Scale area bacl			
		Line style	Line color			
scale	X scale	Scale Color	Sets the display color for the X axis and scale.			
display		main scale	Set the X axis main scale segments			
		equal fraction				
		main scale	Set the main scale display length			
		length				
		sub scale equal	after checking, display sub scale on the control, set the sub scale			
		fraction	segments			
		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 to			
		display number	s, percentages, or not.			
		integer bit	After selecting the display flag, you can set the integer digits			
		daaimaal hit	displayed as needed.			
		font	Set the four for the scale display			
		size	Set the size of the scale display.			
		color	Set the color of the scale display text.			
	Y scale	scale color	Set the display color for the Y axis and scale			
	i soure	main scale	Set the Y 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 scale			
		fraction	segments			
		sub scale	Set the sub scale display length			
		length				

Security setting

				XY li	ne char	rt
Basic Attril	Data	Display	Security se Loc	ation		
- Displa	y contro	d ———				
Whe	en	隐藏	~			
	Devic Addre	本地设备 PSB	ži V	0	~	Settin
	Enable	Sta ON	~	Indired	ct	
User p	ermissio	on ——				
✓ H	lide this	compon	ent when the	user has no	o permise	sion scope
L r	Jser per ange	mission	Permission	1	~	

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.

Basic attributes

XY趋势图					?	×
基本属性	数据	显示	安全设置	位置		
控件ID	XYT0					
描 述						
<ul> <li>─ 采集方式 —</li> <li>● 周期采集</li> </ul>	2 交样周期	1	01秒 🗸			
<ul> <li>● 利利末昇</li> <li>○ 触发采集</li> </ul>	E voltiver		0.112			
- 点数设置	7 10		使用寄存器			
采集处理	、 助式 ) 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	8		
Y轴						
上限 1	00		下限 0	0		
	1 200 88					

cc	ontrol ID	It is used for system management control, and cannot be operated by users
de	scription	Can be used to comment on the purpose of this control
Refresh	Periodic	Set the sampling period and collect it regularly according to the cycle time. The cycle
mode	acquisition	time defaults to 0.1 seconds, which can be adjusted as needed (collection unit: 0.1
		seconds/second/minute)
	Trigger	Set a register and select the trigger condition. When the address reaches the trigger
	acquisition	condition, a message is collected.
		Word address trigger acquisition: After selecting a word address, you can set the
		conditions to "<", ">", "<=", ">=", "!=" a fixed value to take effect. If you do not
		need a fixed value, you can select register assignment to dynamically specify the value.
		○ 周期采集
		<ul> <li>● 触发采集</li> <li>○ 位</li> <li>● 字</li> </ul>
		役 备 本地设备
		地址 psw00
		数据类型 Word V Unsigned V 目 间接指定
		Bit address trigger acquisition: After selecting a bit address, you can set the condition to
		the rising edge or falling edge to take effect.
		○ 周期采集
		● 触发采集 ● 位 ○ 字
		设备本地设备 / 设置
	device	Device port currently communicating
	address	Set target coil number
	setting	Click "Settings" to enter the address setting interface. This interface allows you to set and
		use system registers and user-defined tags. You can click the address tag library or
		project tree - library - address tag library below to set the tags used (see 5-2 Address Tag
		Library for the use of address tag library and user-defined tags)

		地址     ? ×       没 备 本地设备     站号 0       地址类型     PSB       地 址 0     日户自定义标签       地 址 0     系统寄存器       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	副性	数据	显示	安	全设置	位置		
通	道数 1		≑ 新増	通道	删除通道			
通道	X轴地址	数据类型	数据格	冠	Y轴地址	数据类型	数据	格式
1	PSW0	Word	<ul> <li>Unsigne</li> </ul>	ed 🔻	PSW0	Word	<ul> <li>Unsig</li> </ul>	ned
_								
<								>
曲线		$\sim$						
		· · ·						
线条	样式							
*	粗细 ——		— ~	;	样式 —		~	
1	颜色 📃		$\sim$					
***	2		▲ <u>\$</u> €	-				
≫ ಇನ 	2	1 mar /2	▼ 0/1		AUG RAT.			
序号	<b>H</b>	我颜色	田焼樽	ert.		坐标只	l	
2			が 1 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5					
2			1/128					

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

	XY趋势图					×
	基本属性	数据	显示	安全设置	位置	
	- 背景颜色					
L	趋势图背景色		~	刻度区背景色	à 🗌	~
	☑ 栅格显示					
1	X轴栅格等分	数 5	-	Y轴栅格等分	数 5	* *
÷	粗细 —		- ~	样式 -		- ~
-	颜色 📃		$\sim$			
	☑ X轴刻度					
	刻度颜色		$\sim$			
:	主刻度			✓ 副刻度		
1	轴等分数	5	-	抽等分数	1	* *
	刻度长度	10	-	刻度长度	5	* *
	刻度标记					
1	○ 不显示	۲	显示数字	○ 显示百分	沘	
1	整数位	4	-	小数位	0	* *
1	字体	微软雅黑		~	常规	~
	颜色		~	大小	12	$\sim$
1						
1	刻度颜色		~			
1	主刻度		Ť			
1	抽等分数	5	-	10 副风度 轴等分数	1	<b></b>
1	刻度长度	10	ŧ	刻度长度	5	÷
1	刻度标记	L				
-	○ 不显示	۲	显示数字		光	
	整数位	4	-	小数位	0	•
	字体	微软雅黑		~	常规	~
	颜色		~	大小	12	$\sim$
-					确定	取消

trend chart background		Set the background color of the trend chart				
	color					
scale area background		Set the background	color of the scale area			
color						
grid display		Set whether to disp	lay 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 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	d lines			
scale	X/Y axis scale	scale color	Set the display color of the X/Y axis and scale			
display		main scale	Set X/Y axis main scale segments			
		equifraction				
		main scale length	Set main scale display length			
		sub scale	After checking, display sub scale on the control, set the sub scale			
		equifraction	segments			
		sub scale length	Set sub scale display length			
	scale mark	Choose whether to	o display the scale mark, which is the displayed style. You can			
		choose to display 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

XY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	隐藏 ~		
设备	本地设备 >	设置	
地址	PSB ~ 0 0		
启用状态	ON ~   间接指定		
用户权限			
□ 当用户无权	限范围时,隐藏该元件		
所需用户权	限范围 无 ~		

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	form			
Basic Attrib	outes	Display	Appea	arance	Query	Security se	ttings Locatio	on		
Contr	ol ID	RF0								
e ontra		10.0								
Descr	ption									
Compl	inc Cr		м	No	0		M	Data		
sampi	ing or	oupo	•	INO.	U		•	Dala		
list sel	ectio	n								
Selec	Cha	Address	Data	Data	Integer	Decimal	Encoding	word	Alignmer	Display
~	1	PSW0	Word	Unsign	4	o	/	/	Center	20101
~	2	PSW1	Word	Unsign	4	0	/	1	Center	
~	3	PSW2	Word	Unsign	4	0	/	1	Center	
Integ Aligi	ger di nmen play s	(4 t Center serial numl	De De	ecimal d <mark>0</mark> Color		•	Lead	ding 0		
Nu	mber	of digits	▲ ▼	Col	or		<b>~</b>			
Time										
🖌 Di	splay	date Y/M	M/DD		~ C	olor 📃		~		
🖌 Di	splay	tim HH:M	MM:SS		~ C	olor		~		
Data ca	apacit	ty								
Max	lines	100	<b>A</b>	Lines per	10					
D	I	Used for	r system	manage	ement co	ontrols,	user canno	ot operat	e	
on	n Can be used to annotate the purpose of this control									

control ID	Used for system management controls, user cannot operate
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.

display date		Set the date display format.
	color	Set the color of the date display text.
display time		Set the time display format.
	color	Set the color of the time display text.
data	max lines	Set the maximum number of rows displayed in the table (up to 5000 rows).
capacity	lines per page	Set the number of data rows on the current display page of the table. When the collected
		rows exceed the set number of rows per screen, there is a moving bar below the trend
		chart to control the page turning of the trend chart.

# Display

			Report form		
Basic Attributes	Display Ap	pearance Query	Security settings	ocation	
✓ Display pa	art Title				
Tevt		n			
Fo 微软雅碧 Co Ali Middle (	₹ Center ∨	v General Size 12	v v 15	~	
display list ✓ Show colu	umn head Whe	ether in multilin( Aut	o column width		
	J			olumn snacing	
No.		No.	50	olumn spacing	Move up
No. Time		No. Time	59 58 58	olumn spacing 3	Move up
No. Time Date		No. Time Date	59 58 59 59	olumn spacing 3 9	Move up
No. Time Date Channel1		No. Time Date Channel1	59 58 59 58 58	olumn spacing 3 3 3	Move up
No. Time Date Channel1 Channel2		No. Time Date Channel1 Channel2 Channel2	52 52 52 52 52 52 52 52 52 52 52 52 52 5	olumn spacing	Move up Move
No. Time Date Channel1 Channel2 Channel3		No. Time Date Channel1 Channel2 Channel3	59 58 58 58 58 58 58	olumn spacing 3 3 3 3 3	Move up Move Restore
No. Time Date Channel1 Channel2 Channel3	nt	No. Time Date Channel1 Channel2 Channel3	59 58 58 58 58 58 58	olumn spacing 3 3 3 3 3	Move up Move Restore
No. Time Date Channel1 Channel2 Channel3 Title bar for Fo 微彩	nt 次雅黑	No. Time Date Channel1 Channel2 Channel3	ral ▼	olumn spacing 3 3 3 3 3 3	Move up Move Restore
No. Time Date Channel1 Channel2 Channel3	nt 次推黑	No. Time Date Channel1 Channel2 Channel3 Channel3	ral V	olumn spacing 3 	Move up Move Restore
No. Time Date Channel1 Channel2 Channel3 Title bar for Fo 微致 Co	nt 次雅黑	No. Time Date Channel1 Channel2 Channel3 Gene Size 12	ral V	olumn spacing 3 3 3 3 3 3 3 3 3 3 3 3 3	Move up Move Restore
No. Time Date Channel1 Channel2 Channel3 Title bar for Fo 微致 Co	nt 次雅黑	No. Time Date Channel1 Channel2 Channel3 Gene Size 12 Roy	ral v w height	olumn spacing 3 3 3 3 3 	Move up Move Restore
No. Time Date Channel1 Channel2 Channel3 Title bar for Fo 微彩 Co Ali Mide List font Fo 微彩	nt 次雅黑 Idle_Center v 软雅黑	No. Time Date Channel1 Channel2 Channel3 V Gene Size 12 Row	ral v ral v	olumn spacing 3 3 3 3 3 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5	Move up Move Restore
No. Time Date Channel1 Channel2 Channel3 Title bar fon Fo 微彩 Co Ali Mid List font Fo 微彩	nt 文雅黑 Idle_Center v 软雅黑 Set the	No. Time Date Channel1 Channel2 Channel3 Channel3 Gene Size 12 Row Cene Channel Channel3	ral v w height eral v trol is displa	yed in the f	Move up Move Restore
No. Time Date Channel1 Channel2 Channel3 Title bar for Fo 微彩 Co Ali Mide List font Fo 微彩	nt 次雅黑 Idle_Center v 软雅黑 Set the multip	No. Time Date Channel1 Channel2 Channel3 Channel3 Gene Size 12 Row Centre Construction Channel3	ral v ral v ral v ral v ral v ral v ral v ral v ral v	yed in the f	Move up Move Restore

		multiple languages (refer to 5-1 for details of multiple languages).
font		Set the font for component titles.
size		Set the size of the component title text.
	color	Set the color of component title text.
display	show column head	After checking, the title of each column can be displayed.
list	whether in	When checked, multiple languages will be used for the title line.
	multiling	
	auto column width	After checking, the table will automatically adjust the column width based on the
		content of each column.

title 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 style					
		O Use Library Styles					
		<ul> <li>Customize appearance</li> <li>Table</li> <li>Background color</li> <li>Title description</li> <li>Outer frame</li> <li>Line style</li> <li>Line color</li> <li>Line width</li> </ul>					
		Grid  Row separator  Column separator  Line style Line color Line width					
use	e library style	Select a table style from the gallery.					
sty	yle selection	Click to select the desired style appearance from the gallery.					
5	style color	Modify the appearance color.					
custor	mize appearanc	Set your own appearance style.					
table	background co	Solor Set the overall background color of the table.					
	title backgrou	nd Set the background color of the title row.					
	color						
	outer frame	After checking, display the peripheral border.					
	line style	Set the form of box and line, you can choose lines, dotted lines, dashed lines, etc					
	line color	Set the color of the border lines.					
	line width	Set the width of the line.					
grid	grid	Set the display style of the grid.					
	row separate	When checked, a horizontal border will be displayed.					
	column separa	tor When checked, a vertical border will be displayed.					

line style	Set the form of box and line, you can choose lines, dotted lines, dashed lines, etc.
line color	Set the color of the border lines.
line width	Set the width of the line.

Query

			Report form	
Basic Attributes Display App	earance C	Query	Security settings	Location
Pictur PSB0 Export	on->off ∨	Export	PNG V	
✓ Use the query function				
Query method				
Query by date	Query by time	e period		
<ul> <li>Register control guery</li> </ul>				
Query settings				
Query control				
PSBO				
Query date				
Tuesday , Apr	il 🖌 🗌	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 o	date	
	Tuesday , April V	Register contro PSW0
	PSW0:年(无符	丹号数方式输入, YYYY格式, 例如2004)
	PSW1:	: Month (input in unsigned number format, MM for
	PSW2 :	: 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.

				Report form	
Basic Attributes	Display	Appearance	Query	Security settings	Location
Pictur	PSB0 Exp	ON->O	FF 🗸 Export	PNG V	
Use the q	uery function				
	y by date	Query b	y time period		
Register control guery					
Query setti	ngs				
Query	control				
	DCI	20			
- Ouerv ti	me period	50			
From	Tuesday ,	April Y 1	5 Hol <sup>38</sup>	Minute	Second
То	Tuesday ,	April 🖌 14	4 Ho(18	Min1	Second
		🗌 Registe	r control		

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.

Query t	me period							
From	Tuesday	,	April 🗸	15	Ho	38	Minute	Second
То	Tuesday	i.	April 🗸	14	Ho	18	Min1	Second
			🗸 Regi	ster contr	c	PSW0		
			PSW0 ~	PSW5 Re	pres	ent start	time Year/N	Month/Day
			PSW	/6 ~ PSW1	l1 Re	present	end time Ye	ar/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.

Report form
Basic Attributes Display Appearance Query Security settings Location
✓ Pictur PSB0 Export ON->OFF ∨ Export PNG ∨
✓ Use the query function
Query method
Query by date
Register control guer PSW0 Register value 0: by date space 1: by time period     Ouery settings
Query control
PSBO
Query register
PSW0
Example: PSW0~PSW11: According to different query methods, it can take up to 12 words

Security setting

				Report form	
Basic Attributes	Display	Appearance	Query	Security settings	Location
− Display co ✓ Enab	ontrol le				
When	隐藏	~			
De	vic 本地设备	i		∨ Settin	
Ad	ldre <sub>PSB</sub>	~	0		
En	able Sta ON	~	Indirect		
– User pern	nission				
✓ Hide	this compone	ent when the u	user has no pe	ermission scope	9
User rang	permission e	Permission1		<b>v</b>	

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

	Pie Chart
Basic Attrib	Display Security se Location
Con	trol ID PC0
Desc	ription
– First da Devic Addre Data	ta address 本地设备 V Settin PSW V 0 Word V Unsignec V Indirect

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)				

		Ac	ldress	×	
	Device	本地设备	~	Statio n No.	
	Address type	PSW ~		User defined label	
	Address	0		System register	
	数据类型	Word v Unsigned v			
	Address format	[range : 0 - 9999]			
				Address Label	
		Γ	Determine Can	cel Application	
indirect specify	Set the c	urrent address offset,	where the curre	ent register addres	s changes with the
i	indirectly	specified register value	e, i.e. Dx[Dy]=D	[x+Dy numerical v	value] (x, y=0, 1, 2,
	3). Exan	ple: The current register	er address is PSV	V0, if the indirectly	specified address is
]	PSW100;	When the value of the	e PSW100 regist	ter is 0, the regist	er that controls this
	componen	t remains PSW0; Wher	the value of the	PSW100 register	is 1, the register that
	controls th	is component is PSW1	(and so on)		-
data number	Set the nu	mber of blocks (consecu	tive addresses af	fter the first address	5)

Display 

	Pie Chart
Basic Attril Display Security se Location	
4 2 3	Direction Clockwise Anti-cloc Start angle 0 End angle 360
circle center radius Interior co Channe 通道1 v	0 🗘 V Outer fram
Font Color Border Settings Border col	Backgroun
Sign O No display  O Disp	lay number 🛛 🔿 Display percentage
Integer 1	Decimal 0

direction Set the display direction of the address in the section, clockwise or counterclockwise

clockwise		Arrange the display in the order of clock rotation			
counterclockwise		Display in reverse order of clock rotation			
start angle		Set the starting angle for the pie chart display, with a default of 0 degrees and a clock			
		direction of 12 o'clock (0 o'clock)			
ene	d angle	Set the ending angle for the pie chart display, default to 360 degrees, clock 12 o'clock (0			
		o'clock) direction, default to full circle display			
circle	circle	Set center size			
center	center				
	radius	Set the radius of the circle, which can be set through the scroll bar or by entering a number			
	interior	Set the display color inside the center of the circle			
	color				
outer frame		Set the display color of the center outline			
	color				
channel	channel	Select each channel and set the font and background color for each channel			
	font color	Set the font color of the selected channel			
background		Set the background color of the selected channel			
	color				
border	border	Set the color of the pie chart border			
settings	color				
sign	sign	Set the data style displayed on the section, which can be displayed as a percentage,			
		numerical value, or not displayed			
decimal		Set the decimal places for displaying numbers or percentages, which cannot be set when the			
		marker is selected not to be displayed			
	font	Set the displayed data font, which cannot be set when the tag is selected not to be displayed			
	size	Set the text size for displaying data			

