



Uniface user manual

(Version: V1.0)

(Uniface version: 1.46)



Shenzhen UniMAT Automation Technology Co., Ltd.



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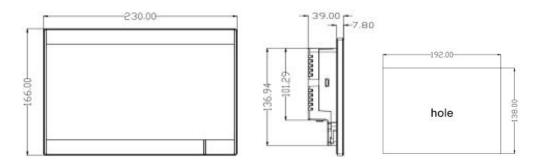
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Installation

Dimension for installation opening UH500 series of HMI (UH507E/S)

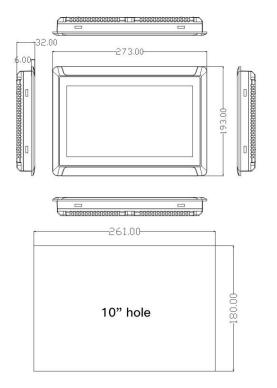
UH507 192×138mm

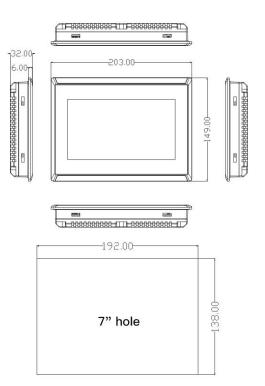


UH300 series of HMI (UH310E、UH307E/S)

UH307 192×138mm

UH310 261×180mm

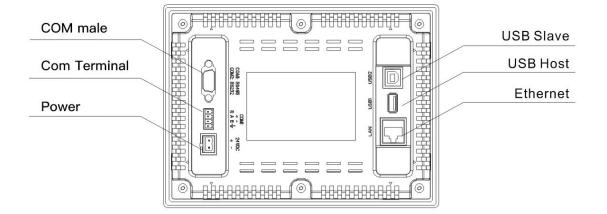




Interface UH300 interface

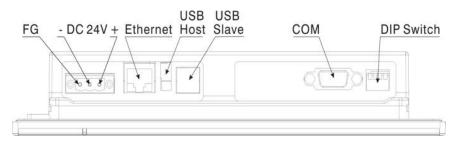
Cable layout: back side of the HMI





UH500 interface

Cable layout: bottom of the HMI



Interface comparison

interface	UH300	UH500				
СОМ	2/3/5 for RS232, 7/8 for RS485	3/8 for RS485				
Com Terminal	4 points with resistance (RS485)	N/A				
Power Terminal	2 points	3 points				
Dip switch	N/A	4 points				
USB SLAVE	Download configuration					
USB HOST	Update firmware and configuration, download historical data					
Ethernet port	Download the configuration project, co	Download the configuration project, communication with PLC				

Note: No dip switch code in UH300, the function of the dip switch has been integrated into the software.

COM port connection

Remark: UH300's series communication is different with UH500 and they can't share the communication cable.

As COM port for UH500 is just RS485 with pin3 & 8.

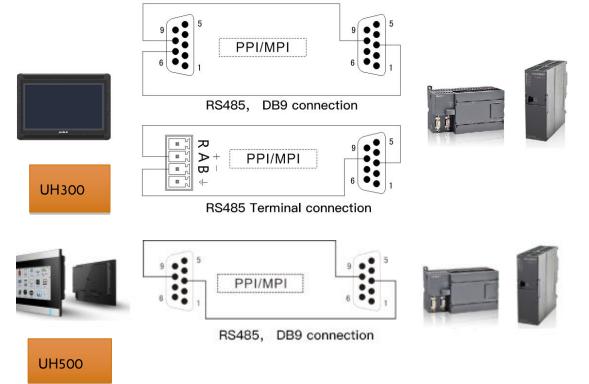
For UH300, COM port includes RS232 and RS485. The pins set up as below, pin 7/8 for RS485 and pin 2/3/5 for RS232.



As for 4 Points terminal, A is set for RS485+, B RS485-, R is when using built-in 120Ω resistance then to short connection R and A, it will be convenient for long-distance communication.

<u>Remark: the pluggable terminal COM1 and the DB9 COM1 share the same RS485 series</u> port, thus they can't be used at the same time.

НМІ	DB9 Male				Pluggable terminals				
	picture	interface	PIN	Pin Definition	interface	PIN	Pin definition	remark	picture
			1			1	R	120Ω resistance	
			2	RS232 RXD	COM1	2	А	RS485+(A)	
		COM2	3	RS232 TXD		3	В	RS485-(B)	
			4			4	PE	Shielded ground	
UH300			5	GND	remark: T	mark: The pluggable terminal COM1 and the DB9			■
		••• ••• 5 COM1	6		COM1 share the same RS485 serial port.				Hr []
	9		7	RS485+(A)					
	5		8	RS485-(B)					
			9						
			3	RS485+(A)					1
UH500	1500		5	GND	1				
			8	RS485-(B)	1				

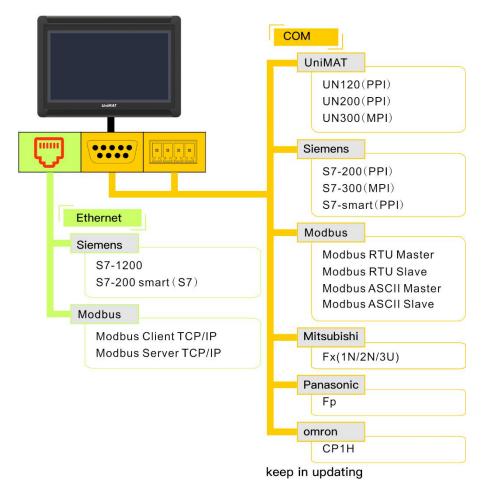




Communication protocol

Function brief

Our HMI support many kinds of communication protocols, such as PPI、MPI、 Modbus、smart S7、Mitsubishi、Panasonnic、Omron, etc.