Security setting

Pie Chart
Basic Attril Display Security se Location
Display control 「 Enable When 隐藏
Devic 本地设备 v Settin
Addre pSB v 0
Enable Sta ON V Indirect
User permission
Hide this component when the user has no permission scope
User permission <u>Permission1</u> v range

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

Location

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

#### 4-5-7. 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 Ta	able			×
asic Attrik	Displa	y Appearance	Security set	Location			
Contro	D ID	ТВО					
Descri	ption						
🗸 Use	consecu	itive addresses					
– Data ad	dress —						
Devic	本地设备	ŕ		✓ Set	tin		
Addre	PSW	~ 0					
Data	Word	🗸 Unsignec 🗸 👝	' : :t				
Data co	ntent —						
Titles	in	Edit all			Add	Dele	te
Tit	tle	Data type	Data	Number	ditable Integer	Decimal	incodi
<							>
< – Data ca	pacity —						>

control ID	Used for system management controls, user cannot operate					
description	Can be used to annotate the purpose of this control					
use consecutive	hen checked, the address order will be automatically calculated based on the first					
addresses	ldress (please refer to the notes below for the use of consecutive addresses without					
	checking)					
data address	Set the first address of the data (only appears when continuous addresses are checked)					
data content	Set the data title, data type, and data format to be displayed in the table					
add/delete	add or delete the data					
edit all	After checking, all the data items to be edited can be checked with one click, and the data					
	can be modified in the data table					
titles in	When checked, the title can be in multiple languages. After checking, the title name of					
multi-language	each column can be set to display in multiple languages. Click "					
	multilingual settings (refer to 5-1 label multilingual for specific usage)					

	Data content ✓ Titles in	✓ Edit	all				Ado	ł	Dele	te
	Title 🚺	Data type		Data		Number	ditable	Integer	Decimal	Incodi
		Word	•	Unsig	•	1	<ul><li>✓</li></ul>	4	0	-
		Word	•	Unsig	•	1	✓	4	0	-
		Word	•	Unsig	•	1	✓	4	0	-
data setting	After selection, yo	ou can set the	e i	nteger di	gits	s, decima	l place	s, leadin	ig 0, and	l colum
	width of the data co	olumn for the	da	ta						
data capacity	Set the total number	et the total number of rows and rows per page displayed in the data table								
data setting data capacity	After selection, you can set the integer digits, decimal places, leading 0, and colu width of the data column for the data Set the total number of rows and rows per page displayed in the data table									

- - (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.

– Data content –									
✓ Titles in	🗹 Edit a	all				Ado	ł	Delet	te
Title 📕	Data type		Data		Number	ditable	Integer	Decimal	incodi
	Word	•	Unsig	•	1	✓	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:

nber

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

BNÖ .		Title	
序号	静态列		
1			
2			
3		dha	
4			
5			

2 Set the address

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

单元格设置	?	×	单元格设置         ? ×
埴充类型	地址监控 ~		填充类型 地址监控 ·
地址类型	数值 ~		地址类型 字符 🗸
设备	本地设备 🗸 设置	ļ	· 没 备 本地设备 ∨  じ2置…
地址	PSW ~ 0 0	ŀ	_ 地址 PSW ~ 0 0
数据类型	Word VUnsigned V 间接指定		寄存器数 1 □ 自定义数据类型
数据类型			
整数位数	1 小数位数 0 🚽 🗌 前导 0		编码方式 UTF_8 🗸 🗌 可编辑
	□ 可编辑		
	确定 取消		确定 取消

Fill type: text monitoring

单元格设置					?	×
埴充类型	文本	~				
<ul> <li>● 文本</li> </ul>	○ 多语言库					
				确定	取	消

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.

				<u> </u>			
		String	•	Jnsigned	•	1	1
			/				
۲.							>
数据设置							
编码格式	UTF_8	~	寄存器	数 1		-	
列宽	ASCII UTF_8						
数据容量	UTF_16 GB2312						

# Display

		Data Table	>
Basic Attrib	Display Appeara	nce Security set Location	
✓ Title			
Text	O Multiling		
		Title	
✓ Colum	✓ Titles in multili	ingual	
Display	Show contents	Title name	Column width
<ul><li>✓</li></ul>	序号	序号	57
✓	名称	静态列	57
Static	<ul> <li>✓ Use Multilingual</li> <li>Line number</li> <li>第1行</li> <li>第2行</li> <li>第3行</li> <li>第4行</li> <li>第5行</li> </ul>	lism 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			
colu	umn	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/1					
table/1	ist title	Set the font, color, size, alignment, and line height for the title display			
list	ist title data	Set the font, color, size, alignment, and line height for the title display Set the color, size, alignment, and row height of the data style font			
list synchroniz	ist title data ze language	Set the font, color, size, alignment, and line height for the title display Set the color, size, alignment, and row height of the data style font You can check to use the same font. After checking, the color, size, alignment, and line			

#### ■ Appearance

			Data Table			
	Basic Attrib D	isplay Appearance	Security set Location			
	- Gallery ap	pearance				
- 1	- Customize Backgro	e appearance				
- 1		Background color Title Background				
Border Settings Border preset						
		Outer frame Thi ck ne ss St St	<b>` `</b>			
		Grid				
gallery appearance	style selection	Click and select a Gallery appear	a table style from the gallery			
			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			

Security setting

grid

Choose the thickness, style, and color of the grid

Data Table
Basic Attrib Display Appearance Security set Location
Display control 「Enable When 隐藏 、 Devic 本地设备 、 Settin Addre PSB 、 0 Enable Sta ON 、 Indirect
User permission Hide this component when the user has no permission scope User permission range

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.
Place	a refer to aborton 4.2.2 value input for normission function

# 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 manageme	nt						×
Recipe group Recipe data										
Recipe group 0 ~	Nam	Name         Recipe_0         Add recipe         Delete recipe								
recipe list 配方0 Recipe 0	Add Insert Delete all Copy Paste									
	Recip	Recipe 4 Recipe data volume 100								
	No.	Element name	Data type		Data format		number	Integer	Decimal	
	0	0	Word	-	Unsigned	-	1	4	0	
	1	1	Word	•	Unsigned	•	1	4	0	
	2	2	Word	•	Unsigned	•	1	4	0	- 1
						D	etermine	Cancel	Applicatio	n

Recipe group

recipe group	Select the	Select the recipe group that needs to be edited, and all added recipe groups can be selected									
	through th	hrough the drop-down menu									
name	Set the na	Set the name of the recipe group									
add recipe	After ente	ering the name, click on	"Add Recipe" to a	ıdd a	new recipe	grou	ıp				
delete recipe	Click to d	Click to delete the selected recipe group									
recipe group list	Display a	ll added recipe group nu	mbers and names	in tł	ne list below						
add	Add recip	Add recipe elements									
insert	Insert a ne	Insert a new recipe element below the selected recipe element									
delete	Delete sel	Delete selected recipe elements									
delete all	Delete all	Delete all elements in this group									
copy	Copy the	Copy the selected recipe element									
paste	Pasting th	Pasting the copied data at the selected location, a new piece of data named 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 ad	ded	recipe and ca	annc	ot be edited				
recipe volume	Each grou	p of recipe data has a s	eparate data volu	ne.	As shown in	the	above figure, if the				
	data amou	data amount is set to 100, it means that up to 100 sets (0-99) of data can 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 Word_String DWord_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

			Recipe	e manageme	ent				×
Recipe grout 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 address  Number index  Name 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
	٢								>
						Determi	ine Can	cel Appl	ication

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

			×								
	В	asic Attril Display Ap	c Attril Display Appearan Query Security s Location								
		Control ID RL0	Control ID RL0								
		Description	Description								
		Description									
		Data source	ata source								
		group Recipe_0	roup Recipe_0 V Recipe Edit								
		Eull display	Full display Editable								
		elec: Element name	ditable	Data type	number	Integer	Decimal				
		0		Word	1	4	0				
				Word	1	4	0				
		I_Copyed 元表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				
				Word	1	4	0				
		Data capacity Total rows Lines per page	5	in the second se							
cont	rol ID	Used for system	mana	agement co	ontrols,	user ca	nnot ope	rate			
description		Can be used to a	annota	ate the pur	pose of	this cor	ntrol				
data	recipe	Select the recipe	e grou	up that nee	ds to be	e displa	wed, or	click on t	he re	ecipe editor to	add o
source	group	modify the recip	oe gro	up							
		When the recip	e gro	oup is sele	ected, t	he tabl	e below	, displays	all	the elements	of th
		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	ıble	After checking, all the recipe items to be edited can be checked with one click, and the				
		data can be modified in the recipe table. Only after checking the "Editable" column and				
		downloading it to the screen or simulating it can the data of a certain element be edited. If				
		a certain element is not checked, it cannot be modified				
data	total rows	Set the maximum number of rows displayed in the table				
capacity	lines per	Set the number of rows displayed on each page to be less than or equal to the maximum				
	page	number of rows per page				

# Display

		Recipe table		
sic Attri Dis	olay Appearan	Query Security s Locati	on	
Title displa	v			
Tevt	O Multilina			
		Recipe_0		
- display list -				
Use	<ul> <li>Display</li> </ul>	Show row	Show	
Shov	v Items	Title Title Description	Column	Move up
月	号	序号	60	
÷.	3称	名称	60	
Serial Numb	er Style 1 (1/2/3)	~		
Title description Column header		✓		
Table title	List title	List Data Sy	nchronize lang	uage font
Fo 微软雅座		✓ General ✓	•	
Co		Sizo 12		
Ali Middle_C	enter V	Row h		×
			Determin	e Cancel

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.

– display list –				
✓ Use	<ul> <li>Display</li> </ul>	Show row	✓	Show
Show Items		Title Title Description Column		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
Basic Attri Display Appearance Query Security's Location
Gallery Appearance
Customize appearance     Backgroud
Background color Different colors of odd
Border Settings
Border preset 🗄 🔠 🖬 👪 👪
Outer frame
Thi
ne v
ss St v
Grid
Select Focus
Text color
Row background color
Cell 🗸

gallery	style selection		Click and select a table style from the gallery	
appearance			Gallery Appearance	
			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 colors	
		color of		
		odd	<ul> <li>Customize appearance Backgroud</li> <li>Odd line color</li> <li>Even line color</li> </ul>	
	border	border	Select a border style based on the preview image	
	setting	preset		
		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

Recipe table
Basic Attri Display Appearan Query Security se Location
✓ Pictur PSB0 Export conditi       ON->OFF ∨     Export Format   PNG ∨
✓ Enable query function
Query method
Query by Query by Query by data
Query settings
Query Control PSB0
Over keyword 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 by data
Ouerv settings	
Query settings	
Query Control	PSBO
Ouan kanword	Use register

(2) Query by data: Enter the data to be queried, and after the query control bit is turned on, all recipes containing this data will be automatically displayed. Alternatively, you can choose to use registers to dynamically specify the query data.

Query method			
Query by	Query by data		
Query settings			
Query Control	PSBO		
- I.	0 Use re		

Security setting

Recipe table		
Basic Attri Display Appearan Query Security se Location		
Display control		
✓ Enable		
When 隐藏 V		
Devic 本地设备 v Settin		
Addre pSB v 0		
Enable Sta ON v Indirect		
User permission		
Hide this component when the user has no permission scope		
User permission 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.

#### 4-6-3. Recipe transfer

Use this button to upload and download recipes.

1. Click "Parts/Recipe/Recipe Transfer" icon in the menu bar or the " icon in the device bar of the control window, move the cursor to the screen, click the left mouse button to place, click the right mouse button, or use the ESC key to cancel the placement. Modify the length and width of the border through the boundary point.

2. When setting attributes, you can set them in the attribute box that pops up when placing components. You can also double-click on "Recipe Transfer" or select "Recipe Transfer" and right-click to select "attributes" for attribute settings.

Basic attributes

Recipe Transfer		
Basic Attribut Appearance Security sett Location		
Control ID RT0		
Description		
Action Press ~		
transmission mode		
Download recipe to     O Upload Recipe from PLC		
O Register control		
Recipe source Recipe_0  v Recipe		
Number of 9 words		
PLC address		
Devic 本地设备 v Settin		
Addre pSW v 0		
Data Word V Unsignec V Indirect		
✓ Recipe transfer completion PSB0		

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	
	O Download recipe to O Upload Recipe from PLC	
	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 word numbers set above	
device	The device port currently communicating with	
address	Set Target Register Number	
data type	Byte-8Bit; Word-16Bit; DWord- 32Bit; DDWord -64Bit; BCD; Hex; Signed number; Unigned number; Floating number	
the use of system registers and user-defined labels. You can click on the ad library or the project tree - library - address label library below to set the l (refer to 5-2 Address Label Library for the use of address label library and us labels)		
	Address	
	Device 本地设备 V Statio 0 n No.	
	Address type PSW    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	
indirect specify	Set the current address offset, where the current register address changes with the 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)	
recipe transfer	Set the flag bit for transmission completion, and automatically set it to ON after	
completion	transmission is completed	

### Appearance

Recipe	e Transfer
Basic Attribu Appearance Security sett Lo	ocation
	✓ Use pictures
	Status 0 ~
OFF	Name button_05_a
	categorysvg
	Size 80 × 42
Change appearance	More pictures
✓ Fill	· · · · · · · · · · · · · · · · · · ·
State 0 - F	ont applied to each
Tevt     O     Multiling	
0	DFF
Font	
Fo 微软雅黑 v	General V
Co Size 12	~
Ali Middle_Center ~	

use pictures	You can check whether to use images. If checked, you can set the appearance of the recipe
	transmission in two states: (0, 1). After selecting the state in the upper right corner, click
	"Change Appearance" or "More pictures" to select custom images to change the appearance
fill	Can set fill styles (solid/gradient) and fill colors
state	You can set the text prompt content for recipe transmission in two states $(0, 1)$ , and whether to
	use multiple languages (please refer to the description of libraries in chapter 4-7 for specific
	use of multiple language libraries). Check the drop-down list to set the font corresponding to
	the corresponding status of the recipe transmission, or click on the "Font applied to each state"
	button to set the font for all states
font	The font, size, color, and display position of the font in the control can be set

Security setting

		Recipe Transfer									
	E	Basic Attribu Appearance Security setti Location									
	_	Operation confirmation delay									
		✓ Confirm before Waiting time									
	_	Key delay									
	_	Display control									
		✓ Enable									
		When 隐藏 ~									
		Devic 本地设备 v Settin									
		Addre PSB V 0									
	_	Enable Sta ON V Indirect									
		Enable control									
		✓ Enable									
		Devic 本地设备 v Settin									
		Addre pSB v 1									
	_	Enable Stalon V Indirect									
		User permission									
		Hide this component when the user has no permission scope									
		User permission None V									
		range									
	_										
0.0	oration	You can get the delay time (a). If this ention is shealed, a non-up window will appear when									
conf	firmation	operating the component saving "Are you sure to execute this operation?" If you do not click									
com (	delav	"ok" or "cancel" within the set waiting time, the pop-up window will disappear and the									
	j	operation will fail; If you click 'OK' within the waiting time, the operation is successful, but									
		clicking 'Cancel' is invalid.									
ke	y delay	Long press the set delay time before the operation takes effect									
displa	ay control	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									
e	enable	When checked, display control will be enabled									
When	validation	Set the display of the control when validation fails									
	tails										
ac	ddress	Set the ON state to be called on the OFF state to be called									
ena	ole state	Example: If the device is checked as shown in the above figure, the bit control is PSR0, 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.									
enabl	le control	Can be set with bit restrictions (customizable enable control enabled state), and only when the									
		enable conditions are met can the component be used normally (as shown in the figure above:									
		when PSB1 is in the ON state and the trigger conditions are met, this component can be used;									
		if PSB1 is in the OFF state, even if the trigger condition is met, this component is still									
		unavailable)									

user permission	Set controlled permission levels.
	To set the permissions for this component, you need to enter the password for the set
	permission level before the component can be used normally. When there is no permission for
	this component, it will be hidden

#### Location

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

## 4-6-4. Recipe transfer application

1. Create the recipe data table to be transferred in "Recipe Edit" (for the convenience of explaining the function,

the following data is for example)

### 1> Establish Recipe 0- Bread recipe 0

Recipe management									
Recipe group Recipe data									
Recipe group 0 ~	Name	Bread recipe 0	Add	reci	pe Delete	e re	ecipe		
recipe list 配方0 Bread recipe 0	Add Inse	ert Delete Delete all	Copy Paste						
配方1 Recipe_1	Recipe 5 Recipe data volume								
	No.	Element name	Data type		Data format	:	number	Integer	Decimal
	0	flour	Word	•	Unsigned	•	1	4	0
	1	water	Word	•	Unsigned	•	1	4	0
	2	sugar	Word	•	Unsigned	•	1	4	0
	3	butter	Word	•	Unsigned	•	1	4	0
	4	egg	DWord	•	Float	•	1	4	0

			Recipe	e manageme	ent					
Recipe grout Recipe data										
all recipe group list	Search $\swarrow$ $\swarrow$ $\swarrow$ $\swarrow$ $\boxtimes$ $\boxtimes$ $Add$ Insert Delete Delete all									
配方0 Bread recipe 0 配方1 Recipe_1	Use external address									
	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

Recipe management									
Recipe group Recipe data									
Recipe group 1 v	Name	Bread recipe 1	Ad	d recip	e Delet	e recipe			
recipe list 配方0 Bread recipe 0	Add Inse	rt Delete Delete all	Copy Paste						
配方1 Bread recipe 1	Recipe	Recipe 5 Recipe data volume 100							
	No.	No. Element name Data type Data format number Integer D							
	0	flour	Word	-	Unsigned	• 1	4	0	
	1	water	Word	•	Unsigned	• 1	4	0	
	2	sugar	Word	•	Unsigned	• 1	4	0	
	3	butter	Word	•	Unsigned	• 1	4	0	
	4	egg	DWord	•	Float	• 1	4	4	
			Recipe	man	agement				
Recipe grout Recipe data	]								
		1		<b></b>					
all recipe group list	Sea	rch	<i>P</i>	Add I	Insert Delet	e Delete	all		
配方0 Bread recipe 0		Use external ad	ddress						
四方1 Bread recipe 1									
	序	号 名称	flour	wa	ater	sugar	butter	eqq	
	C	数据0	100	1	01	102	103	104.1044	
	1	数据1	200	2	01	202	203	204.2044	
	2	数据2	300	3	01	302	303	304.3044	
	3	数据3	400	4	01	402	403	404.4044	
	4	数据4	500	5	01	502	503	504.5044	
	5	数据5	600	6	01	602	603	604.6044	
	6	数据6	700	7	01	702	703	704.7044	
	7	数据7	800	8	01	802	803	804.8044	
	8	数据8	900	9	01	902	903	904.9044	
	9	数据9	1000	10	001	1002	1003	1004.1004	

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
ic Attrib	utAppearance Security sett Location
Contro	DI ID RTO
Descr	ption
Actio	
Actio	sian mode
- another	_
Dow	nload recipe to 🛛 🔿 Upload Recipe from PLC
e Dow	nload recipe to OUpload Recipe from PLC
🕘 Dow	nload recipe to OUpload Recipe from PLC
Dow Regi	nload recipe to O Upload Recipe from PLC
Dow	nload recipe to O Upload Recipe from PLC
Oow Regi Recip	e Bread recipe 0 v Recipe V Register PFW0
Regi     Recip     sourc	nload recipe to Upload 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>sourc</li> <li>PLC add</li> </ul>	nload recipe to Upload Recipe from PLC ster control e Bread recipe 0 V Recipe Recipe PFW0 ress
<ul> <li>Dow</li> <li>Regi</li> <li>Recip</li> <li>sourc</li> <li>PLC add</li> <li>Devic</li> </ul>	nload recipe to Upload Recipe from PLC ster control e Bread recipe 0 v Recipe V Register PFW0 ress 本地设备 v Settin
<ul> <li>Dow</li> <li>Regi</li> <li>Recip sourc</li> <li>PLC add</li> <li>Devic</li> <li>Addre</li> </ul>	nload recipe to ○ Upload Recipe from PLC ster control e Bread recipe 0 ∨ Recipe ✔ Register PFW0 ress 本地设备 ∨ Settin PSW ∨ 0
Regi Recip sourc PLC add Devic Addre Data	nload recipe to ○ Upload Recipe from PLC ster control e Bread recipe 0 ∨ Recipe ♥ Register PFW0 ress 本地设备 ∨ Settin PSW ∨ 0 Word ∨ Unsignec ∨ Indirect
<ul> <li>Dow</li> <li>Recip sourc</li> <li>PLC add</li> <li>Devic</li> <li>Addre</li> <li>Data</li> <li>type</li> </ul>	nload recipe to ○ Upload Recipe from PLC ster control  e Bread recipe 0 ∨ Recipe ✔ Register PFW0 ress  本地设备 ∨ Settin PSW ∨ 0 Word ∨ Unsignec ∨ □ Indirect
<ul> <li>Bow</li> <li>Regi</li> <li>Recip source</li> <li>PLC add</li> <li>Device</li> <li>Addree</li> <li>Data</li> <li>type</li> </ul>	nload recipe to Upload Recipe from PLC ster control  e Bread recipe 0 V Recipe V Register PFW0 ress  本地设备 V Settin PSW V 0 Word V Unsignec V Indirect

recipe transfer-download recipe to PLC

Function key - recipe download

	Function key	
View Help	Function Appearance Security set Location	
Copy Cut Paste Delete	Control ID FB0 Description	
[00001]Page1		
	Action Press Status 🗸	
	□ Start	
	Functions	ptional 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
Recipe download address		关闭窗口
- Devic 本地设备	✓ Settin	导入CSV
- Data Word of Unsigna	✓ 0	导出CSV
type	Indirect	上传配方
		下载配方
Recipe transfer comple	etion flag	函数调用
-	PSB0	画面打印
2 2		
	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.

	Recipe Transfer
	Basic AttributAppearance Security sett Location
	Control ID DTO
	Control D KTO
	Description
	beschption
	Action Bress M
	Action Fless +
	ransmission mode
	Download recipe to Upload Recipe from PLC
	Register control
	0.119111111
bio bio constante de la consta	Recipe
	Recipe O Recipe Register ( PFW0 )
REWO	source
	DLC address
	PLC address
LIO	Devic 本地设备 V Settin
· · · · · · · · · · · · · · · · · · ·	
· · · · · · · · · · · · · · · · · · ·	Addre pSW v 0
	Data Word V Unsigner V
	ture Indirect
	type
	Recipe transfer completion ( PSR0 )

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

			R	ecipe manageme	nt			
Recipe grout Recipe data								
Recipe group 0 ~	Nam	e Bread	l recipe 0	Add r	eci	Delet	te re	ecipe
recipe list	<b>*</b> +	-						
配方0 Bread recipe 0	Add Ins	ert Dele	ete Delete all	Copy Paste				
配方1 Bread recipe 1	Recip	e 5		ecipe data blume 100				
	No.	Ele	ment name	Data type		Data forma	t	number
	0	PSW0	flour	Word	-	Unsigned	-	
	1	PSW1	water	Word	•	Unsigned	-	1
	2	PSW2	sugar	Word	•	Unsigned	-	1
	3	PSW3	butter	Word	•	Unsigned	-	1
	4	PSW4	egg	DWord	-	Float	-	1

The data type of the PLC address should be consistent with the element data type set in the recipe table, such as egg element

4 egg DWord • Float

Ŧ

The data type is Dword-Float, then when setting PLC address, it needs to set to this type.

	Read / V	Vrite Address —				
	Devic	本地设备			~	Settin
DTO	Addre	PFW	~	4		
FFW2000	Data	DWord 🗸 Float	~		rect	
	type				ect	

3. Put the recipe table on the screen

			Recip	e table			×										
Basic Att	tril Display A	opearan	Query See	curity se Lo	ocation												
Contr Desc	rol ID RL0																
Data s Recip	Bread recipe	0 \	Recipe Ed	lit					0								
✓ Fu	ull display		Editable	e						 2	ead recipe 0	flour	water	sugar	butter		
ielec:	Element name	ditable	Data type	number	Integer	Decimal			6.01		101	nour	water	Jugui	Dutter	- C99	
✓																──	-
✓	water		Word	1	4	0		::									
~	sugar		Word	1	4	0											
~	butter		Word	1	4	0		11								1	
<ul> <li>Image: A state</li> </ul>	egg		DWord	1	4	1											ĺ
										 	· · · · · · · · · · · · · · · · · · ·						

4. Put a recipe index register SPSW256.

-	÷	: :	-	ł	÷	ł	ł	ł	ł	ł	ł	ł	ł	ł	ł	ł	ł	ł	ł	÷	:	÷
-		D I SI	1 S	9 <u>9</u>	ģ	g					Ì	ĥ	ģ	e:	X	ŗ	e(	gi	ş	te	r	-

- 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							
Urr		Bread recipe 0					
OFF		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 re	gister						
register specified	data of the recipe group						

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 (	D		
	序号	名称	flour	water	sugar	butter	egg
٦	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

	Event butt	on		×
Basic Attrib Appearance Security set	Location			
Control ID RE0				
Description				
Function type	Key	action		
Recipe Operation	Inse	ert a row above	the sele $\vee$	
✓ Start				

control ID		Used for system management controls, user cannot operate					
desc	ription	Can be used to annotate the purpose of this control					
functi	ion 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					

Eve	ent button	×
Basic Attrib Appearance Security set Loca	ation	
	✓ Use pictures	
	Status 0 V	
OFF	Name keyboard_01_a	
	categorysvg	
	Size 80 × 42	
Change appearance	More pictures	
Fill	ı — — — — — — — — — — — — — — — — — — —	
State 0 🗸 🗸 Di	isplay text Font applied to each	
Tevt     O     Multiling		
	OFF	
Font		
Fo 微软雅黑 V	General 🗸	
Co Size	12 ~	
Ali Middle_Center V		

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	sic Attrib Appearanc, 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						
		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						
Ī	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						
		hidden and defaults to hidden, which cannot be modified						
_	enable	When checked, display control will be enabled						
	When validation	Set the display of the control when validation fails						
_	fails							
-	address	Set the target coil for 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 snown in the above figure, the bit control is PSBU, and if						
		verification fails, it will be model. If the enabled state is ON, the component will be displayed						
+	anabla control	Can be set with hit restrictions (sustamizable enchled state), and only when the enchled						
		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 S	et controlled permission levels
А	After setting the required user's permission range, the following three functions can be checked
a	ccording to the needs.
(1	1) After the operation is completed, the usage permission will be cancelled: if this option is
n	ot checked, the corresponding level password needs to be entered every time the component
is	s operated. After checking, only one successful input is required.
(2	2) When the user has no permission range, a prompt window will pop up.
(3	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. Special component

### 4-7-1. 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 Security se Location					
Control ID TM0					
Description					
✓ Delay ⊥					
Timer execution flag bit Devic 本地设备  V Settin					
Addre PSB V 0					
Indirect					
Bit state change ) Word value cha Screen start      Trigger ac PSB0      Trigger coRising e       End condition      Stop when screen is clos Stop when the preset time is reached ange					
Preset time					
Constant     Specified by register					
<ul> <li>✓ Timer arrival preset time no PSB0 Condi ON ✓</li> <li>✓ Time counte PSW0</li> <li>✓ Reset bit PSB0 Condit ON ✓</li> </ul>					
Determine Cancel Application					

control ID	Used for system management controls, user cannot operate
description	Can be used to annotate the purpose of this control
time unit	The minimum unit is 0.1 seconds, seconds or minutes
delay/execution cycle	After setting, the timer will only start executing after the set cycle time is
	executed when the trigger conditions for the timer are met
timer execution flag bit	When executing, the target coil lights up and goes out after the execution is
	completed
device	The device port currently communicating with
address	Set target coil number
setting	Click "Settings" to enter the address setting interface. This interface allows
	you to set the use of system registers and user-defined labels. You can click
	on the address label library or the project tree - library - address label library
	below to set the labels used (refer to 5-2 Address Label Library for the use of
	address label library and user-defined labels)

		Address				
		Device 本地设备       Statio 0 n No.         Address pSB       User defined label         Address 0       System register         Address format       [range : 0 - 9999]         Address Label       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 <ul> <li>Bit state change ) Word value chaO Screen start</li> <li>Trigger ac PSB0 Trigger co Rising e v</li> </ul>				
	word value change	Start timing when the data in the trigger address register changes (if "equal value" is checked, it means timing starts when the data in the trigger address register is equal to the set value) Trigger conditions Bit state change ) Word value chaO Screen start Trigger ac PSW0 I Requal 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	constant	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		
	<ul> <li>Constant</li> </ul>	Specified by register	
	Read address		
	Devic 本地设备	✓ Settin	
	Addre PSW V	0	
	Data Word 🗸 Unsignec 🗸		
	type	Indirect	
timer errivel preset time notice	Specify a soil and when the	timer reaches the project time the soil is	
timer arrivar preset time notice	specify a con, and when the time reaches the preset time, the con is		
	ON/OFF		
time counted	Counted time can be displayed	d by specifying a register that displays the	
	real-time cumulative time after the	riggering	
reset bit	reset bit Specify a coil. When the set trigger condition (ON/OFF) is met, the time w		
	be reset, the arrival notification will be reset, and all status bits will return to		
	their default state. To start the tir	ner, a new trigger is required	

Security setting

Timer
Basic Attril Security se Location
Enable control
Devic     本地设备     Settin       Addre     pSB     0
Enable Sta ON V Indirect
nable control Can be set with bit restrictions (customizable enabled state), and only when the

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)

#### 4-7-2. Operation record

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 reco	ord settin	g	×	
	Enable operation logging —				~	
	Screen	Part 📑 e	lect Des	cription	~	
	User screen1:[00001]					
	System picture2000					
	System picture2000					
	System picture2000	[				
	System picture2000	[		_		
	System picture2000	[				
	System picture 2000	[	$\neg$			
	System picture2000	[				
	System picture2000			_		
	System picture2000	[				
	System picture2001			-		
	System picture2001			_		
	System form25001:	[		_		
	system lonn25001.[	L			~	
	Control address					
	Enable control	Enabling				
		method	OFF	~		
- 1	Clear control	Clear by	ON->OFF	$\checkmark$	_	
	Save setting					
- 1	● H ○ U				_	
	Export Control				_	
	File Operation  Fixed file  Date	O Register				
	Storage capacity 10000 🔹 Count 🗸					
	Insufficient HMI space • Stop saving records	Overwrite old	records			
	Data retention days					
	Retention d1	Dav			> <sup>*</sup>	
		_			-	
L			Determin	e Cancel Ap	oplication	
select	Select to indicate that if t	the control is	operate	d, the operation red	cord will be d	isplayed on the
	"Operation Record Displa	av". Vou car	click the	" 🗒 " sign to ever	and the contro	ls in the screen
	Operation Record Displa	ay, 100 call	chek un	Sign to expe		is in the screen
	and set whether to check	them.				
	C	Dent			-	1
	Screen	Part	_	Screen	Part	
	User screen1:[00001]		Use	r screen1:[00001]		
	System picture2000		富	1:[00001]Page1	Recipe Tra	Ť
	System picture 2000		· · · · · · · · · · · · · · · · · · ·		Eunstiantia	+
				LIT:[00001]Page1	Function K	ł
	System picture2000		窗	山1:[00001]Page1	Value inpu	
	System picture2000		窗	□1:[00001]Page1	Value inpu	
	System picture2000		Sve	tem picture2000		Ť
	System picture 2000		- Sys			t
	- system picture2000		_ ⊔ ⊔ Sys	tem picture2000		l

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		
	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		
	up to 200 characters)		
date	The stored file name is named with a date, for example, the file exported on May 29, 2021 is		
	named 20210529		
register	Set the register address, and the stored files will be named based on the contents of the register.		
	When selecting dynamically specified file name, it is necessary to select a string type register		
	such as character input and Chinese input. (File names can support up to 200 characters)		
storage capacity	Set the total amount of collected data information stored;		
insufficient UMI	Set the status to stop saving or eventriting old records when storage space is insufficient		
space	Set the status to stop saving or overwriting old records when storage space is insufficient		
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:  $1/2 \approx 2 = 4$ ;  $1/2 \approx 2 = 4$ ; 1/2

#### 4-7-3. Operation record display

1. Click on "Parts/Operation Record/Operation Record Display" icon in the menu bar or the "III" 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