Series communication:

COM1 (RS485)

PPI (UN120/200 CPU、SiemensS7-200/smart CPU)

MPI (UN300 CPU、SiemensS7-300 CPU)

MODBUS (MODBUS RTU host & slave、MODBUS ASCII host & slave)

COM2 (RS232)

Mitsubishi (Fx1N, Fx2N, Fx3U)

Panasonnic (Fp)

Omron (CP)

MODBUS (MODBUS-RTU MODBUS ASCII)

Ethernet communication:

MODBUS TCP (Server / client)

S7 communication (S7-200 smart)



remark: our HMI has set the function buttons for smart running & stop .

Connect with	PLC										
UH300 — Sier	mens										
UH 300		PF	PI/MPI								
7 485+		3	485+								
8 485-		8	485-								
UH300 — Mits	ubishi F	x1N/	Fx2N ((DB9)	UF	1300 —	Pana	sonic Fr	0	1
UH 300		Fx1	N/2N			UH	300		F	-p	
2 RX		2	TXD			2 F	₹X		2 -	TXD	
3 TX		1 F	RXD				гх	X		3 RXD	
5 GND		3 (GND			5 G	ND		1 0	GND	
UH300 — Mits	ubishi F	x2N/	3U (8 pi	n ciro	cular hole)	UH300) — 0	mron Cl	Ρ	
UH 300			Fx3	U			UH	300		Cp)
SG Shield	5000		SG Sh	ield			2 F	κx		2 T)	٢D
2 RX	5000 500Ω		4 TX	<-			3 1	гх		3 R)	٢D
3 TX			1 RX	(-			5 G	ND		9 GI	١D
5 GND			2 RX	(+						4 R	ГS
	L		7 TX	(+						5 C	ГS
dress settin	g										
a ati a sa isatwa aku u	otion										

Add

Function introduction

1. RS485-UN120/UN200 (Siemens S7-200) [PPI communication] same as S7

communication

Register name	Address format	Input range	Remark
Ι	dd.o	0.0~4095.7	bit: input mapping register
Q	dd.o	0.0~4095.7	bit: output mapping register



		0.0 /007 -	
M	dd.o	0.0~4095.7	bit: bit memory
S	dd.o	0.0~4095.7	bit: Sequence Control Relay
SM	dddd.o	0.0~4095.7	word: special bit memory, SM0.0~SM4095.7
V	ddddd.o	0.0~10239.7	bit: the bit of variable memory
IW	dddd	0~4094	word: input mapping register, each word occupies two byte address
QW	dddd	0~4094	word: output mapping register, each word occupies two byte address
MB	dddd	0~4095	byte: bit register, each word occupies one byte address.
MW	dddd	0~4094	word: bit register, each word occupies two bytes address.
MD	dddd	0~4092	double word: bit register, each word occupies four bytes address.
SB	dddd	0~4095	byte: sequence control relay, each word occupies one byte address.
SW	dddd	0~4094	word: sequence control relay, each word occupies two bytes address.
SD	dddd	0~4092	double word: sequence control relay, each word occupies four bytes address.
SMB	dddd	0~4095	word: special bit memory, SMB0-SMB29 read only, each word occupies one byte address.
SMW	dddd	0~4094	word: special bit memory, SMW0-SMW28 read only, each word occupies two bytes address.
SMD	dddd	0~4092	word: special bit memory, SMD0-SMD26 read only, each word occupies two bytes address.
VB	ddddd	0~10239	Byte: variable memory
VW	ddddd	0~10238	word: variable memory, each word occupies two bytes address.
VD	ddddd	0~10236	double word: variable memory, each word occupies four bytes address.
TV	ddd	0~255	word: the current value of the timer.
CV	ddd	0~255	word: the current value of the counter.
AIW	dd	0~62	word: analog input, each word occupies two addresses.
AQW	dd	0~62	word: analog output, each word occupies two addresses.

2. RS485-Siemens S7-300 (MPI communication)

Register Name	Address format	Input range	remark
Ι	dddd.o	0.0~1023.7	bit: input mapping register
Q	dddd.o	0.0~1023.7	bit: output mapping register
М	dddd.o	0.0~255.7	bit: bit memory
DBX	DDD:dddd.o	1:0.0~99:32767.7	bit: the bit for the word in DB block storage area. The block no. DDD 0-99. Each block word dddd with range 0-32767 and each word's bit is 0-7.
IW	dddd	0~1022	word: input mapping register, each word occupies two byte address
QW	dddd	0~1022	word: output mapping register, each word occupies two byte address
MW	dddd	0~254	word: bit memory, each word occupies two bytes address.
MD	dddd	0~252	double word: bit memory, each double word occupies four bytes address.
DBW	DDD:dddd	0:0~99:32766	word: DB block storage area, block no. DDD 0-99, each block word dddd



			with range 0-32766. each word occupies two bytes address.
DBD	DDD:dddd	0:0~99:32764	double word: DB block storage area, block no. DDD 0-99, each block word dddd with range 0-32764. each double word occupies four bytes address.
PIW	dddd	0~1022	word: process image input area.
PQW	dddd	0~1022	word: process image output area.

3. MODBUS

Register Name	Address format	Input range	remark
0x	ddddd	1~65536	bit: output coil.
1x	ddddd	1~65536	bit: input coil, read only.
3x_bit	ddddd.DD	1.0~65536.15	bit: the bit input register with 16 bit. Read only
4x_bit	ddddd.DD	1.0~65536.15	bit: the bit output register with 16 bit.
3x	ddddd	1~65536	word: the word with 16 bit what be input register. Read only.
4x	ddddd	1~65536	word: the word with 16 bit what be output register.
3x_double	dddd	1~65535	Double word: input register, high-low 16bits upside down with 3x double word, read only
4x_double	ddddd	1~65535	Double word: output register, high-low 16bits upside down with 3x double word

Note:

- d: decimal, the input range is 0~9.
- o: octal, and the input range is 0~7.
- DDD: block number, the input range is 0-255.
- DD: hexadecimal, and the input range is 0-15.
- Word: it means that the register can only be used as a word.
- Double word: it indicates that the register must select 32 bits in the configuration
- Bit: it means that the register can only be used as a bit.
- Read only: it means that the register can only read but not be written in.

• The Register Name supported by different device models may be different and the range may vary. Please refer to the related technical documents of the connected devices in detail.

*1 remark: in expanding mode, when input address, using "/" means connection and using "#" means expanding mode. For example, 2/1#REGxxx means the second connection No. 1 address REGxxx.

4. Mitsubishi FX series

Fx2N

Register name	bit/word	Address format	Max. address	Mini. address
Х	bit	000	377	0
Y	bit	000	377	0



М	bit	DDDD	3071	0
S	bit	DDD	999	0
SM	bit	DDDD	8255	8000
Т	bit	DDD	255	0
С	bit	DDD	255	0
D	word	DDDD	7999	0
SD	word	DDDD	8255	8000
TV	word	DDD	255	0
CV	word	DDD	199	0
32CV	word	DDD	255	200

Fx3U

Register Name	bit/word	Address format	Max. address	Mini. address
Х	bit	000	377	0
Y	bit	000	377	0
М	bit	DDDD	7679	0
S	bit	DDD	4095	0
SM	bit	DDDD	8255	8000
Т	bit	DDD	255	0
С	bit	DDD	255	0
D	word	DDDD	7999	0
SD	word	DDDD	8255	8000
TV	word	DDD	255	0
CV	word	DDD	199	0
32CV	word	DDD	255	200

5. Panasonic Fp series

Register Name	bit/word	Address format	Max. address	Mini. address
Х	bit	000	377	0
Y	bit	000	377	0
R	bit	DDDD	7679	0



Т	bit	DDD	4095	0
С	bit	DDDD	8255	8000
L	bit	DDD	255	0
DT	word	DDDDD	99999	0
LD	word	DDDDD	99999	0
FL	word	DDDDD	99999	0
SV	word	DDDD	9999	0
EV	word	DDDD	9999	0
WX	word	DDDD	9999	0
WY	word	DDDD	9999	0
WR	word	DDDD	9999	0
WL	word	DDDD	9999	0
IX	word	D	13	0
IY	word	D	13	0
ID	word	D	32	0
L		1		

6. Omron CP1H

Register Name	bit/word	Address format	Max. address	Mini. address
CIO_bit	bit	dddd.DD	6143.15	0.0
LR_bit	bit	ddd.DD	199.15	0.0
HR_bit	bit	dddd.DD	1535.15	0.0
AR_bit	bit	ddd.DD	959.15	448.0
DM_bit	bit	ddddd.DD	32767.15	0.0
CIO	word	DDDD	6143	0
LR	word	DDD	199	0
HR	word	DDDD	1535	0
AR	word	DDD	959	448
TC	word	DDD	127	0
DM	word	DDDDD	32767	0

Fins



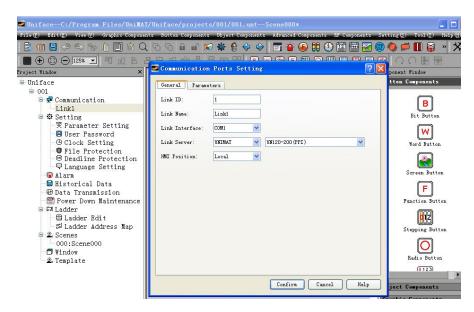
Register Name	bit/word	Address format	Max. address	Mini. address
CIO_bit	bit	dddd.DD	6143.15	0.0
WR_bit	bit	ddd.DD	199.15	0.0
HR_bit	bit	dddd.DD	1535.15	0.0
AR_bit	bit	ddd.DD	959.15	448.0
DM_bit	bit	dddd.DD	32767.15	0.0
CIO	word	DDDD	6143	0
WR	word	DDD	199	0
HR	word	DDDD	1535	0
AR	word	DDD	959	448
TC	word	DDD	127	0
DM	word	DDDDD	32767	0

7. Address searching function

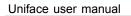
Click the search function of edition or shortcut key crtl+F then the address search menu is popped up which can search the bit or word of the internal address and external connection address, or the current scene and all the scenes, and supports the address replacement at the same time.

Example

1. HMI's communication parameters setting:set communication port--- mode selection--PPI



2. PPI communication parameters setting as showing in below chart.





Communicati	on Parameters	Other	
Baud Rate:	9600	Touch ID: (0-255)	1
Data Bits:	8	PLC ID: (0-255)	2
Check Bit:	EVEN 💌	Communication Time (0-65535)	es: 20 💲 m
Stop Bit:	1	Timeout Times: (100-65535)	2000 😂 m
Restore 1	Default Setting	Retry Numbers: (0-5)	3
		Address Mode:	Standard Mode 🚩
		PLC Address Space: (1-255)	32

3. Put a few bit buttons onto the screen and setting the written addresses of these bit buttons Q0.0, Q0.1.

tatus0		Functions
	Border Color:	Set ON
<u> </u>	Foreground:	Set OFF
OFF	Background:	O Press down ON
<u></u>		O Press down OFF
<u> </u>	Pattern:	Invertal
tatus1		
<i>A</i>	Border Color:	Write Address: Q0.0
Ĭ	Foreground:	
ON	Background:	₩ Monitor
L	Pattern: Solid	Monitor Address: Q0.0
		Confirm Cancel }
		3 Q0. 4 Q0. 5 Q0. 6 Q0. 7
	Q0.0 $Q0.1$ $Q0.2$ $Q0.3$	Q0. 4 Q0. 5 Q0. 6 Q0. 7

4. The system block parameter setting interface of S7-200 program software is shown as the following diagram



ystem Block	
Communication Ports Communication Port settings allo communicate to a given PLC.	w you to adjust the communication parameters that STEP 7-Micro/WIN will use to
🕽 System Block	Communication Ports
Communication Ports Retentive Ranges Password	Ports
	Port 0 Port 1
- 🕞 Input Filters 🗊 Pulse Catch Bits	PLC Address: 2 2 (range 1 126)
Background Time	Highest Address: 31 - 31 - (range 1 126)
	Baud Rate: 9.6 kbps 💌 9.6 kbps 💌
Increase Memory	Retry Count: 3 - (range 0 8)
	Gap Update Factor: 10 - 10 - (range 1 100)
	Configuration parameters must be downloaded before they take effect.
Click for Help	and Suppor OK Cancel Default &

5. Connect the HMI to PLC through 485 communication cable and power them together, then download the corresponding project to HMI. When click the components on the screen, the corresponding PLC output points will be lighten.