Basic Attrib Display Query Security set Location Control ID OR0 Description Operation record setting Operation Display list Use ♥ Adaptive column spacing Select Project Title Title Description Column spacing ♥ 日期 日期 82 ♥ 日期 日期 82 ♥ 日期 日期 62 ♥ 日期 日期 56 ♥ 比拉 比拉 220 ♥ 放作 动作 55 ♥ 用户名 月合 ♥ 第一 用户名 56 ♥ 最上 能拉 120 ♥ 第一 139 Move up Move down Restore default Order Time ● Chronological order
Control ID       OR0         Description       Operation         Operation record setting       Operation         Display list       Operation         Use       ✓ Adaptive column spacing         ✓       FFB         ✓       FFB         ✓       FFB         ✓       日期         日期       日期         62       ✓         ✓       日期         日期       56         ✓       日期         ●       日期         日期       56         ✓       封伸         ●       Move down         Restore default       Order         Time       ● Chronological order
Description         Operation record setting         Display list         Use       ✓ Adaptive column spacing         Select       Project         Title Title Description       Column spacing         ✓       序号         ✓       日期         日期       日期         ●       日         ●       日         ●       日         ●       139
Operation       Operation         Display list
Display list         Use       Adaptive column spacing         Select       Project       Title Title Description       Column spacing         Image: Select       Project       BH       BH       B2         Image: Select       BH       BH       B2       BH       B2         Image: Select Sel
Use       ✓ Adaptive column spacing         Select       Project       Title Title Description       Column spacing         ✓       序号       序号       35         ✓       日期       日期       82         ✓       日期       日期       62         ✓       时间       时间       62         ✓       日期       日期       82         ✓       日期       日期       62         ✓       拉仲田       拉仲田       56         ✓       控伸描述       拉仲描述       56         ✓       地址       地址       220         ✓       助作       动作       55         ✓       用户名       用户名       月户名         Ø       岡口       窗口       高合         ✓       開户名       県作信息       139         Move up       Move down       Restore default       Reverse chronological order         Time       Chronological order       Reverse chronological order
SelectProjectTitle Title DescriptionColumn spacing✓序号序号35✓日期日期82✓时间时间62✓控件ID控件ID56✓控件描述控件描述56✓地址地址220✓动作动作55✓用户名用户名56✓操作信息第日39
✓       序号       序号       35         ✓       日期       日期       82         ✓       时间       时间       62         ✓       控件D       控件D       56         ✓       控件描述       控件描述       56         ✓       地址       地址       220         ✓       地址       地址       55         ✓       加作       动作       55         ✓       用户名       用户名       56         ✓       第一       窗口       56         ✓       第       第       139         Move up       Move down       Restore default       139         Order
✓     日期     日期     82       ✓     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       ✓     动作     动作     55       ✓     用户名     用户名     56       ✓     第一     窗口     窗口       ✓     留口     窗口     56       ✓     留口     窗口     56       ✓     留口     窗口     56       ✓     留口     留口     56       ✓     留口     留口     56       ✓     留口     留口     56       ✓     留口     留口     139
✔     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       ✔     地址     助作     55       ✔     用户名     用户名     56       ✔     日户名     日户名     56       ✔     日户名     日白     日日       Ø     操作信息     139       Move up     Move down     Restore default       Order     Chronological order     Reverse chronological order
✓     控件ID     控件ID     56       ✓     控件描述     控件描述     56       ✓     地址     地址     220       ✓     动作     动作     55       ✓     用户名     月白     56       ✓     用户名     月白     56       ✓     用户名     月白     第日       ✓     日白名     第日     第日       ✓     日白名     月白     第日       Ø     操作信息     139       Move up     Move down     Restore default       Order     Chronological order     Reverse chronological order
✓     控件描述     控件描述     56       ✓     地址     地址     220       ✓     动作     动作     55       ✓     用户名     用户名     56       ✓     用户名     開户名     139       Move up     Move down     Restore default       Order     Chronological order     Reverse chronological order
●     地址     地址     220       ●     动作     动作     55       ●     用户名     月戶名     月戶名       ●     日戶名     日戶名     56       ●     日日     日日     日日       Move up     Move down     Restore default
▼     动作     动作     55       ▼     用户名     月白     56       ▼     窗口     窗口     56       ▼     操作信息     操作信息     139       Move up     Move down     Restore default       Order     Order     Reverse chronological order
●     用户名     用户名     56       ●     窗□     窗□     窗□       ●     Move down     Restore default
画山     画山     画山     30       ダ     操作信息     操作信息     139       Move up     Move down     Restore default       Order
Move up     Move down     Restore default       Order     Time     © Chronological order
Order Time   Chronological order  Reverse chronological order
Time  Chronological order
Format Date YY/MM/DD v e HH:MM:SS v
Used for system management controls, user cannot operate
Can be used to annotate the purpose of this control
rd Click on "Operation Record Settings" to set the relevant content of the operation
If the list displayed in the operation record is in multiple languages, check the

multi-language	using multiple languages is checked, a multi language setting table will be displayed on the		
	right side of the title description. Clicking on it will lead to the multi language library setting		
	interface for setting multiple languages. The use of multiple languages can be found in labels		
	chapter 5-1. Multiple languages		
adaptive column	After checking, the column width cannot be customized, and the software will automatically		
space	adjust it to the most suitable size based on the project screen		
select	Only when checked can it be displayed in the list		
No.	Display the sequence number of table columns		
date	Date generated during control operation		
time	Time generated during control operation		
control ID	The ID number of the control		
control	Description content of the control		
description		If you need to	
address	The address of the control, which can display whether it is an internal or	adjust the order	
	external address	of items, you	
action	Set Word, Set ON, Set OFF, Toggle (bit reverse), Write Const Value, Write	can click the	
	String, Return To Prev Window, Go To Next Window, Upload recipe,	"Move Up,	
	Download recipe, Press, Release	Move Down"	
user name	Do you have user privileges to log in at this time? If not logged in, it will not	button below. 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	_	
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,	that is, the latest	
	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, that is, the latest		
order	operation record information is displayed at the top of the table		
time date format	set the date and time format		

When using multiple languages is checked, "..." will be displayed in the bottom right corner of the title description. Clicking on it will lead to the multi language library setting interface to set multiple languages.

Display 

	Operation record display
Basic Attrib Dis	play Query Security set Location
Use title	O Multilina
Table title Fo 微软雅黑	List title List Data Synchronize language font styles
Co	Size 12 V
Table Background c	color V Title description V
<ul> <li>✓ Outer fram</li> <li>Thi</li> <li>Co</li> <li>Ior</li> </ul>	ne v Style v
✓ Grid Thi Co Ior	Style v

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 lan	nguage font styles	If unchecked, the title font and list font can be set separately		
		If checked, the two fonts, colors, sizes, and alignment remain consistent		
f	ònt	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

Operation record display	×
Basic Attrib Display Query Security set Location	_
✓ Pictur     PSB0     Export conditi     ON->OFF ∨     Export Format     PNG ∨	
Enable operation record query	
Query method	
• Query by date O Query by time period	
O Register control	
Query control	
✓ PSB0	
Query date	
Tuesday, April V Register PSW0	
For example: PSW0: year (unsigned number input, YYYY format	
PSW1: Month (unsigned number input, mm format, for e:	
PSW2: Day (unsigned number input, DD format, for exa	

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.

Query	control	
~	PSB0	
Query	date	
	Tuesday, April 🗸	C 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.

-Query tim	e period					
Quory orm	o porroa					
Eron	Tuesday	Annil	✓ 11	Ноц 44	Minute	Second
1.1.01	racbaa, ,	mpiii		104	millace	becond
То	Tuocday	April	V 11	нол 44	Win 32	Second
10	Iuesuay,	прттт	· · · ·	1104	minter	Second
		_	Posiston			
			Register			

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.

uery time period From Tuesday , April V 11 Hou 44 Minute Second To Tuesday , April V 11 Hou 44 Minu32 Second I Register PSW Example: PSW0 PSW5: from time year, month, day,	uery tim From	e period				
From Tuesday, April ∨ 11 Hou44 Minute Second To Tuesday, April ∨ 11 Hou44 Min 32 Second ✓ Register FSW Example: PSW0~PSW5: from time year, month, day,	From	m 1				
To Tuesday, April ∨ 11 Hou 44 Min 32 Second ✓ Register PSW Example: PSW0 <sup>°</sup> PSW5: from time year, month, day,	L	luesday ,	April V 1	.1 Hou 44	Minute	Second
✓ Register PSW Example: PSW0 <sup>°</sup> PSW5: from time year, month, day,	То [	Tuesday ,	April V 1	.1 Hou 44	Min 32	Second
Example: PSW0 <sup>~</sup> PSW5: from time year, month, day,			🖌 Regis	ster PS	W	
Example: PSW0~PSW5: from time year, month, day,						
			Example	: PSW0~PSW5: fro	om time year, i	month, day,

#### (3) Register Control Query Method

Use registers to dynamically specify the query method. A register value of 0 indicates querying by date, and a value of 1 indicates querying by time period. Users can choose according to their own needs.

■ Security setting

	Operation record display	x
Basic Attrib Display	Query Security set Location	
Display control ✓ Enable When 隐藏 Devic 本地设备 Addre PSB Enable Sta ON	✓ ✓ ✓ 0 ✓ Indirect	
User permission Hide this compone User permission range	ent 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.

#### 4-7-4. 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.

**Ĕ**≯

3. Use the function

(1) Static installment payment

		Hire purchase		×
✓ Enable static inst	tallment			
🗌 Enter administra	tor Administr password	rator	Ø	
H R Add Batch add De	elete Delete all			
Period	Start time	End time	Description	Password
Period 1	4/18/2023 2:45 PM	4/19/2023 2:45 PM		12345678
Period 2	4/19/2023 2:45 PM	4/20/2023 2:45 PM		12345678
Enable dynamic	Installment			
Installment		Ø		Generate
Dynamic Installment		Dynamic super password	Æ	dynamic
			Determine	Cancel Application

- Check "Enable static installment ", add the number of installment periods, set the start time, end time, description, and password.
- Enter administrator password to cancel installment payment: If this option is checked in the project, set the administrator password and download it. In any installment payment pop-up window that pops up, enter the custom administrator password, which will cancel subsequent installment payments and close the window to enter the project operation page. Passwords support letters (case sensitive) and numbers, with a password length limit of 10 characters.

	Batch add	×	
Start date	2023/04/20 14:45	]	
Interval time		0 • H 0 • M o • in	l
Add Periods	1 P e		l
	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:	46:0		•		
	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.

- (2) Dynamic installment payment
- Enable dynamic installment

		Hire purchase		×
Enable static inst	tallment			
🗹 Enter administra	tor Administra password	tor	Ø	
Add Batch add De	elete Delete all			
Period	Start time	End time	Description	Password
Period 1	4/18/2023 2:45 PM	4/19/2023 2:45 PM		12345678
Period 2	4/19/2023 2:45 PM	4/20/2023 2:45 PM		12345678
Enable dynamic	installment			
Installment key Dynamic Installment	<	<ul> <li>Dynamic super password</li> </ul>	Ø	Generate dynamic
			Determine Cancel	Application

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			
	Enter administrator Administrator	Ø		
	Dynam	ic password generation		
A	Device II		n Descused	
	Installment ke	y Ø	Passworu	
	Start time o	2022/04/18 00:00		
	installment	2023/04/18 00:00		
	• End time of	2023/05/18 00:00		
	<ul> <li>Duration of</li> </ul>	30		
	Dynamic	Ø		
	Enable dynamic installment			
	Installment	Confirm Cancel	Generate	
	key Dynamic	ynamic super	dynamic	
	Installment p	assword		
		Determin	ne Cancel Application	
device ID	Each screen only has a unique de 1. click on the lower pop up a window, the re 改备信息 Hmi版本: 1.1.3.221006 系统版本: 1.1.3.221008 硬件版本: HV2 设备IP: 172.31.6.228 设备ID: 022-009-016-0851-0036 2. check the ID on the proc <b>FouchWin</b> Touch Panel MODEL:TS3-700-E HIV100 POWER:DC24V 5W ID: 256-135-149-D518-4141 C C OX13214750431049 WUXI XINJE ELECTRIC CO., LTD.	evice ID, and there are the er right corner of HMI s d color area is the devic	hree ways to query the sci creen, select " e ID.	reen ID;
	3. When downloading, sel	ect the LAN download a	and scan the IP interface to	o find the
	required device ID base	u on the model and IP a	Juless	S. 11 - 12 - 14 - 14 - 14 - 14 - 14 - 14 -
	通信设置 连接方式 局域网 >	网络名称 IP地址 Hmi 172.31.6.228	设备ID 022-009-016-0851-0036	机型 TS3-700-E
	<ul> <li>● 设备P查线</li> <li>172.31.6.150 ~</li> </ul>	Hmi 172.31.6.230 Hmi 172.31.7.139	022-009-016-0856-0038 7 022-010-010-0856-0046 7	TS3-700-E TS5-700-E
	<ul> <li>○ 设备ID查找 022-00, 016-0851-0036 √</li> <li>归描IP</li> <li>通信测试</li> </ul>	Hmi         172.31.6.150           Hmi         172.31.7.141	022-009-007-0901-0029 T 022-010-010-0958-0007 T	rss-700-E Tss-700-E
	上传下载 下载密码 123456 ④	Hmi 172.31.1.53 Hmi 172.31.6.115	022-009-027-1844-0001 T 022-009-008-1438-0004 T 022-009-006-1458-0004 T	IS3-700-E IS5-700-E
		172.31.0.110	055-009-000-1039-0038	ISS I DOTE
	用户自定义开机调面 □ 使用款认开机调面			
installment key	The password includes upperca	se and lowercase letter	s and numbers, and the l	length does not

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	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.



#### 4-7-5. 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

Scrolling text
Basic AttricSecurity se Location
Control ID SC1
Description       Display control     Show contents       0     Always show       1     Controlle       2     Always show
Add     Delete     Move up     Move       Font
Co  Size    scroll    Message    1    scroll spe
□ Border Thi Borderless ∨ Style ↓ Co
Color
Determine Cancel Application
Used for system management controls, user cannot operate
Can be used to annotate the purpose of this control
include always show and controlled by coil

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
	Image: Controlle PSR0         Image: Controlle PSR0         Image: Controlle PSR0
	Text string
	Tevt     Multiling
	Thank you for your kindness
	Determine Cancel Application
controlled 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

control ID

		Display control       Show contents         0       Always show Y       Thank you for your kindness         2       Always show Y         2       Always show Y         Register assignment       X         Address       Settin         Addre       PSB       0         Indirect       Indirect
		Iogic     O Negative logic       Determine     Cancel       Application
show	<sup>7</sup> contents	Right click on the displayed content to copy it, create a new text string, create a new variable text, create a new data display, and delete the displayed content. Click/double-click on the displayed content to edit it again.           Display control         Show contents           0         Always show         Thank           2         Always show         Thank           2         Always show         Thank           New Variable text         New Variable text           New Data Display         Delete
operate 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
border		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	Stext string refers to the use of static text string in chapter $4-2-1$

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

Scrolling text	×			
Basic Attril Security se Location				
Display control	- 11			
✓ Enable				
When 隐藏 V				
Devic 本地设备 v Settin				
Addre pSB v 0				
Enable Sta ON 🗸 🗌 Indirect				
User permission				
Hide this component when the user has no permission scope				
User permission None V range				
Same to chapter 4-1-1 straight line security setting part.

Location

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

# 5. Library description

# 5-1. Label multilingual

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	J									
		Add labe	I Delete a t	ap Delete al	Add status	Deleted state	e Copy Paste	Import Exp	port		
No.	Label name	Number	State La	anguage 1	Language 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language {
								Dete	rmine	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.

### ■ Label library

						Label r	nultilingual					×
La	bel	Multiling	1									
		_	Add Ial	bel Delete	a tap Delete	all Add status	Deleted state	e Copy Past	e Import Ex	<b>→</b> port		
	No.	Label name	Number	State	Language 1	Language 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language {
	1	label_1	4	0	Text1							
				1	Text1							
				2	Text1							
				3	Text1							
	2	label_2	3	0	Text1							
				1	Text1							
				2	Text1							
	3	label_3	1	0	Text1							
									Dete	ermine	Cancel A	pplication
	sear	rch	Searc	Search for the set language and quickly locate the line								
a	dd l	abel	add a	add a label								
1.	1-4-	1.1.1	Dalat	a aalaat	ad labala							

delete label	Delete selected labels
delete all	Delete all labels
add status	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 status	Delete selected status
сору	Copy the selected row
paste	Paste a copied line
import	Import Label Library Table
export	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						
Label name Status Quantity	label_1						
State	0 ~						
Language 1	OFF						
Language 2	off						
Language 3							
Language 4							
Language 5							
Language 6							
Language 7							
Language 8							
	Confirm						
status 0 setting							

	NewLabel
Label name	label_1
Status Quantity	2
State	1 ~
Language 1	ON
Language 2	on
Language 3	
Language 4	
Language 5	
Language 6	
Language 7	
Language 8	
	Confirm



(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)

	Label multilingual												
l	Label Multiling												
	Add label Delete a tap Delete all Add status Deleted state Copy Paste Import Export												
	No.	Label name	Number	State	Language 1	Language 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language {	
	1	label_1	2	0	OFF	off							
				1	ON	on							
									Dete	rmine	Cancel A	pplication	

(3) click determine to save the settings.