6. Address searching. Click the search function of edition or shortcut key ctrl+F to pop up the search interface. You can search bit and word in the current scene or all of the scenes. At the same time, you can replace the selected addresses, double-click the corresponding addresses to pop-up corresponding control option of corresponding scene.

Address Area:	Link1		~
Search			
Address Type:	💿 Bit Address	🔘 Word Address	🚫 Station No.
Search Range:	The Current Sce	ene or Window 🛛 😽	
Search Address:	M	~	
🗹 Range	0.0	~ 5.7	
Replace To			
Replace Address:	I		~
ontrol Name	Address	Address Type	Sence/Window



Animation design

Function introduction

Picture Display function: to achieve the dynamic display of static pictures through other ways, such as address control, time setting.

GIF picture: to set dynamic gif pictures. You can set the animation in the library, or user-defined GIF files.

Bar Graph: the value of the corresponding address is displayed by the bar graph.

Picture Display		? 🛛	🚾 GIF Display	🕐 🔀 🔤 Bar Graph	? 🛛
	/isibility		GIF Display Visibility Picture: Current V Open	General Visibility Background:	
UniMAT	Status: Total Status:	0		Birstian	
Status Type	Value	🔿 Auto Change	UniMAT	Direction	
Monitor Address:]	LBO		Start	Nin: 0 Nac: 65535 Bur Pattern: Solid Bur 70 Calor:	
	(Confirm Cancel Help	Confirm Cancel	Help Confirm C	Cancel Help

Flow Block: Flow Block is used to simulate in animated pictures the liquid flow status in pipeline. Whether a flow block is flowing is determined by the status of the trigger, when the trigger is 1, the flow block is flowing, when the trigger is 0, the flow block is static. The flowing speed is specified by user.

Dynamic Rectangle and Dynamic Circle: their function is similar which changes the position or size of graph according to the value of monitoring address, thus to show real-time change of the monitor address on a dynamic basis.

🗷 Flow Block 🛛 🖓 🔀	🜌 Dynamic Circle 🛛 🛛 🔀	🖻 Dynamic Rectangle 🛛 💽 🗙
General Wizibility	General Label Visibility	General Label Visibility
Pare Back Tengrount. Pare Back Tengrount. Pare Back Tengrount. Payse Tengrount. Payse Backgrount. Payse Backgrount.	Circle Solid Background:	Rectangle Solid Background:
Arder Calar: Patien: Trigger Address: [30]	Border color:	Border color:
Digily Type © Herizal Trepety	Centrel Center Redius	Control V Fosition V Size
birrettin: To Laft ¥ Block Rober: J S De Berder Line © Firsel Flare Speed ○ Lor ③ Biddle ○ Sight ◯ Phone: Flare Speed	Data Type: 16-Bit Integer 💌 Monitor Address: LNO	Data Type: 16-Bit Integer V Monitor Address: LNO
Confirm Cancel Malp	Confirm Cancel Help	Confirm Cancel Help

Example

1. shining light (controlled by time)



Put a Picture Display on scene, in the general page set the Total Status 2, Status type to auto change with frequency being set 5×0.1 s. In Label page, add an indicator pattern from the Gallery to a status screen, in Visibility page set controlled by bit, When the corresponding bit value to achieve the effective state the indicator pattern will be displayed.

🖬 Picture Display 🛛 🛛 🛛 🛛	🗹 Picture Display 🔹 💽 🔀	🖬 Picture Display 🔹 🛛 😨
General Label Frinhlity Status: Status: Status Type O hit O False Auto Gauge Frequency Status Type O hit O False Auto Gauge Frequency Status Type O False O False	General Label Visibility	Oeneral Ldel Yisibility Ø[Cnstralled by his]
Canfirm Cancel Help	Confirm Cancel Help	Confirm Cancel Help

2. Liquid storage tank.

Put a image of Graphic Components, select a liquid storage tank from Gallery, and drag into a Bar graph of Object components to cover the liquid area of tank.

3. Rotation motor

First put a picture and set as display when bit control value being 0, put a

similar GIF component and set as display when bit control value being 1. These two components must be set the same size and same position(Use alignment function). Or put a picture to be displayed when its bit control value being 0and put a Picture Display, set to automatically switch 0.1s, Then select two motor pictures with same shape but different angle in the Gallery, set to display them when the bit control value being 1.

🖬 Inage 🛛 💽 🔀	🖬 Innge 💦 🔀	🖬 GIF Display 🛛 🖓 🔀	🖬 GIF Display
Iag Visibility Ficture: Galary V Open	Ingg Visibility Controlled by bit Bit Controlled by werd Controlled by werd Controlled by werd level	617 bisplay Visbiliy Picture: Galley Den Galley Sources Start	GT Piglay Visibility Controlled by bit Bit Centrol Address: DD 0 © 1 Controlled by word Controlled by word Controlled by word
Confirm Cancel Help	Confirm Cancel Help	Confirm Cancel Help	Confirm Cancel Help

4. Flow block

Add expand flow block at advanced components and set the corresponding address for it.

5. Dynamic rectangle, Dynamic circle

In the Object components, add dynamic rectangle or dynamic circle and set the corresponding address.



Dynamic rectangle, for example, the data type is 16-bit integer, and the address is set as LW1. Then the value of LW1 is rectangular x coordinates. The value of LW2 is rectangular y coordinates; the value of LW3 is the width of rectangle; the value of LW4 is the height of rectangle.