#### Multilingual table

export

				Label multili	ngual			×	
Label	Multiling	✓ Add ta	able Delete						
Add Delete Delete all Copy Paste Import Export									
No.	Language 1	La Add ge 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language 8	
2	Text1								
3	Text1								
adu	d table	Add a mult	tilingual table			Determ	ine Cancel	Application	
ade	d table	Add a mult	tilingual table			Determ	ine Cancel	Application	
ado	d table lelete	Add a mult delete the t	tilingual table	;		Determ	ine Cancel	Application	
ado d so	d table lelete earch	Add a mult delete the t Search for	tilingual table table the set langua	e age and quicl	kly locate the	Determ	ine Cancel	Application	
ado d se	d table lelete earch add	Add a mult delete the t Search for Add a num	tilingual table table the set languable the rto the sel	e age and quic ected table	kly locate the	Determ	ine Cancel	Application	
add d so d	d table lelete earch add lelete	Add a mult delete the t Search for Add a num Delete num	tilingual table table the set langua ther to the sel nbers in the se	e age and quicl ected table elected table	kly locate the	Determ	ine Cancel	Application	
add d so d del	d table lelete earch add lelete lete all	Add a mult delete the t Search for Add a num Delete num Delete all r	tilingual table table the set langua ther to the sel nbers in the sen	e age and quic ected table elected table	kly locate the	Determ	ine Cancel	Application	
add d so d del	d table lelete earch add lelete lete all copy	Add a mult delete the t Search for Add a num Delete num Delete all r Copy the ro	tilingual table table the set langua ther to the sel nbers in the se numbers ow containing	e age and quick ected table elected table g the selected	kly locate the	Determ e line	ine Cancel	Application	
add d so d del c	d table lelete earch add lelete lete all copy paste	Add a multi delete the t Search for Add a num Delete num Delete all r Copy the ro Paste a cop	tilingual table table the set langua ther to the sel nbers in the se numbers ow containing bied line	e age and quick ected table elected table g the selected	kly locate the	Determ	ine Cancel	Application	

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 multilingual										
	abel	Multiling									
Tab	[ID: 00 [ID: 00 [ID: 00	1] 0] 1]	Add ta	ble Delete	te Import Export	t					
N	о.	Language 1	Language 2	Language 3	Language 4	Language 5	Language 6	Language 7	Language 8		
	1	Text1									
							Determ	nine Cancel	Application		

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

	Label multilingual										
Label	Multiling										
Tabl [ID	Tabl     IDElete       IDElete     Delete       IDElete     IDElete       IDELete     IDELete </td										
No.	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										
	Determine Cancel Application										

(3) click determine to save the setting.

#### **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.)

ind	indicator									
Basic Attril Appearances ecurity set Location										
1										
	✓ Ose pictures Status 1 ✓									
aa	Name lamp_05_a									
	Size 60 × 60									
	512e 00 × 00									
Change appearance	More pictures									
Fill	r									
State 1 June Disp	blay text Font applied to each									
O Text   Multiling	Edit									
✓ Enable 3		-								
Label label_1[2]	∠ Language ∨									
4										
	aa									
East										
Fo 微软雅黑	General V									
Co Size 1	2 ~									
Ali Middle_Center V										
	Determine Cancel Application	on								

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 Attrib Security se Location	
Control ID ST2	
Description	
O Text  Multiling  2 Edit	
✓ Enable 3	
Table   [ID: 004]   No.   1   V     Language	
4 5	
Text1	
Font Fo 微物確照	
Co Size 12 V	
Ali Middle_Center v Autofit size	
Border	
Co	
lor •	
Determine Cancel	1

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)

	1			text config			x			
Basic At	tril Display	Security se	Location							
- Cont	tent				2		_			
N	o. V	alue	Te	Text description string						
0		0		string0						
1		1		Variable string1		Delete				
	Moveup									
					Label m	ultilingual				
					_	5				
	): 004] <mark>3</mark>		✓ Add ta	able Delete						
			HU		5 I III					
		Add	Delete D	elete all Copy Pas	ste Import	Export				
No	Language	1 lar	oquade 2	Language 3	Languag	e 4 la	nansa			
1	Text1	1 La	iguage z	Language 5	Language		iguagi			
2	Text1									
	4									

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	•	Σ → 15 → S 0 → L	2 •
01 [25011]KeyBoard_Hex_01 [00	002]页面2		[25011]KeyBoard_Hex_01 [00002]页	<b>1</b> 2
-Gr				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1		700 	
静态文字1 即1			静态文字2 2 <sup>111</sup> 2 <b>学</b> 状态文字2	
多状态又字1				

language 1

language 2

#### 5-2. Address label library

Used for customizing address labels, and can also view the meaning and correspondence of HMI internal system addresses in the library.

System register

Used to display HMI system address information, making it easy for users to view and use.

			Addre	ess Label Libr	ary		×
Lab	el type						
		Г					
• s	system label ု Custom label 🔷 Ed	quipment			~		
			1 Ph 1				
Sear	rch Add Dele	ete Delete all	Copy Im	port Export			
-	Labelgene	Eurotics	Address	Addeese		Derver off hold	
	Label name 田白規規登录标志位	T 把里针 L 值	SPSB0	Bit	Read/write	Fower off hold	
·	707 (KK量示标志位) 用户权限取消标志位	工程料计值	SPSB1	Bit	ReadOnly	False	
	剩余存储空间标志	工程野认值	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	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1	工程野认值	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	~
						Determine	

You can search in the search area and click it to quickly query the required registers (system registers cannot be changed).

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
type HMI	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						
HMI	Insufficient storage space	Local	0	SPSB	3	Bit	ReadOnly	False
	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

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
		device						
	First scan after power on	Local	0	SPSB	8	Bit	ReadOnly	False
		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						

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
	Week - Hex	Local	0	SPSW	29	Word	ReadOnly	False
		device						
	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						
	Backlight adjustment	Local	0	SPFW	252	Word	R/W	True
	(values 0-11)	device						
	Recipe Index	Local	0	SPFW	256	Word	R/W	True
		device						
	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
		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
Hardware		device						
	Clear alarm records	Local	0	SPSB	120	Bit	R/W	False
		device						
	restart	Local	0	SPSB	200	Bit	WriteOnly	False
		device						
	Safely ejecting the flash	Local	0	SPSB	201	Bit	WriteOnly	False

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
	disk	device						
	HMI hardware version	Local	0	SPSW	33	String	ReadOnly	False
type		device						
	HMI software version	Local	0	SPSW	90	String	ReadOnly	False
type		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
	for communication port 1	device						
	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						
Communication	Ethernet device	Local	0	SPSB	52	Bit	ReadOnly	False
Communication	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						
	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						

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
	port 3 communication	Local	0	SPSW	52	Word	ReadOnly	False
	successful times	device						
	port 3 communication error	Local	0	SPSW	53	Word	ReadOnly	False
	times	device						
	port 3 communication	Local	0	SPSW	54	Word	ReadOnly	False
	timeout times	device						
	port 3 communication	Local	0	SPSW	55	Word	ReadOnly	False
	failure times	device						
	present connection method	Local	0	SPSW	56	Word	ReadOnly	False
		device						
	present connection signal	Local	0	SPSW	57	Word	ReadOnly	False
	strength	device						
	Informatization IP address	Local	0	SPSW	58	Word	ReadOnly	False
		device						
	Informatization subnet	Local	0	SPSW	62	Word	ReadOnly	False
	mask	device						
	Informatization default	Local	0	SPSW	66	Word	ReadOnly	False
	gateway	device						
	Informatization port no.	Local	0	SPSW	70	Word	ReadOnly	False
		device						
	Informatization DNS server	Local	0	SPSW	71	Word	ReadOnly	False
		device						
	Informatization MAC	Local	0	SPSW	75	Word	ReadOnly	False
	address	device						
	Informatization module	Local	0	SPSW	81	Word	ReadOnly	False
	information	device						
	Ethernet device 1 IP	Local	0	SPFW	1	Word	R/W	True
	address	device						
	Ethernet device 1 port no.	Local	0	SPFW	5	Word	R/W	True
		device						
	Ethernet device 2 IP	Local	0	SPFW	6	Word	R/W	True
	address	device						
	Ethernet device 2 port no.	Local	0	SPFW	10	Word	R/W	True
		device						
	Ethernet device 3 IP	Local	0	SPFW	11	Word	R/W	True
	address	device						
	Ethernet device 3 port no.	Local	0	SPFW	15	Word	R/W	True
		device						
	Ethernet device 4 IP	Local	0	SPFW	16	Word	R/W	True
	address	device						
	Ethernet device 4 port no.	Local	0	SPFW	20	Word	R/W	True
	-	device						
	Ethernet device 5 IP	Local	0	SPFW	21	Word	R/W	True

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
	address	device						
	Ethernet device 5 port no.	Local	0	SPFW	25	Word	R/W	True
		device						
	Ethernet device 6 IP	Local	0	SPFW	26	Word	R/W	True
	address	device						
	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						
	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						

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
	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
		device						
	Ethernet device 22 IP	Local	0	SPFW	106	Word	R/W	True
	address	device						
	Ethernet device 22 port no.	Local	0	SPFW	110	Word	R/W	True
		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

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
		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						
	Ethernet device 33 port no.	Local	0	SPFW	165	Word	R/W	True
		device						
	Ethernet device 34 IP	Local	0	SPFW	166	Word	R/W	True
	address	device			. = .	/		
	Ethernet device 34 port no.	Local	0	SPFW	170	Word	R/W	True
		device				/		
	Ethernet device 35 IP	Local	0	SPFW	171	Word	R/W	True
	address	device	0	CDEUL	1.7.5	<b>XX7</b> 1	DUU	E
	Ethernet device 35 port no.	Local	U	SPFW	1/5	word	K/W	True
		device	0	CDEW	176	33.7 1	DAV	
	Ethernet device 36 IP	Local	U	SPFW	1/6	word	K/W	Irue
	address	device	0	(DDU)	100	<b>XX</b> 71	D AV	T
	Ethernet device 36 port no.	Local	U	SPFW	180	word	K/W	True
	Ethomat Jaria 27 ID	Less	0	CDEW	101	War 1	D AV	T
	Ethernet device 3/ IP	Local	U	254 M	181	word	K/W	Irue
	address	aevice						

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
	Ethernet device 37 port no.	Local	0	SPFW	185	Word	R/W	True
		device						
	Ethernet device 38 IP	Local	0	SPFW	186	Word	R/W	True
	address	device						
	Ethernet device 38 port no.	Local	0	SPFW	190	Word	R/W	True
		device						
	Ethernet device 39 IP	Local	0	SPFW	191	Word	R/W	True
	address	device						
	Ethernet device 39 port no.	Local	0	SPFW	195	Word	R/W	True
		device						
	Ethernet device 40 IP	Local	0	SPFW	196	Word	R/W	True
	address	device						
	Ethernet device 40 port no.	Local	0	SPFW	200	Word	R/W	True
		device						
	Ethernet device 41 IP	Local	0	SPFW	201	Word	R/W	True
	address	device						
	Ethernet device 41 port no.	Local	0	SPFW	205	Word	R/W	True
		device						
	Ethernet device 42 IP	Local	0	SPFW	206	Word	R/W	True
	address	device						
	Ethernet device 42 port no.	Local	0	SPFW	210	Word	R/W	True
		device						
	Ethernet device 43 IP	Local	0	SPFW	211	Word	R/W	True
	address	device						
	Ethernet device 43 port no.	Local	0	SPFW	215	Word	R/W	True
		device	0	CDEUL	216	<b>TT7</b> 1	D (III	
	Ethernet device 44 IP	Local	0	SPFW	216	Word	R/W	True
	address	device	0	CDEN	220	337 1	DAV	
	Ethernet device 44 port no.	Local	0	SPFW	220	Word	K/W	True
	Ethermot device 45 ID	Less	0	CDEW	221	Wand	DAV	
	ethemet device 45 IP	Local	0	SPFW	221	word	K/ W	True
	Ethernet device 45 port po	Local	0	SDEW	225	Word	D/W/	Truo
	Ethemet device 45 port no.	device	0	SELW	223	word	K/ W	The
	Ethernet device 46 ID	Local	0	SDEW	226	Word	D/W/	Truo
	address	device	U	51 F W	220	woru	IX/ VV	Tiue
	Ethernet device 46 port no	Local	0	SDEW	230	Word	D /W/	True
	Emerner device 40 port llo.	device	0	51.1.44	250	word	IX/ YY	1100
	Ethernet device 47 IP	Local	0	SPFW	231	Word	R/W	True
	address	device	, v	511 11	2.51	HOIG	11/11	1100
	Ethernet device 47 port no.	Local	0	SPFW	235	Word	R/W	True
	portion	device						
	Ethernet device 48 IP	Local	0	SPFW	236	Word	R/W	True

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
	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						
	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						

type	label name	device	station	address	address	data type	read write	power-off
		name	no.	type			mode	holding
	Communication port 2	Local	0	SPFW	347	Word	R/W	True
	device stop bit	device						
	Communication port 2	Local	0	SPFW	348	Word	R/W	True
	device parity bit	device						
	Communication port 2	Local	0	SPFW	349	Word	R/W	True
	delay before sending	device						
	Communication port 3	Local	0	SPFW	351	Word	R/W	True
	interface type	device						
	Communication port 3	Local	0	SPFW	352	Word	R/W	True
	device station no.	device						
	Communication port 3	Local	0	SPFW	353	Word	R/W	True
	device baud rate	device						
	Communication port 3	Local	0	SPFW	354	Word	R/W	True
	device data bit	device						
	Communication port 3	Local	0	SPFW	355	Word	R/W	True
	device stop bit	device						
	Communication port 3	Local	0	SPFW	356	Word	R/W	True
	device parity bit	device						
	Communication port 3	Local	0	SPFW	357	Word	R/W	True
	delay before sending	device						
	Communication port 1	Local	0	SPFW	400	Bit	R/W	True
	station number shielding	device						
	Communication port 2	Local	0	SPFW	416	Bit	R/W	True
	station number shielding	device						
	Communication port 3	Local	0	SPFW	432	Bit	R/W	True
	station number shielding	device						
	VNC service control	Local	0	SPFW	451	Bit	R/W	True
		device						

Custom label

Address Label Library	×
Label type	
○ System label	
Search Add Delete Delete all Copy Import Export	o synchronize MQTT
Device 🍸 Station No. Label name Address Data 🍸 Data type 🦷 Synchronize Description	
	Determine

According to personal usage habits, create tags for HMI internal addresses or device addresses, and view the usage status of each tag address in this window.

add	to add new add	dress label.					
		New address label					
		Variable name Address mode O bit O Word					
		Descripti on					
		Devic 本地设备 V Settin Addre PSB V 0 Data Word V Unsignec V Indirect					
	L	Determine Cancel Application					
	variable name	Set the label name for the address to be created.					
	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
	(und so
delete	Delete the specified address label
delete ell	Delete all added address labels
	Convite an address labels.
copy	Copy the spectric address label.
paste	is the manified location
overant	at the specified location.
export	Export the CSV format address table of the gradified rath in the computer into the UML
import	The indicates have been and the specified path in the computer into the HMI.
example	The indicator button uses a user-defined label.
	(1) add custom label Touch Win Pro - 工程 - [00001]Page1
	File Edit Parts Mapping Tool View Help
	Image: Second
	Engineering tree 0 x [00001]Page1
	User screen     Label type     Label type
	G System picture     ○ System label     ○ Equipment
	Import System form     Import System form       Import Search     Import Search       Import Search     Import Search
	Source file     Device \[Station No. Label name Address Data \[U] Data type \[J] Synchronize Description     New address label
	-Bi Label multilingual     Variable       -Gi Address Label Library     name
	Resource material library     Address     bit     Word     Mudio resource library
	on
	Devic 本地设备 v Settin
	Addre pSB 0 Data Word V Unsignet V
	type
	Determine Cancel Application
	after clicking ok, it will show below picture:
	Address Label Library X
	○ System label  ○ Custom label  ○ Equipment  v
	Search Add Delete Delete all Copy Import Export Whether to synchronize MQTT
	Determine
	(2) use custom label
	Place indicator buttons on the engineering screen and follow the steps shown in the following
	figure for configuration.

indicator
Basic Attribio Appearance Security set Location
Control ID LIO
Description
Read address
Addre psB v 0
Address
Device 本地设备 v
type indicator v User defined label
Address 0 System register
Address Use custom labels : indicator format
Address Label
Determine Cancel Application
after clicking ok, it will show below picture:
indicator
Basic AttribiAppearance Security set Location
Basic Attrib(Appearance)Security set Location
Basic Attrib/Appearance/Security set Location Control ID L10 Description
Basic Attrib(Appearance(Security set) Location Control ID LIO Description
Basic Attrib(Appearanc(Security set Location Control ID LIO Description Read address Devic 本地设备
Basic AttribtAppearanctSecurity set Location Control ID LIO Description Read address Devic 本地设备    Settin Addre indicator    0
Basic AttribtAppearanct(Security set Location Control ID LIO Description Read address Devic 本地设备    Settin Addre indicator    0
Basic AttribtAppearanct(Security set Location Control ID LIO Description Read address Devic 本地设备    Settin Addre indicator    0
Basic AttribtAppearanct(Security set Location Control ID LIO Description Read address Devic 本地设备   Settin Addre indicator   0
Basic Attrib/Appearanc(Security set Location Control ID LIO Description Read address Devic 本地设备   Settin Addre indicator   O
Basic Attrib(Appearanc(Security set Location Control ID LIO Description Read address Devic 本地设备   Settin Addre indicator   0 logic Positive logic   Negative logic Flash
Basic Attrib(Appearanci Security set Location Control ID LIO Description Read address Devic 本地设备    Settin Addre indicator    0 logic
Basic Attrib(Appearance(Security set  Location) Control ID L0 Description Read address Devic 本地设备    Settin Addre indicator    0 logic logic Positive logic    Negative logic Flash ③ On status flashes Flicker frequency ①1 秒
Basic Attribuppearanci(Security sel Location         Control ID         Description         Read address         Devic       本地设备         Addre       indicator         logic         Iogic         Positive logic       Negative logic         Flash       Off status flashes         Flicker frequency       0.1 Positive logic
Basic Attrib(Appearance) Security set Location         Control ID         Devic       本地設設編         Address         Devic       本地設設編         Addre indicator       0         logic       • Negative logic         • Flash       • Off status flashes         • On status flashes       • Off status flashes         • Flicker frequency       0.1 10 v
Basic Attribly ppearanc(Security set Location)         Control ID         Description         Read address         Devic 本態设备         Addre         indicator         0         Iogic         Iogic         Iogic         Iogic         Iogic         Iogic         Iogic         Indicator         Indicator      <