Dynamic circle, for example, the data type is 16-bit integer, and the address is set as LW1. Then the value of LW1 is the X coordinate of the center of the circle. The value of LW2 is the Y coordinate of the center of the circle, and the value of LW3 is the radius of the circle.

Recipe Function

Function introduction

In manufacturing field, recipe describes proportion relation of different recipes, it's the gather of some variables corresponding parameters setting value during production process.

For example, a bread factory produces bread, there will be a basic ingredient recipe, this recipe will list all ingredient lists that used for producing bread (for example water,flour, sugar, egg, sesame oil etc.)Besides, also list all choosable ingredient lists (for example fruits, kernel, chocolate chips etc.) These choosable ingredient can be added to basic recipe to produce various breads. For example,sweet cake will use more sugars,while low sugar cake will use less sugar. Here, we call the ingredient proportion relation as recipe.

In Uniface recipe editor function, one group recipe is one proportion relation. In the table of editor, customers can match proportion relation among ingredients visually. Click "Recipe Setting" of tool menu, then you can see recipe configuration dialog box, please check as below:

- 1. Create a recipe group and name as bread.
- 2. Add the ingredients number of bread that is recipe length is 5.
- 3. Modify ingredients name and matched variable address.
- 4. Click save recipe and exit.

Add RCP group	Delete RCP group	Change group name	Save RCP	Import RCP	Export RCP	Help Quit
0: egg	Group name:	egg	Length of RC	P: 3	Number of RCP: 0	A V
	Name	e Variables	Data type			
	1 water	LWO	16-bit unsigned			Add row
	2 flour	LWO	16-bit unsigned			Insert row
	3 egg	LWO	16-bit unsigned			
						Delete row
						Add column
						[Inser column
						Delete column
	Notice whe	n write RCP finish				
	00000					



Example

1. project target

Realize the adjustment of different kinds of coffee ingredients, so that can complete the coffee modulation by one key operation.

2. how to achievement

Click recipe control *i*, add a new recipe group and set ingredients number of recipe, each recipe contains different ingredients proportion, and then save the recipe.

coffee	Gr	oup name: cof	fee	Length of RCH	e: 8 👙	Number of RCP:	8		
		Name	Variables	Data type	RCPO	RCP1	RCP2		
	1	water	VWO	16-bit unsigned	2	1	8	1	Add row
	2	Sugar	V#2	16-bit unsigned	4	2	7	0	Insert ro
	з	Milk	V₩4	16-bit unsigned	6	3	6	0	Liserere
	4	Coffee bean	V¥6	16-bit unsigned	8	4	5	0	Delete ro
	5	salt	LWO	16-bit unsigned	0	5	4	0	
	6	green tea	LWO	16-bit unsigned	10	6	3	0	Add colum
	7	matcha	LWO	16-bit unsigned	0	7	2	0	Add cord
	8	price	LWO	16-bit unsigned	80	100	100	0	Inser colu
									Delete col
	<							>	Derece cor

Add the corresponding components and set corresponding variables to project scene, and group index is modify Internal Register LW60802 can achieve switch-over of recipe group, If recipe index is Modify Internal Register LW60803 can achieve recipe switch-over of recipe group.

Numerical input and display address of recipe ingredients is using the internal recipe register address. Such as the above recipe, there are 8 ingredients, the system internal address is RWI0-RWI7 from top to bottom if connects corresponding PLC address just needs to input the corresponding variables, such as VW0, VW2, VW4 etc..

лĶ	糖	配方	<mark>样 例──</mark>		
99999	99999	99999	99999	抹茶奶盖	
盐	绿茶	抹茶	价格	炭烧咖啡 夏威夷咖	加啡
99999	99999	99999	99999	卡布奇诺 爪哇咖	
				曼特宁咖啡 绿茶奶	
下载配方		越配方	保存配方	摩卡咖啡 抹茶奶	盖

Recipe's uploading, downloading or saving can be achieved in the function button.



Data transmission

Function introduction

Data Transmission is used for the data exchange between external device and HMI or between device and device.

Click Data Transmission in Project Manager to pop up the data transmission list as below.

Destination Address	Trggered	Address Type	Address Length

1. Click "Add", you can add data transmission. At present, maximum number entries is 100. Triggered type is interval trigger and minimum time unit is 200ms, the data types which can be transfered is bit, word, double word, and the maximum transmission data size by each trigger is 100(bit, word, double word)

a) Interval: 1~100 (* 200ms)

b) Address type: bit, word, double word

c) Address length: 1~100, the data size of each transmission, unit is the type chosen at "address type"

d)Source address/ Destination address: the transmission direction is from source address to destination address, this type of chosen register must be same as the address set in "Address type".

2. After setting, click "confirm", add this set entry into the list.

Add 🛛 🖓 💌	🛂 Data Transmissio	on			8
Attribute	Source Address	Destination Address	Trggered	Address Type	ddress Lengt
Interval: 🕴 🚔 *200ms	LBO	LBO	1*200ms	Bit	1
Address Type: Bit 💌					
Address Length: 1					
Address					
Source Address: LBO					
Destination Address: LBO					
				r.	
Confirm Cancel	Add	Delete	Modify	Close	Help

3.After adding, click close button exit, after downloading the configuration you can do data exchange according to the set transmission type.

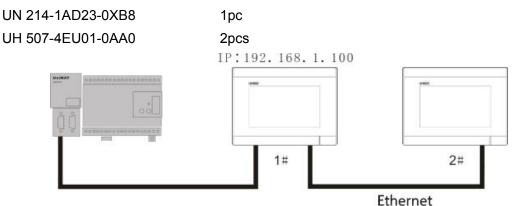


Example

1. Project target

Achieve 1# HMI & 2# HMI to control CPU's Q0.0 & Q0.1 status.