2							
查询方	<ul> <li>□ 技设备</li> <li>式:</li> <li>□ 技画面/窗</li> </ul>	· · ·	<ul><li>✓ 地址</li><li>✓</li></ul>				×
搜索	[   液	▲ 前 前 加 删除 删除全部	□ (* *) 复制 导出 导入				
1	示签名称 设行	备名称 站号	地址类型	地址	使用画面/窗口	使用控件	
► E	指示灯按键 本地	设备 0	PSB	0	1 1	1:LBO 1:LBO	

# 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.



The resource material library selection image dialog box appears, as shown in the following figure:

		Resource library X
	Ad	Image: Constraint of the second se
<ul> <li>● 数</li> <li>● 支援</li> <li>● 指示式</li> <li>● 指示式</li> <li>● 多次</li> <li>● 多次</li> <li>● 数据</li> <li>● 数</li> </ul>		Dutton_01 Dutton_02   Dutton_02 Dutton_03   Dutton_03 Dutton_04   Dutton_04 Dutton_05   Dutton_06 Dutton_07   Dutton_07 Dutton_08   Dutton_08 Dutton_09   Dutton_09 Dutton_10   Dutton_08 Dutton_09   Dutton_08 Dutton_09   Dutton_09 Dutton_10   Dutton_08 Dutton_09   Dutton_10 Dutton_10
Left engineering column section		Image: 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	Delete selected material
	element	
	rename	Rename the added folder
Select the	target file	Select the object image, click the "OK" button below after selecting it, and confirm to
section of	n the right	enter the target editing interface. At the same time, the function of adding or deleting
		materials can be realized through "adding elements" or "deleting elements"

#### 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.

			Ė	🗉 Library			
				- 🗵 Label multilingual			
				Address Label Library			
				Resource material libra	iry		
				Audio resource library			
							-
				音频库			×
	6	6		文件	大小	播放	
			0	alarm01.wav	831.256K	播放	
sounds			1	alarm02.wav	384.044K	播放	
			2	alarm03.wav	105.58K	播放	
			3	beep02.wav	209.96K	播放	
			4	message01.way	132.404K	播放	
			5	ring01.wav	768.04K	播放	
			6	ring02.way	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	el Applicatio	n
	Add a fold	der o	ontai	ning audio to quickly add	audio materials (cur	rrently only su	pports wav
add folder 坚	f			<u> </u>		. ,,,	11-13-14
	tormat)						
delete folder 匡	Delete the	sele	cted f	older, please note that if de	leted by mistake, it ca	annot be restor	ed
add material	Add custo	m m	ateria	ls			

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.

Key	IJPage	I		
Basic AttribiAppearance Function bi Security set Location Control ID BT1 Description Write address Devic 本地设备	Compile	ی System settings Data sampling ان کار	کی المحتود کی محتود ہوئے کی محتود ہوئے کی محتود ہوئے ہوئے ہوئے ہیں۔ یہ محتود ہوئے کی محتود ہوئے کی محتود ہوئے ہ محتود ہوئے ہوئے ہوئے ہوئے ہوئے ہوئے ہوئے ہوئے	آل Operation record ان راب المحمد
Addre pSB v 0		音频库		×
	6	文件	大小	播放
Action	0	alarm01.wav	831.256K	播放
Set on Set off Negate	1	alarm02.wav	384.044K	播放
	2	alarm03.wav	105.58K	播放
	3	beep02.wav	209.96K	播放
Start alarm02.wav	4	message01.wav	132.404K	播放
	5	ring01.wav	768.04K	播放
	6	ring02.wav	720.044K	播放
	7	tune01.wav	1910.66K	播放
	8	tune02.wav	1974.292K	播放
	9	welcome01.wav	488.64K	播放

# 6. Function block

This chapter explains the usage of the C function by introducing the C instruction and combining some simple examples. Therefore, only some simple and easy to understand C function knowledge is used in the introduction. The main purpose is to help customers understand this function, understand some basic writing rules, and some precautions during use.

# 6-1. Function block introduction

#### 6-1-1. Function block operating conditions

Unlike general TG series HMI, TS series HMI support function block offline/online simulation.

#### 6-1-2. Build a function block

1. Open TouchWin Pro software, click engineering tree/project/function block/source file/add function.



2. Fill in the basic information of the function block in the pop-up information dialog box, and click "OK" to create a new function. (Function block names can be up to 30 characters)

	Function Attribute	x
Function name	Func0 .C	
Descriptio n		
Author		-1
Date	Tuesday , April	
	Ok Cancel	

Function Name naming Rules Refer to 6-2-1 Writing Method.

3. Select the newly created function, double-click the left mouse button, and open the function block for function writing.

	Function Block	×
New Save Cut Copy Paste	· ● ◆ 本 ③ ペ 考 導 導 Delete Undo Redo Compile Search and replace Note Note Off	
□ 日東         1           □ HMI API fur         2           □ HMI API fur         3           □ CloseWin         2           - CloseWin         2           - CodeSys         6           - CodeSys         6           - DCMapC         9           - DCMapC         10           - DCMapC         12           - DCMapC         13           - DCMapC         13           - DCMapC         2           - DCMapC         1           - DCMapC         2           - DCMapC         2	<pre>/************************************</pre>	*
- OpenWii - PSW - Read - Reads - Screenli - Screenli 		

## 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:

	Function Block	×
	b c> 團 🕂 @ @	
New Save Cut Copy Paste Delete Un	do Redo Compile Search and replace Note off	
□ 目录 ^	1 /************************************	^
⊟-HMI API functions	3 Author :	
- CloseWindow	4 Date : 4/25/2023	
CodeSvsRead	5 Descript:	
CodeSysWrite	<pre>7 #include "macro.h"</pre>	
DCMapClear	8	
DCMapDrawCircle	9	
DCMapDrawCircleArc	10 void Func0()	
DCMapDrawEllipse	11 ( <b>Delay</b> (100);	
DCMapDrawLinpseArc	13	
DCMapDrawRect		×
DCMapSetBack@olor	/	
Delay double click		^
OpenWindow	<pre>void Delay( UINT ms);</pre>	
Read	-b. fat	- 10
Reads	- 笑例:	
ScreenJump	Delay(1000) · // 延时1秒	
CetDCR ¥	Delay(1000), // %=4117	
Function Block API function		*
编译成功		

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.

■ 目录 HMI API functions Beep - CloseWindow - CodeSysRead - CodeSysWrite - OCMapClear	1 /********** 2 Name 3 Author 4 Date 5 Descrip 6 *********** 7 #include "	: Func0.c : : 4/25/2023 bt: 运属性 ×	Â
DCMapDrawCircle     DCMapDrawCircleArc     DCMapDrawCircleArc     DCMapDrawEllipse     DCMapDrawEllipseArc     DCMapDrawRet     DCMapSetBackColor     Delay     OpenWindow     PSW     Read     Reads     ScreenJump     cetBCR     Function Block API function C:\Program Files (x86)\TouchWin Pro\Tc	8 9 WORD a; 10 void Func( 11 {Read( 12 13 } < ***********************************	Register type Type 学 、 Station Device 本地设备 、 Object PSW 、 0 Station 0 章 Value Data type Word 、 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	
Start	
Functions Optional functions	
调用函数 设置线圈	
Add 设置数据	_
function call	_
Basic Attributes Security settings 日本市在	_
Function UU狭	_
	-
Serial execution     Parallel execution     CSV	-
HCSV	
Determine Cancel Application 句配方	
式配方	
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".

		Fu	nction domain		×
Mode	Function	Location			
Control I Descript	ID FF0				
- Action m	ode				
0.9	⊖ Screen				
0.9	Screen				
⊖ Coil					
01	Timing				
Ontinuo					
<ul> <li>○ First scan after</li> <li>□ Timing continuous mode</li> <li>○ First scan after</li> </ul>					

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.

Fund	ction domain	
Mode Function Location		
Functions selected 调用函数	Add	Optional functions 设置线圈
		设置数据
functio	on call	
Function al Func0	✓ Edit	Function 奂
• Serial executior P	arallel execution	□ V
Determine	Cancel	Application V
		函数调用
		画面打印

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.

indicator key	×
Basic Attrib Appearanc Function bir Security set Location	
Key When pressed V Add to Delete Move	
Function call     ×       Function al     Function       Image: Serial execution     Function       Image: Determine     Cancel       Application	

# 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>
                             // use system header file<>
#include <string.h>
#include "Func1.h"
                              // use user-defined header file""
int a = 10;
                    // define the variables
                     // realize the function
void Test()
{
          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_PSP = 0
```

```
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_DDW ords = 0x200,
};
enum NewVarDataType
{
  DT_Word = 0x4,
```

```
DT_DWord = 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) = $	0x0201
#define MAKELONG(wl,wh)	((long)(((WORD)(wl)) ((DWORD)((WORD)(wh))) <<16))
Eg. MAKEDWORD(0x01, 0x02) =	== 0x00020001
#define LOWORD(1)	((WORD)(l))
Eg. LOWORD $(0x00020001) == 0x$	x0001
#define HIWORD(l)	((WORD)(((DWORD)(l) >> 16) & 0xFFFF))
Eg. HIWORD $(0x00020001) == 0x$	0002
#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 o	occupy 2 bytes	
		DT_DWORD	occupy 4 bytes	
		DT_DDWORD	occupy 8 bytes	
	add1,add2:	register address		
	pValue:	data buffer (The length	should match the dataType)	
	return value	TRUE / FALSE (Succes	ss/Failure)	
example	bool bValue	e;// Define a Boolean varia	ble	
	WORD wValue;// Define an integer variable			
	Read(_T("Xi	nje XD/XL/XG series (Mo	dbus RTU)"), 1, TP2_M, DT_Bit, 0, 0, &bValue);//read bit M0	
	Read(_T("Xi	nje XD/XL/XG series (Mo	dbus RTU)"), 1, TP2_D, DT_WORD, 0, 0, &wValue);//read	
	D0			
	Write(_T("X	inje XD/XL/XG series (Mo	odbus RTU)"), 1, TP2_M, DT_Bit, 10, 0, bValue);//write bit	
	M10			
	Write(_T("X	inje XD/XL/XG series (Mo	odbus RTU)"), 1, TP2_D, DT_WORD, 10, 0, wValue);//write	
	D10			
caution	When writing	g Read functions, be sure	to add the&addressing character	

## 6-2-5-2. Reads/Writes

function	read write register 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 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	
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		
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 window		
format	void Oper	void OpenWindow(int winNo, int winX, int winY);	
note	winNo:	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			

#### 6-2-5-10. SetPSB

function	set ON/OFF PSB		
format	SetPSB(a	SetPSB(addr, val);	
note	Addr:	register address	
	Val:	data buffer, 1-ON;0-OFF	
example	<b>SetPSB</b> (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 (BL	UE), 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	
	х:	Set the X-axis coordinate point value of the starting point of the line using the	

		upper left corner of the function canvas as the coordinate origin (0,0)
	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	<pre>int x_pos,y_pos</pre>	line_height,line_width,linewidth;
DWORD line_color;		olor;
	x_pos=PSW[300];	
	y_pos=PSW[301];	
	line_color=*(DWORD *)(PSW+302);	
	line_height=PSW[304];	
	line_width=PSW[305];	
	linewidth=PSW[306];	
	DCMapClear(1); // Use the DCMapClear command to delete the drawing during use	
	DCMapDrawL	<pre>ine(1,x_pos,y_pos,line_width,line_height,linewidth,line_color);</pre>

# 6-2-5-13. DCMapDrawRect

function	Custom Draw R	ectangle				
format	BOOL DCMapI	DrawRect (DWORD dwDCMapID, int x, int y, int Width, int Height, int				
	linewidth, DWO	RD color, BOOL FillRect, DWORD FillColor)				
note	dwDCMapID:	Set Function Canvas Number				
	х:	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)				
	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 valueHeight:Set rectangular height valueLinewidth:Set the width of the rectangular line, i.e. thicknessColor:Set the color value of rectangular edgesFillRect:Set whether the interior of the rectangle needs to be filled, 0 is not filled, and 1					
		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 n		Set whether the interior of the rectangle needs to be filled, 0 is not filled, and 1				
		is filled				
	FillColore	Set the fill color value. If FillPect is set to 0, the fill color setting is invalid				
1-		Set the fill color value. If I fill keet is set to 0, the fill color setting is invalue				
example	Int x_pos,y_pos,rec_height,rec_width,linewidth;					
	DWORD rec_col	or,fillcolor;				
	bool Fill;					
	Read(_T("local o	levice"), 0, TP_PSB, DT_Bit, 300, 0, &Fill);				
	x_pos=PSW[300]	],				
	y_pos=PSW[301]	]. ,				
	rec_color=*(DW	ORD *)(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 d	rawing
format	BOOL DCMap	DrawCircle( DWORD dwDCMapID, int x, int y, int Radius, int linewidth,
	DWORD color,	BOOL FillRect, DWORD FillColor )
note	dwDCMapID:	Set Function Canvas Number
	X:	Set the X-axis coordinate point value of the center display position using the
		upper left corner of the function canvas as the coordinate origin $(0, 0)$
	у:	Using the upper left corner of the function canvas as the coordinate origin (0,
		0), set the Y-axis coordinate point value for the center display position
	Radius:	Set circle radius
	Linewidth:	Set the width of the circular line, i.e. thickness
	Color:	Set the color value of the circular edge
	FillRect:	Set whether to fill the interior of the circle, 0 for no filling, 1 for filling
	FillColor:	Set the circle fill color value. If FillRect is set to 0, the fill color setting is
		invalid
example	<pre>int x_pos,y_pos,</pre>	Radius, linewidth;
	DWORD circle_color,fillcolor;	
	bool fill;	
	Read(_T("local	device"), 0, TP_PSB, DT_Bit, 300, 0, &fill);
	x_pos=PSW[300	D];
	y_pos=PSW[301	l];
	circle_color=*([	DWORD *)(PSW+302);
	Radius=PSW[30	14];
	linewidth=PSW[	[306];
	fillcolor=*(DWC	ORD *)(PSW+308);
	DCMapClear(1	);
	<b>DCMapDrawC</b>	<pre>ircle(1,x_pos,y_pos,Radius,linewidth,circle_color,fill,fillcolor);</pre>

## 6-2-5-15. DCMapDrawCircleArc

function	Custom arc draw	ing
format	BOOL DCMapD	brawCircleArc( DWORD dwDCMapID, int x, int y, int Radius, int linewidth,
	DWORD color, l	DWORD StartAngle, DWORD EndAngle )
note	dwDCMapID:	Set Function Canvas Number
	Х:	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,H	Radius,linewidth;
	DWORD circle_c	color;
	float StartAngle,H	EndAngle;
	x_pos=PSW[300]	
	y_pos=PSW[301]	
	circle_color=*(D)	WORD *)(PSW+302);
	Radius=PSW[304	4];
	linewidth=PSW[3	306];
	StartAngle=*(floa	at *)(PSW+308);
	EndAngle=*(floa	t *)(PSW+310);
	<b>DCMapClear</b> (1)	,
	DCMapDrawCin	rcleArc(1,x_pos,y_pos,Radius,linewidth,circle_color,StartAngle,EndAngle);
caution	Taking the arc of	rigin (center point) as the base point, the direction to the right of the horizontal
	line passing thro	ugh that base point is horizontal 0°.

# 6-2-5-16. DCMapDrawEllipse

function	Customize drawi	ing ellipses					
format	BOOL DCMapE	DrawEllipse(DWORD dwDCMapID, int x, int y, int X_Axis_Len, int					
	Y_Axis_Len, int	linewidth, DWORD color, BOOL FillRect, DWORD FillColor)					
note	dwDCMapID:	Set Function Canvas Number					
	х:	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:	Function Canvas Number g the upper left corner of the function canvas as the coordinate origin (0, et the display position of the ellipse origin X-axis coordinate point value g the upper left corner of the function canvas as the coordinate origin (0, et the Y-axis coordinate point value of the ellipse origin display position he ellipse radius value of the X axis he ellipse radius value of the Y axis he elliptical line width, i.e. thickness elliptical edge color values whether to fill the interior of the ellipse, 0 for no filling, 1 for filling he fill color value. If FillRect is set to 0, the fill color setting is invalid					
		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:	is_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:	Rect: 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	x_Axis,Y_Axis,linewidth;					
	DWORD E_color	r,fillcolor;					
	bool Fill;						
	x_pos=PSW[300]	. 2					

	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 drawi	ing elliptical arcs	
format	BOOL DCMapDrawEllipseArc( DWORD dwDCMapID, int x, int y, int X_Axis_Len, int		
	Y_Axis_Len, int	linewidth, DWORD color, DWORD StartAngle, DWORD EndAngle)	
note	dwDCMapID:	Set Function Canvas Number	
	х:	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	
	y:	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,y	x_Axis,Y_Axis,linewidth;	
	DWORD eArc_c	olor;	
	float StartAngle,I	EndAngle;	
	x_pos=PSW[300]	]. ,	
	y_pos=PSW[301]	]. ,	
	eArc_color=*(DV	WORD *)(PSW+302);	
	x_Axis=PSW[30:	5];	
	Y_Axis=PSW[30	4];	
	linewidth=PSW[3	306];	
	StartAngle=*(floa	at *)(PSW+308);	
	EndAngle=*(floa	t *)(PSW+310);	
	<b>DCMapClear</b> (1)	· · · · · · · · · · · · · · · · · · ·	
	DCMapDrawEll	ipseArc(1,x_pos,y_pos,x_Axis,Y_Axis,linewidth,eArc_color,StartAngle,EndAngle	
	);		
caution	Taking the origin	n (center point) of the elliptical arc as the base point, the direction to the right of	

the horizontal line passing through the base point is horizontal 0 $^{\circ}$ . 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 Co	Clear Canvas Content	
format	BOOL DCMapC	Clear( DWORD dwDCMapID )	
note	dwDCMapID:	Set Canvas Number	
example	<b>DCMapClear</b> (1)	;// Clear the contents of the function canvas number 1	

# 6-3. Project example

#### 6-3-1. Data compare

Example requirements:

Take three integers from the PLC for comparison, and output the maximum and minimum values for display on the HMI.

Example device:

(1) One TS3-700-E and one XD5E-30T4-E

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

Related information:

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

(2) TouchWin Pro Editing Software User Manual

Operation process:

1. Establish C function block

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



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

	Function Attribute	×
Function name	Compare .C	
Descriptio		
		-
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.

			Function key		
Fund	ction Appe	arance Security set	Location		
	Control ID	FB1			
	Description				
	Action Pr	ess Status	~		
	Start				
Fur	nctions			Optional functions	
		周用函数		设置线圈	
	_		Add	设置数据	
		fun	ction call	×	
	Basic Attrik	utes Security settir	ngs		
	Function al	Compare	∨ Edit	Function	
		• Serial execution	) Parallel executio	n	
		Determ	nine Cancel	Application	
				「半以目じノノ	
				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:

.s‡0. <sub>D0</sub> .	<sup>.s†1</sup> .D2	. <sup>s†2.</sup> D4
0000	2 0000	4 0000
Max(PSW300)	5%30000	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 form
🖶 🖪 Function Block
🗝 Header file
🖻 🚍 Source file
Add function

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

	Function Attribute	x
Function name	Clr .C	
Descriptio n		
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
Control ID FB2
Description
Action Press Status ~
Start
Functions Optional functions
调用函数
· · · · · · · · · · · · · · · · · · ·
function call
Basic Attributes Security settings
al Clr v Edit Function
Serial execution     Parallel execution
Determine 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):

Numeric input properties	×
Basic Att Data inp Scale co Notice Appeara Security Location	^
Control ID DI2 Description	I.
Read / Write use different address	
Read / Write Address Devic 本地设备    Settin Addre PFW    300 Data DWord   Float    Indirect	
Numeric input properties	
Basic Att Data inpuScale co Notice Appeara Security Location	
Show Leading 0	
Number of digits	
Integer digits 3 Decimal digits 2	

(2) Place four data display components on the screen, with addresses of PFW304, PFW306, PFW308, and PFW310. The attributes are all set to DWORD, floating point display (DWORD float), with 3 integer bits and 2 decimal bits. The settings are shown in the following figure (all other data display operations are the same):

Numeric Display Properties
Basic AttriData displ Scale con Appearan Security s Location
Control ID DD0 Description
Read address
Devic 本地设备 v Settin
Addre pFW v 304
Data DWord V Float V Indirect
Numeric Display Properties
Basic Attri Data displescale con Appearan Security s Location
Show Leading 0
Number of digits
Integer digits 3 Decimal digits 2

#### 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					
🖻 🖬 Source file					
E FI					
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	calculate			.c		
Descriptio n						
Author						
Date	Wednesday,	April ∨				
			Ok		Cancel	

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.

Function key	
Function Appearance Security set Location	
Control ID FB2 Description	
Action Press Status v	
Start	
Functions Optional fun	ctions
调用函数calculate 设	
function call	
Basic Attributes Security settings	渝
Function al calculate  V Edit Function	换
	āП
Serial execution Parallel execution	<u>i</u>
	SV
Determine Cancel Application	SV ···方
	<b>数调用</b>
(E)	面打印

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:

ł	<sup>s‡0</sup> PFW300	<sup>s†1</sup> PFW400	<sup>s†2</sup> PFW500
-	10 Frw000.00	₽ <sup>11</sup> ₽₩ <b>₽</b> ₩ <b>₽</b> 00000	<b>900.00</b>
-	Dword-float	Dword-unsigne	ed Dword-float

#### 3. Establish C function block

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

Engineering tree
🖃 🎓 Project
🖃 🗖 User screen
🛅 [00001]Page1
🕀 🗔 System picture
🖽 🔜 System form
🖨 🖪 Function Block
= Header file
E E Source file
E FI
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	convert		.c	
Descriptio n				
Author				
Date	Wednesday, April	~		
		Ok	Can	cel

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

-	Function Block	×
E	්කු 🐔 🛧 ් 🛃 ॡ වූ y Paste Delete Undo Redo Compile Search and replace Note Note Off	
Function Block     Function Block     Funce     Cr     Compare     Cr     Clr     Calculate     Convert	<pre>     /*********************************</pre>	~

Convert1: Integer cast to floating point number.

·	Function Block	×
New Save Cut Copy	ng Paste Delete Undo Redo Compile Search and replace Note Note off	
Function Block     Function Block     Function Block     Source file     Compare     Clr     Calculate     Convert     Convert	<pre>k 1 /***********************************</pre>	

#### 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 Appearance Security set Location	
Control ID FB2	
Description	
Action Press Status V	
Start	
Functions Optional functions	
调用函数convert1 设置线圈	
Add 设置数据	
function call	
Basic Attributes Security settings	
Function     al     Convert1     V     Edit	-
Serial execution     Parallel execution	
	-
Determine Cancel Application	
國政制用	
画面ない	

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

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	~					
USE	3 Communic					
Upload Download						
Downloa	Ø					
☑ Allow project upload	✓ Upload pa	Ø Ø				
User defined boot scre	ee⊡ Use the default boot s	screen				
Synchronize PC time	✓ Hide menu system	□ Enable installment				
✓ Clear alarm record	☑ Clear operation ☑ Clear data acq					
<ul> <li>Overwrite recipe data</li> </ul>	☑ ☑ Download fonts to ☑ Clear PFW/SPFW					

# 7-1. 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.

Virtu	Virtual Keyboard 🛛 📈														
Esc	1	2	3	4	5	6	7		8	9	0	-	=	Back	Space
Ta	ь	q	w	e	r	t		у	u	1	i	o	р	ſ	]
Ca	aps	а	s	d	f		,	h		j	k	I	;		\
Sł	nift	z	x	c	v	b		n	n	n	,		/	Ent	ter
c	trl		Alt								•		•		₽

# 7-2. Device information

Click the icon to display a device information pop-up window, which includes HMI version, download version, system version, device IP, and device ID.

设备信息		×
Hmi版本:	1.1.3.221018	
系统版本:	1.1.3.2201012	
硬件版本:	HV2	
设备IP:	172.31.8.169	
设备ID:	118-049-202-8EB2-0671	

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														
	Virtual Ke	vboa	rd											
	Esc 1	2	3	4	5	6	7	8	9	0	-	=	Back	Space
	Tab	q	w	e	r	t	у		u	i	0	р	[	]
	Caps	а	s	d	f	g		'n	j	k	I	;	,	١
确认 取消	Shift	z	x	c	v	Ь	n		m	,		/	Ent	er
	Ctrl		Alt							Þ		•		F _

# 7-3. Setting

#### 7-3-1. 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.

设置	X
名称 密码 网络 时间 VNC 系统 其它	
Hmid the ny	
修改 确认 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.

TTTT (1)     TT転 (P)     通信対     通信対     通信対     で     ぼ     で     ぼ     で     ぼ     し     マームのなど自主な	C -> HMI) 遭 连接方式 备IP查找 备ID查找	局城网 172.31.2.147 133-192-026-6383 扫描IP			×	999   1   1   1   1   1   1   1   1   1
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		ТS3-700-Е
ду		172.31.2.147		361-071-138-C4C9-1476		TS3-1000-E
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		ТS3-700-Е
Hmi		172.31.2.170		110-191-008-F918-7089		TS3-700-E
Hmi		172.31.1.53		419-161-108-5CA7-3998		ТS3-700-Е

#### 7-3-2. 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 "123456".

设置			$\times$
名称 密码 网络	时间   VNC   系统	其它	
	修改上传密码		
	修改下载密码		
	修改设置密码		
	修改VNC密码		
	修改远程密码		
	修改	确认	取消

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

### 7-3-3. 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.

设置 🛛 🔀
名称 密码 网络 时间 VNC 系统 其它
O 通过DHCP自动获取ip地址
▲ 手动设置inttut
IP address: 172 . 31 . 2 . 147
Subnet Mask: 255 . 255 . 0 . 0
Gateway: 172 . 31 . 255 . 254
DNS address: 221 . 228 . 255 . 1
修改 确认 取当
1994X 1984X 4X/FJ

## 7-3-4. 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 s	settings		
aramete Monitor Interactic User per	Clock	Device	Printer	Project	
Disable clock setting     Clock source					
HMI internal					
O Peripheral					
Write clock to peripheral					
Write mode Continuity V					
Clock display format					
Decimal system	al				
Number of synchroniz					
Device			R	egister	
10.000					

设置	$\times$
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	Í

设置
名称 密码 网络 时间 VNC 系统 其它
© Start VNC single connection
Start Vice single-connection
© Start VNC multi-connection
Stop VNC connection
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.

	Only a single VNC can be enabled, that is, only one VNC entry can	
Start vive single-connection	be enabled to connect to this HMI. If an external VNC Viewer is	
	enabled, priority should be given to connecting to the VNC	
	configured internally in the software, and the settings will take	
	effect synchronously.	
Start VNC multi-connection	Support multiple VNC usage, that is, multiple VNC entries are	
Start vive man-connection	enabled simultaneously to connect to this HMI, and synchronization	
	takes effect after setting.	
Stop VNC connection	Close VNC connection, that is, other VNC ports cannot enable VNC	
() stop vive connection	connection to this HMI. After setting, synchronization will take	
	effect.	

### 7-3-6. System

Click "System" to enter, where you can view system information and the proportion of system resources.

设置	$\times$
名称 密码 网络 时间 VNC	系统其它
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: 133-192-026-63B3-5723	
MAC: 6c:79:b8:83:e5:d1	
修改	() 确认 <b>取消</b>

#### 7-3-7. Others

Click "Other" to enter, where you can set whether to use the mouse pointer and set touch calibration. After checking "Use Mouse Pointer", the mouse cursor will appear on the touch screen. On the software system settings page, you can choose whether to hide the mouse cursor and set the size of the mouse cursor.

If "Hide Mouse Cursor" is checked in the software system setting before downloading the project, the mouse cursor will not be displayed on the touch screen after downloading the project.

If "Use Mouse Pointer" is checked in the touch screen settings interface after downloading the project, the mouse cursor will be displayed on the touch screen.

If the software system setting does not check "Hide Mouse Cursor" before downloading the project, the mouse cursor will be displayed on the touch screen after downloading the project.

If 'Use Mouse Pointer' is not checked in the touch screen settings interface after downloading the project, the mouse cursor will not be displayed on the touch screen.

The display of the mouse cursor is only related to the final operation of the project.

Paramete Monitor Interactic User perr Clock Device Printer Project [Screen] Startup [00001]Page1 「Screen saver] Waiting time No Screensaver Display Close backlight [Mouse cursor] Hide Mouse cursor Mouse Cursor size 20X20 (black) [Startup Close backlight] [Mouse cursor] [Close backlight] [Close backlight]
[Screen]       Startup       [00001]Page1       >         [Screen saver]
[Screen saver]         Waiting time       No Screensaver         Display          • Close backlight         [Mouse cursor]       Mouse cursor size         20X20 (black)
● Close backlight [Mouse cursor] □ Hide Mouse cursor Mouse cursor size 20X20 (black) ✓ 名称 密码 网络 时间 VNC 系统 其它
名称   密码   网络   时间   VNC   系统   其它

Click on the "Start Touch Verification" touch screen to power on again and enter the calibration page. Long press and hold the center of the "field grid" on the calibration page to calibrate. After the "field grid" turns green, release this point and calibrate clockwise from the top left corner. After the calibration of the "field grid", another kind of "field grid" will appear. Continue to press and hold the center of the "field grid" in sequence to light up. After the calibration is completed, the touch screen will restart. If the calibration fails, it will return to the first "field grid" to continue calibration.

# 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

C	Communication settings	_ 🗆 🗙
Connection m	LAN connection	~
Device ID:		<b>*</b>
Password:		۲
Find available	Communic	Connect to



	Touch Panel         MODEL:TS3-700-E       MINI 00         POWER:DC24V 5W       D: 256-135-149-D518-4141         D: 256-135-149-D518-4141       C E         WUXI XINJE ELECTRIC CO., LTD.       3. When downloading, select the LAN download and scan the IP interface to find the
	required device ID based on the model and IP address.
	Download (PC - > HMI) Offline Simulator Compile System settings Data sampling Alarm entry
	Communication settings Ethernet device information query x
	Operation         LAN         V         Network         IP address         Device ID         Model           Image: Device IP discovery         192.168.6.2         Hmi         192.168.6.2         412-169-050-93CF-7761         T55-700-E/W/4G
	O Device ID lookup 412-169-050-93CF-776
	Scan IP Communic
	Upload Download
	Allow project upload     Upload paleeeeee
	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 alial, this button to score the device ID that the computer is connected to Scleet the ID
device	address that needs to be connected from the scanned IP address click "Find Available
	Devices" and the following non-up window will non up. Double click to select the device
	you want to connect to
	1993年795月 双市通路投資
	设置名称 IP 设置ID 利型 版本 Hmi 172.31.7.121 03305121085C05927 T55-1500-E HV17 Hmi 172.31.6.100 02200002310330000 T55-1700-E HV17(1:3:221006
	Hmi         172.31.0.110         02200900616590058         TS5-700-E         HVT/1.1.3.220929           Hmi         172.31.6.115         02200900814380004         TS5-700-E         HVT/1.1.3.220929
	取び通
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:
	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:

	Informatizati				$\circ - \circ$
	Status information	Networking settings	Remote settings	Online transmission	Data release
	Module information:	None			
	Module version:	V1.0			
	Name	Reg	ister	Value	Notes
	Networking m	ode SF	SW56	3	Single word Dec integer
	Signal intens	sity SF	SW57	0	Single word Dec integer
	System time	e SF	SW16	2023-05-06 11:5:7	Six word Dec integer
	device running	time SP	SW200	00:28:18	Triword decimal integer
	IP address	s SF	SW58	192.168.6.2	Quadword Dec integer
	Subnet mas	sk SF	SW62	255.255.255.0	Quadword Dec integer
	Gateway	SF	SW66	192.168.6.1	Quadword Dec integer
	DNS	SF	SW71	0.0.0	Quadword Dec integer
	MAC addres	ss SF	SW75	3C-47-57-07-75-FF	Six word Hex integer
	VNC Service Ena	ble Fl Si	PSB22	1	Bit, binary
	MQTT server ena	able fl SI	PSB19	0	Bit, binary
	LAN connection	n sign Sł	PSB23	1	Bit, binary
	Login server	flag SI	PSB20	1	Bit, binary
		-			
lodule	ale information Display the current		rent module na	me, wired/4G/Wil	Fi
Mod	ule version	Display the cur	rent module ve	ersion	
Netwo	etworking mode 1: 4G		: 4G 2: WiFi 3: wired		
Signa	al intensity	Effective in 4G and WiFi modes, displaying signal strength (-51dB~-113dB)			
8-1		The signal great	The signal greater than -51 is strongest, and the signal less than -113 is weakest		
Sys	stem time	Display the cu	Display the current system time		
evice	running time	Accumulated t	time of operation after starting the device		
IP	address	Display the IP	address obtaine	ed by the current de	evice
C 1			1		4.1

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	1: ON 0: OFF				
MQTT service enable flag	1: ON 0: OFF				
LAN connection flag	1: ON 0: OFF				
Login server flag	1: ON 0: OFF				

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

us monnation retreating	settings Remote settings Online transmission Data release
Networking Wired	Internet Acce Y
Get address autom	atically
O Use the following a	ddress
IP address	192 . 168 . 6 . 10
Subnet mask	255 . 255 . 255 . 0
Default Gateway	192 . 168 . 6 . 1
<ul> <li>Get server address</li> <li>Use the following s</li> </ul>	automatically erver address
<ul> <li>Get server address</li> <li>Use the following s</li> <li>Preferred DNS Serven</li> </ul>	automatically erver address er 0.0.0.0
<ul> <li>Get server address</li> <li>Use the following s</li> <li>Preferred DNS Serven</li> </ul>	automatically erver address er 0.0.0.0
Get server address Use the following s Preferred DNS Serven	automatically erver address er 0.0.0.0
Get server address Use the following s Preferred DNS Serv	automatically erver address er 0 . 0 . 0 . 0
Get server address Use the following s Preferred DNS Serven	automatically erver address er 0.0.0.0

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

4G	When selecting 4G internet access, there is no need to configure parameters. After
	selecting 4G internet access, click "Application" below, and a pop-up window will
	prompt you to restart the HMI. After clicking "OK", restart the HMI, and the
	configuration parameters will take effect. Next time, remote login information
	configuration interface can be used
WIFI	When selecting WIFI to access the internet, users can manually enter their SSID and
	wireless password, or click on the WiFi scan button to view the SSID, encryption
	method, and signal strength of nearby devices. Click on Connect and enter the correct
	WiFi password. If the connection is normal, the parameter values will be
	automatically filled in to the parameter page
	1-directly enter wifi name and password.
	Note: The password and name must be entered correctly, otherwise it may cause
	incorrect WiFi configuration to be downloaded and remote connections will not be
	able to log in. If this situation occurs, it is necessary to connect through the local area
	network and reconfigure the WiFi.