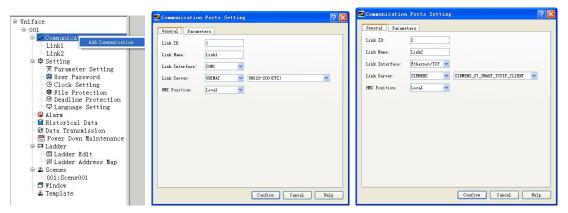
2. Wiring



3. Project setting

1# HMI

Create a new project, add a new Link and set the parameters of Link1 & Link2 respectively. Set one is PPI and another Link MODBUS Server TCP/IP.



Set data transmission: click the add icon, set address length 2, source address LB0 and destination address 2/Q0.0.

Attribute	Source Address	Destination Address	Trggered	Address Type	ddress Lengt
) Interval: 1 💭 *20ms) Associate:	LBO	2/Q0.0	1*20ms	Bit	1
Address Type: Bit 💌 Address Length: 2 📚					
Address Source Address: LBO					

Remarks: when set the destination address, if you input directly, need to add "2/" in front. If you click the right side icon to choose Link settings, you don't need to add "2/".



Add two bit buttons on project scene, and set the addresses LB0 and LB1. After setting 1 #HMI, save the configuration and download to HMI.

2# HMI

Create a new project, set the communication connection Link1 is MODBUS Client TCP/IP, the remote IP of Link1 parameter is set as the remote IP address of 1# HMI, as 192.168.1.100.

Communication Ports Setting	Communication Ports Setting
General Parameters Link ID: Link Nume: Link Interface: Ethernet/TCP w Link Server: MODBUS w MODBUS_TCFIP_CLIENT	General Parameters IP Address Setting Remote IP: 192.168.1.100] Other Port: 8000 Other IL II: 0 Oc2553 Communication Times: 20 Orderson 0 0
HUI Position: Local V 32bit Data Conver (ABCD -> CDAB) add the slave station No. for 32 bit data conversion: 0 8 add station	Timeout Times: 1000 ♀ ms (100-6553) Betry Numbers: 3 ♀ Address Mode: Standard Mode ♥ PLC Address Space: 16 ♀ (1-255)
No.	Confirm Cancel Help

Add two bit buttons in project scene, and set the addresses 0x1 0x2 respectively.

Save the setting of 2# HMI and download to HMI.

Complete the above setting, then can achieve 1# & 2# HMI to control CPU's Q0.0 and Q0.1 status.

Alarm

Function Introduction

When triggering some events that should not be triggered during the operation of the device, the system will make warning and record the time and content of the corresponding events. The alarm is used to set the alarm information. Only the alarm is configured, the alarm control and the dynamic alarm bar can be used normally.

1.	set the	alarm	information,	firstly	set the	trigger	condition
- ,							

No	Type	Address type	Address	Trigger con-	ditions	Even	t content
,	vdd	Insert	Delete	Edito	r] [Copy	Paste
	3833 - Sa						



2, record the real-time alarm: to show the real-time alarm data, alarm scrollbar

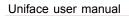
	Time	Date	Message	^
1				
2				
3				
4				
5				
<				>
		Sample Message		

3, System alarm setting: to set the display mode of overall pages alarm.

MI Parameters Sett	ing Display Setting Down	load and Storage Setting
Model Setting Screen Model: Display Mode:	UH507E 💌 Horizontal 🗸	Alarm Setting Alarm Voice: Have Sound Tips V V Alarm flashing scene Background Color:
Start Setting Splesh Screen: Guard Times: Touch Voice: Set the screen Load Logo Scree		System Alarm Setting ✓ Use System Alarm Background: Text color: Font family: 宋体 Font size: 10 Alarm Display type: Alarm Display O Cycle display Alarm Position: ③ Top Ø Heide the nouse cursor

4, Clear alarm voice: the alarm sound can be set on/off by the function button.

	?
ty Solid	
current recipe write current recipe write current recipe read current recipe save touch voice OB/OFF	× <
alarm voice ON/OFF setting screensaver time(minute) setting system time and date	
setting current language Siemens S7-200 Smart Run Siemens S7-200 Smart Stop	
	Solid current recipe write current recipe write current recipe read current recipe save touch voice ON/OFF slarm voice ON/OFF setting screensaver time(minute) setting current language Siemens S7-200 Smart Run





Example

A. set the real-time alarm

1. Double click Alarm icon to open Alarm Setting in software window.

Link1	编	号 组	地址类型	地址	触发条件	报警事件文本
ゆ Setting 一叉 Parameter Setting	1	0	Bit	LB1	ON	1号风机异常
🛛 🛛 User Password	2	0	Bit	LB2	ON	2号风机异常
-⊕Clock Setting -♥File Protection	3	0	Bit	LB3	ON	3号风机异常
Deadline Protection Language Setting	4	0	Bit	LB4	ON	4号风机异常
Alarm	5	0	Bit	LB5	ON	5号风机异常
🖬 Historical Data 🕼 Data Transmission	6	0	Bit	LB6	ON	6号风机异常
Power Down Maintenance	7	0	Bit	LB7	ON	7号风机异常
려 Ladder - 웹 Ladder Edit	8	0	Bit	LB8	ON	8号风机异常
⊨ Ladder Address Map	9	0	Bit	LB9	ON	9号风机异常
 ▲ Scenes 000:Scene000 ➡ Window ▲ Template 		添加] [插入		(编辑	夏制 粘贴 · · · · · · · · · · · · · · · · · ·

2. Add the matched alarm event in the alarm setting and change the trigger condition.

Alarn Hodif	fy 🤶
General	
Address type	
Group ID:	0
Scan time(s)	: 1
Address type	: Bit 💌
Address:	LBO
Alarm Text:	
Trigger:	ON 🔽
🗹 Vse	
	Confirm Cancel

3. Add an alarm control, and change the corresponding display parameters.

Frame	Title			Text		
BG Color:	Language:	Language1	~	Font Size:	16	~
Border Color:	Font Size:	16	~	Text Color:		
	Font:	宋体	~	Rows:	5	•
	BG Color:			🗹 Time Display	HH: MM	~
	Text Color:			🗹 Date Display	DD/MM/YY	~
	Time:	Time		Select Alarm Gro		1.1
	Date:	Date		0	to	255 🛟
	Message:	Message				



4. When the corresponding alarm event is triggered, the Alarm Control will display the alarm time, date and content, etc.

	模拟窗口	MT-8-18	
	时间	日期	报警内容
1	11:25	2017-01-19	1号风机异常
2	11:25	2017-01-19	2号风机异常
3	11:25	2017-01-19	3号风机异常
4	11:25	2017-01-19	4号风机异常
5	11:25	2017-01-19	5号风机异常
6	11:25	2017-01-19	6号风机异常
7	11:25	2017-01-19	7号风机异常
8	11:25	2017-01-19	8号风机异常
9	11:25	2017-01-19	9号风机异常
<			>
ſ	ON ON ON	ON ON ON	ON ON ON

5. Add a dynamic alarm bar at the scene and trigger the corresponding event, the triggered time will scrolling display on the scene.

9号风机异常 8号风机异常 7号风机异常 6号风机异常 5号风机异常 4号风机异常 3号风机异常

6. When setting the overall alarm, the alarm information will be displayed at the corresponding position of all pages.

	时间	日期	报警信息	
1	11:12	27/02/2017	液位过高	
2	11:12	27/02/2017	1号报警	
3	11:12	27/02/2017	2号报警	
4				
5				
o 7				
8				
•			液位过高 1号报警 2号	> 报警
1号开	2号开	液位高报警	正常液位 报警声音开/关	J



B. Historical alarm setting

1. Query historical alarm. Query the historical record, triggered time, faulty information and fault clearance time etc.

Insert a function button which set to display alarm data. Then well done.

🖬 Function Button 🛛 🛛 🕅	🖬 Function Button 🛛 💽 🔀
General Label Advanced Visibility	General Label Advanced Visibility
Border Color: For eground: Background: Pattern: Solid	Border Color: Foreground: Background: Pattern: Solid
Function: Display alarm date 🗸 🗸	Function: Export alarm data to USE disk 🗸
Confirm Cancel Help	Confirm Cancel Help

Remark: Query historical alarm data can not be done at off-line. Just operate on the touch screen.

2. Download the historical alarm data. You Can download the historical data to the U disk by the function button. Select the Download History Alarm Data in the function buttons.

Multilingual

Function introduction

The function realizes the multilingual setting. Double click "language settings" and pop up the following dialog,

当前	语言: Languagel	▼ 语言数里:	[1	•
编号	控件描述	Languagel		
11	Scenes/Scene000/Multi-State Lamp1/status0/text	炭烧咖啡		
12	Scenes/Scene000/Multi-State Lamp1/status1/text	卡布奇诺		
L3	Scenes/Scene000/Multi-State Lamp1/status2/text	曼特宁咖啡		
L4	Scenes/Scene000/Multi-State Lamp1/status3/text	摩卡咖啡		ſ
15	Scenes/Scene000/Multi-State Lamp1/status4/text	夏威夷咖啡		
16	Scenes/Scene000/Multi-State Lamp1/status5/text	爪哇咖啡		
17	Scenes/Scene000/Multi-State Lamp1/status6/text	绿茶奶盖		L
18	Scenes/Scene000/Multi-State Lamp1/status7/text	抹茶奶盖		
19	Scenes/Scene000/Text0/text	配方样例——咖啡		
20	Scenes/Scene000/Text1/text	7次		
21	Scenes/Scene000/Text2/text	糖		
22	Scenes/Scene000/Text3/text	牛奶		



- Current language: the current language used for text.
- Language quantity: 8 languages in total
- Component description: describe the text information of the control in the current scene.

Example

1. project target Download program to HMI, set two buttons to switch Chinese & English.

2、Project setting. Create a new project, put the corresponding controls at scene and

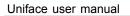
set the relevant alarm, make these all be displayed in Chinese. Then add two function buttons at the scene and set one for Chinese and another for English. As follows:

0=					
	中文	E	nglish		
Ľ_			J		
í=		<u> </u>			
	关				
l_					
Ļ					
	时间		信息	~	
	时间	】 日期	信息	^	
1	时间	】 日期	信息	^	
1 2 3	时间	! 日期	信息	^	
	时间	日期	<u>信息</u>	^	
3	时间	】 日期	信息	~	

Click the language setting in the left project window, select 2 of the language, and translate for Language1. After the translation is completed, click confirm.

当前	语言: Language1 · 语言数	⊉:	2	2
编号	控件描述	Language1	Language2	3
0	Scenes/Scene000/Alarm Control0/title_column/Title_Clear_Date_Text	Clear Date	4 6	1 5
1	Scenes/Scene000/Alarm Control0/title_column/Title_Clear_Time_Text	Clear Time	7	7 3
2	Scenes/Scene000/Alarm Control0/title_column/Title_Date_Text	日期	date	
3	Scenes/Scene000/Alarm Control0/title_column/Title_Message_Text	信息	message	
4	Scenes/Scene000/Alarm Control0/title_column/Title_Time_Text	时间	time	
5	Scenes/Scene000/Bit Button0/status0/text	关	off	
6	Scenes/Scene000/Bit Button0/status1/text	开	on	
7	Scenes/Scene000/Function Button0/text	中文	中文	
8	Scenes/Scene000/Function Button1/text	English	English	
9	AlarmLogin/alarm0001/alarmText	LB0错误	LBO error	
	偏号) L 2 3 3 4 4 5 5 7 7 3	場合 拉件描述 ② Scenes/Scene000/Alarm Control0/title_column/Title_Clear_Date_Text 14 Scenes/Scene000/Alarm Control0/title_column/Title_Date_Text 25 Scenes/Scene000/Alarm Control0/title_column/Title_Date_Text 26 Scenes/Scene000/Alarm Control0/title_column/Title_Date_Text 27 Scenes/Scene000/Alarm Control0/title_column/Title_Message_Text 28 Scenes/Scene000/Alarm Control0/title_column/Title_Time_Text 29 Scenes/Scene000/Bit Button0/status0/text 20 Scenes/Scene000/Bit Button0/status1/text 27 Scenes/Scene000/Function Button0/text 28 Scenes/Scene000/Function Button1/text	編集 拉什描述 Language1 編集 拉什描述 Language1 20 Scenes/Scene000/Alarm Control0/title_column/Title_Clear_Date_Text Clear Date 11 Scenes/Scene000/Alarm Control0/title_column/Title_Date_Text Clear Time 22 Scenes/Scene000/Alarm Control0/title_column/Title_Date_Text 日期 33 Scenes/Scene000/Alarm Control0/title_column/Title_Message_Text 信息 44 Scenes/Scene000/Alarm Control0/title_column/Title_Time_Text 时间 55 Scenes/Scene000/Bit Button0/status0/text 关 56 Scenes/Scene000/Bit Button0/status1/text 开 57 Scenes/Scene000/Function Button0/text 中文 58 Scenes/Scene000/Function Button1/text English	場合 注anguage1 Language1 Language2 Language2 <thlanguage2< th=""> <thlangua< td=""></thlangua<></thlanguage2<>