	Informatizati O - X
	Status information Networking settings Remote settings Online transmission Data release
	Networking ID should be 17 bit: V WiFi
	Encryption WPA-PSK   enter wifi name and password
	SSID
	Wifi passwo
	Place confirm that the wife 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
	Wth例表     -     ×       SSID     安全     信号强度
	▶ 0 SZ-TEST ¥PAWPA2PSK
	1     Import Office Color     In KNT ALLSK     Import Office Color       2     TP-LINK_B12C     WPAWPA2PSK     Import Office Color
	3         DevLink         WFAWFA2PSK         使速连接           4         Xinje AP         WPAWFA2PSK         使速连接
	5 TP-LINK_EA89 WPAWPA2PSK // Ukreite
	6 Tenda_522488 俞 提示 X 快速连接
	▲ 通過() 采研:
	(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

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.

# 8-4. Remote settings

Enabling and disabling VNC functions enables remote control.

Infor	natizati	$\circ$ – $\circ$	×		
Status	information Networking settings Remote settings Online transmission Data release	э			
	Port number: 5900				
	Network Start VNC				
	If the network delay is high, it may not be connected or stuck				
	, , , ,				
	Applicatio Ok	Cancel			
Port number	The default is 5900 and cannot be modified				
VNC password	The default password is 123456 (customizable	password	, refer	to chapter 7-2	3-2
	password)				
Network detection	After clicking on network detection, an attempt	will be n	nade to	o establish an I	Frp
	connection with the HMI, reporting the connection	status an	d whet	ther the connect	ion
	is normal or abnormal	-			
Start VNC	Open the local VNC client when clicking to start V	NC			
Ston VNC	Close the local VNC client when clicking to start V	NC			
Stop VINC	cross the rotal with cheft when cheking to stop v.				



Note: If the network latency is high, VNC may not be able to connect or get stuck.

# 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.

oformatizati					$\circ$ - $\times$
atus information	Networking settings	Remote settings	Online transmission	)ata release	
Transmiss	<b>ion mo</b> serial port	$passthr_{\mathbb{V}}$			
COM1:		C	DM2:		
Bau	d rate: 19200	$\sim$	Baud rate: 19200	~	
Data	a bits: 8	~	Data bits: 8	~	
Che	ck digi Even	$\checkmark$	Check digi Even	~	
Sto	p bit: One	$\checkmark$	Stop bit: One	~	
Virtua	l serial COM1	~	/irtual serial COM2	~	
Enabl	e statu Enable (	COM1	Enable statu Enab	le COM2	
Rese	et virtual serial		Enable virtual		
			Applicatio		

transmission mode	Serial port transparent transmission, VPN transparent transmission
baud rate	9600/19200/38400/57600/115200
data bit	7/8
parity bit	None/Odd/Even
stop bit	None/One/Two/OnePointFive
virtual serial port	COM1-COM255 optional
enable status	Check whether to enable COM1/COM2 ports, both serial ports can be enabled for virtual serial
	ports at the same time
reset virtual serial	After modifying multiple serial port parameters, it can be directly reset
port	
enable virtual	Enable the virtual serial port of COM1/COM2 for further transparent operation

#### Serial port transparent connection steps:

(1) Connect the COM port of the PLC to the COM port of the TS5 through an XVP cable.

(2) Connect the HMI to the PC using a local area network/remote connection (refer to Information

Configuration Login for connection steps), 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.

Informatizati		0 - X
Status information Networking settings Remote set	tings Online transmission Data release	
Transmission mo serial port passthr		
COM1:	COM2:	
Baud rate: 19200 v	Baud rate: 19200 v	
Data bits: 8 🗸	Data bits: 8 🗸 🗸	
Check digi Even 🗸 🗸	Check digi Even 🗸 🗸	
Stop bit: One v	Stop bit: One 🗸 🗸	
Virtual serial COM27 🛛 🗸	Virtual serial COM2 v	
Enable statı 🗹 Enable COM1	Enable statu Enable COM2	
Reset virtual serial	Close the virtual	
New virtual serial port pair succeeded Opening serial port open the serial port successfully Connecting to the network	3	^
Connect network successfully COM1 port corresponding passthrou	gh has been connected	~
	Applicatio Ok	Cancel

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.



(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 1,Scan Cycle:0.0ms, now user can download and monitor the PLC program.

Communication	configuration ×		
Communication COM_Modbus_1			
Connection mode selection Interface Type: COM CommProtocol: Modbus	<ul> <li>✓</li> <li>✓</li> </ul>		
Automatic Detection			
Station No         Baudrate(B)           1         ↓           Serial Port(C)         ● 19200BPS ● 38400           COM27         ✓           ✓ Blue Tooth Serial Port         ● 115200BPS			
Parity( <u>P)</u> ◯ None ◯ Odd  ● Even	Other set Databits:8 ,Stopbits:1		
Connect To PLC Succeeded <ul> <li>Auto-connect on exit</li> <li>OK</li> <li>Cancel</li> </ul> <ul> <li>OK</li> <li>Cancel</li> <li>OK</li> </ul> <ul> <li>Cancel</li> <li>Cancel</li> </ul> <ul> <li>OK</li> <li>Cancel</li> <li>OK</li> <li>Cancel</li> <li>OK</li> </ul> <ul> <li>Cancel</li> <li>Cancel</li> </ul> <ul> <li>Cancel</li> </ul>			



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.

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".
```

信息化设置		$\circ - \times$
状态信息 联网设置	计远程设置 在线透传 数据发布	
适传方式:	VPN运传 ~	
VPN参数		
	虚拟网关: 192 , 168 , 1 , 1	
	子网掩码: 255 . 255 . 255 . 0	
	虚拟网段: 192 . 168 . 1 . 252	
	192 . 168 . 1 . 254	
	启	用VPN
	应用 确:	ビリリククロション

(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 , now user can download and monitor the PLC program.

	Communication con	figuration	×
Communication	Ethernet_Modbus_1		
Connection mode	selection		
Interface Type:	Ethernet	~	
CommProtocol:	Modbus	$\checkmark$	
Communication per Scan IP Device IP: Local IP:	arameter configuration 192 · 168 · 1 · 100 192 · 168 · 1 · 252	502	
Connect To PLC S	lucceeded	Auto-connect on OK Cancel	exit



Note: Enabling VPN will occupy the HMI IP, and the IP in the bottom right corner of the touch screen will be blank. After closing VPN, you need to reconfigure the IP (if not on site, you can connect remotely through VNC).

# 8-6. Data release

Data release refers to sending local data information to the cloud through a specified protocol. Currently, it supports the MQTT protocol of the Xinje Cloud platform.

Informatizati				$\circ$ - $\times$	
Status information Networking settings Remote settings Online transmission Data release					
-MQTT server con	figuration				
Server type: General MQTT server			~		
F	Release met Ensure su	iccessful publi	shing once (once	~	
Se	ver addres: mqtt.x-ne	et.info			
	User namexinjeadm	in			
	Passwor	•••••	•	Ø	
Resto	re	Read		Write	
Data configuratio	n				
Instruction	Command	In	struction		
Instruction name	Communication In device	nstruction address	Data number	Notes	
device1	本地设备	PSB0	1[Bit]	-	
device2	本地设备	PSBO	1(Bit)	-	
One-click			Applicatio	k Cancel	

Data release function requirements: The HMI is TS5 series, 4G/WIFI/wired connected and can access mqtt.x-net-info.

Note: The cloud platform corresponding to the Xinje MQTT protocol is only limited to Cloud v4.1 and above.

server type		general MQTT 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
		the sender) only sends once, regardless of whether the receiving end has received
		the data
ralaasa	Successfully	Corresponding QoS service quality level: QoS1, successfully published at least
mothod	published at least	once. The publisher needs to confirm upon arrival. After publishing the message, the
methou	once (possibly	publisher waits for the recipient's confirmation message. If the receiving end does
	multiple times)	not reply, resend it
	Ensure successful	Corresponding QoS service quality level: QoS2, to ensure successful publication
	publishing once	once, the publisher needs to confirm upon arrival, and the recipient needs to confirm
	(with and only once)	again by the publisher
server address		Default mqtt.x-net-info and cannot be modified

### **MQTT** server setting

user name	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		
mand	Read the published MQTT configuration, password, username, and publishing		
Teau	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 to delete it
instruction	

Click on the command add to enter the data command configuration and edit the data source

	Data instruction configuration — 🗖 🗙
Device command	
Command r	Communica 本地设备 v
Data specif <mark>i</mark> Bit	<ul> <li>Add metho Single addition</li> </ul>
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>	V Minimu
Maximu	₽ublish even 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:

					Instruct	ion	editing setti	ings			×
Searc	:h	Add	Delete Delete	all Import	Export						
	Instruction	mmunicati∙∏	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

communication	Filter and query based on device type
device	
Display by	Check 'Display by Category' to filter and query based on device type, station number, register
category	type, address, data type, data format, triggering method, minimum triggering range, maximum
	triggering range, reporting interval, unit (note) or quantity
search	Enter relevant keywords to search
add	add a instruction
delete	Select a line of instructions to delete
delete all	delete all the commands



Note: Xinje Cloud Server Monitoring currently does not support monitoring bit group addresses.

## **Operation steps (take Xinje Cloud server as an example):**

(1) Enter the information settings - data release interface.

Informatizati O - X
Status information Networking settings Remote settings Online transmission Data release
MQTT server configuration
Server type: General MQTT server v
Release met Ensure successful publishing once (once $ \lor $
Server addres; mqtt.x-net.info
User namexinjeadmin
Passwor
Restore Read Write
Data configuration
Instruction Command Instruction
Instruction name         Communication device         Instruction address         Data number         Notes
One-click Applicatio Ok Cancel

(2) select server type: general MQTT server.

- MOTT server co	nfiguration -			
MQTT Server co	iniguration			
Se	erver type:	General MQTT server		<b>~</b>
	Release met	Ensure successful publi	shing once (once	~
Se	erver addres	mqtt.x-net.info		
	User name	xinjeadmin		
	Passwo	•••••	•	Ø
Rest	ore	Read		Write

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

MQTT server configuration		
Server type:	General MQTT server	~
Release met	Ensure successful publishing once (on	ce 🗸
	Publish only once Publish successfully at least once (pos	sibly
Server address	Ensure successful publishing once (on	ce an
User name	xinjeadmin	
Passwor	•••••	Ø
Restore	Read	Write

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

Data configuration Instruction Com	mand	Instruction		
	Data instruct	tion configuration		_ □
Device command				
Command r		Communica 本地	设备	~
Data specif <mark>i</mark> Bit	~	Add metho Sing	le addition	~
Data object PSB	~	Start addre	0.0	I
MQTT				
Data type: BOOL(Bool)	Trigge	r m <sup>,</sup> Triggered when tl	he valu∈ ∽	
Trigger co less than	<ul> <li>✓ Mini</li> </ul>	mui	▲ ▼	
Maximu	- Publish	n eve	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.

Informatizati				0 - X
Status information Net	working settings Ren	note settings Online	e transmission Data	release
MQTT server conf	iguration			
Ser	ver type: Gener	al MQTT server		¥
R	elease met Ensure	successful publ	ishing once (once	~
Ser	ver addres: mqtt.x	-net.info		
	User namexinjead	dmin		
	Passwor	•••••	•	Ø
Resto	re	Read		Write
Data configuration	1			
Instruction	Comman	dI	nstruction	
Instruction name	Communication device	Instruction address	Data number	Notes
D20	本地设备	PSW20	1[Word]	-
One-click			Applicatio	Ok Cancel

## Xinje Cloud operation steps:

(1) login Xinje Cloud, add a new project.



(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			$\times$
* 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.

		♥ 监控 C Refresh de	evice Delete device
Name <b>T</b>	🗹 Data type	monitor I 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.

Device configura	ation															💉 Add o
数据加工中心 d	lata center															
							١	/ariable g	roup	monitor	batch	modify		batch imp	ort	batch
<ul><li>数据源 data sor</li></ul>	urce							变量组管	理	♀ 监控	の 批量	修改・	+ Add	り 批量导)	λ 1	◙ 批量删除
请选择 >	请选	择	<b>~</b> 请说	择	<b>~</b> 译	选择	~	查询	清	空						
数据源	語称	设备	变	超	是否可写	Data t	进制编	嗣 数	据下限	数据上限	单位	达 保	留小数位	多段字符	串	监控
■ 坊目																
■ 项目 ◆ <b>和</b> 图	^	> 数据源 请选择设备	~	请选择数据学	5 v (1838)	采 <b>业量</b> 组	• 请选择		✓ ■10	30	交量组管理	♀ 监控	② 批量修改	+ 添加 - 习 批	重导入 1	會 批量删除
<ul> <li>項目</li> <li>產業</li> <li>項目產業</li> </ul>	*	<ul> <li>数据源 请选择设备</li> </ul>	<ul> <li>&gt; 数据源名称</li> </ul>	读选择数据关系	2 × 消滅 交量相	年交量相 是否可写	<ul> <li>- 請述界</li> <li>数据类型</li> </ul>	建马模式	<ul> <li>&gt; 倉前</li> <li>数据下限</li> </ul>	海空数据上限	交量祖管理	♀ 监控 保留小数位	② 批量等改 多段字符串	+ 添加 - 勾 批	<b>聖守入 1</b> 調	會批量的除
■ 項目 ● 起訳 ● 項目配置 ● 項目配置	~	<ul> <li>&gt; 数据源</li> <li>第23年2日</li> <li>4</li> </ul>	数据源名称 3速 XD/XL/XG	濟选择数 振关型 设备 信速	2 v 前的 交量相 信息化_05d	주交量组 是否可写 是	✓ 講道法用 数据类型 Bool	(波马缆式) 进制编码 十进制	<ul> <li>》</li> <li>》</li></ul>	清空 数缩上限	交量相管理	♀ 监控 保留小数位 0	<ol> <li>次 批量修改</li> <li>多段字符書</li> <li>查看</li> </ol>	+ 添加 2 批	量导入 1 調 減磁	<ul> <li>計量的除</li> <li>라</li> </ul>
<ul> <li>項目</li> <li>社選</li> <li>項目必要</li> <li>項目必要</li> <li>第目必要</li> <li>第目必要</li> <li>第目必要</li> <li>第二、第二、第二、第二、第二、第二、第二、第二、第二、第二、第二、第二、第二、第</li></ul>	^	<ul> <li>数据源</li> <li>第33年28</li> <li>4</li> <li>4</li> </ul>	マ 数紙源名称 請該 XD/XL/XG 当該 XD/XL/XG	1999年1993年19 1995年 信藤 信藤	<ul> <li>※回答:</li> <li>※回答:</li> <li>※回答:</li> <li>《信息化、05d</li> <li>信息化、05d</li> </ul>	平交量组 是否可写 是 是	> 読述書 数据类型 Bool Bool	- 读写模式 进制编码 十进制 十进制	前記 第7記版	清空 数据上限	交量相管理 单位	<ul> <li>♥ 当控</li> <li>保留小数位</li> <li>0</li> <li>0</li> </ul>	<ol> <li>⑦ 批量等改</li> <li>多四字符串</li> <li>宣音</li> <li>宣音</li> </ol>	+ 添加 ① 批 盖控 -	<b>聖</b> 导入 1 第 機幅 機幅	6 批量的种 新作 图称 图称
<ul> <li>第 項目</li> <li>● 配置</li> <li>● 取用不量配置</li> <li>● 変功相影素</li> <li>● 等功相影素</li> <li>□ 出志大用</li> </ul>	* *		<ul> <li>         、         、         、</li></ul>	1935年3月25日 - 辺奈 - 信藤 - 信藤 - 信藤	<ul> <li>支量相</li> <li>支量相</li> <li>信息化_05d</li> <li>信息化_05d</li> <li>信息化_05d</li> </ul>	年之量切           是否可写           是           是           是           是           是           是	マ 新潟県 数据実型 Bool Bool Bool	<ul> <li>送時線四</li> <li>送射線码</li> <li>十进制</li> <li>十进制</li> <li>十进制</li> </ul>	<ul> <li>第1章</li> <li>第1章</li> </ul>	満空 数据上限	交量:相管理 单位	<ul> <li>● 当把</li> <li>体漏小数位</li> <li>0</li> <li>0</li> <li>0</li> <li>0</li> </ul>	<ul> <li>⑦ 批量等改</li> <li>多段字符ま</li> <li>宣音</li> <li>宣音</li> <li>宣音</li> </ul>	+ 添加 Q 批	(1) またい (	중 <b>扎皇的外</b> 計: 王明令 王明令 王明令
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(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



Note: Please refer to the Xinje Cloud manual for the specific operation of the cloud platform.





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