Click the function button Chinese matched and Select Setting Current Language at Function and Language 1. English matched one Select Setting Current Language at Function and choose Language 2





	2 功能按钮 ? 🗙
Function Image: Second state s	 ●般 标示 高級 显現 b框色: 前景色: 日引 sh
Function:	功能: 设置当前语言 🗸
Lagage:	语言: Language2
Confirm Cancel Help	· · · · · · · · · · · · · · · · · · ·

Then the function is set up and press Chinese button then display Chinese and English button for English.

uff
Same date announce 1

Historical data record

Function introduction

Records the data that the address variable appears during working, forms the corresponding historical data record table and draws the historical curve trend map to the data. Data can also be downloaded to the U disk and we can read the data of the U disk through the computer or other devices. (historical data records can not show changes in data records by off-line simulation, it is necessary to download to the touch screen to view the related records data).

"Historical data" is used in conjunction with the "historical data display" on Advanced components. "Historical data" is mainly used for the setting of parameters, "historical data display" displays the historical data. If you haven't create a new "historical data collector", you can double click the Historical Data and pop up the following window. (Need to save file before a historical data collector is formed)



ical	data coll	Read Address	Sample Length	Number of Sample	Sampling Method	Data Type	Display Type	Total Di
1								

Notice : It can add Max. 10 historical data collectors each time.

Click "add" in the pop-up menu to create a new historical data collector. Pop-up window as below,

Name: collect			Number	of Sample: 100		**
Read Address:				Read Length:	1	
Data Type:	16-Bit Unsigned Integ	er	~	Display Type:	16-Bit Unsigned Decimal	~
Total Digits:	5	1	\$	Decimal Digits:	0	\$
Sampling Meth	od Interval:	0	н	0 🗢 M	1 🗘 S	
🔿 Trigger	Trigger Address:	-			OFF->ON	
2	pling whole time:	0		C _ time:	00:00 add tin	ne

Name: user can change the name displayed in project manager accordingly. (only for letters or numbers)

Read address: to read the starting address of the data

Sampling length: the number of data to read from memory at most is 16.

The total number of sampling is the number of data extracted, which supports 100000 articles at most.

Sampling mode: timing sampling, and reading data according to the time interval set.

Trigger sampling: to record the data according to the set of bit status or edge trigger.

Regular sampling: setting several specific time points for sampling.



Example

1. double-click to open the historical data function at the directory of software project manager.

🛛 Historical	Data						? 🛛
rical data coli	. Read Address	Sample Length	Number of Sample	Sampling Method	Data Type	Display Type	Total Digi
<		iii		-			>
Add	Delete	modi fy	Save	Clear d	ata 3	(elp	Close

2. It controls the suspension sampling or clear historical data by address variables. Set the corresponding control address the corresponding state of the address variable is triggered the relevant function.

Clear historical	Data	
Enable:	OFF->0N	×
Address:		
Pause sampling		
Pause sampling DEnable:	ON	~
	KO	

3. Adding the address variables that need to record the historical data and the way of data sampling, the number of individual historical data variables is up to 8, supporting the discrete address variables. There are three ways of sampling historical data, including time sampling, trigger sampling, and timing sampling; each historical data collector has a maximum of 100 thousand samples, and the data record will be automatically stored in the Flash, and more than 100 thousand will automatically cover the previous data item.



ener a	l Data	Ltem										
Name:	collecto	r0				Numb	er of Sample: 100					*
Sampl	Ling Addre	:s										
Read	Address:	LWO					Read Length:	1				\$
Data	Type: [16-Bi	Integer			~	Display Type:	16-Bit	Decima	1		~
Total	. Digits:	5				\$	Decimal Digits:	0				*
Re	ad Addre:	s R	ead Leng	th	Data T	ype	Display Type	otal	Digit	Decim	al Digi	ts
1 LWO		1		\$ 16-	Bit Int	eger 💙	16-Bit Decimal	√ 5	•	0		
Add Sa Sampl	umpling Add	bress)		Sampling	Addres	3				0		
Sampl ③ Ti	umpling Add Ling Method	bress) 1	Interval :	Sampling	Addres		0 📚 M	1	\$ \$	0		8
Add Sa Sampl ⊙ Ti ○ Tr	umpling Add	bress) 1	Interval: Trigger A	Sampling ddress:	Addres	3	0 0 0			0	add tim	

4. When the historical data collecting address is set up, you need to add the corresponding historical data display components in the software advanced options, including historical data displays and historical trends, add historical data displays to the software scene, and set up historical data items to display.

Historical Da	ata Display			? - × - `		Date	Time	Name0	Name 1	Name2	Nan	ne3
General	Data Visibil	t sr			1							
					2							
Historical	l Data: collect	or0 •			3							
Малс	Show				4							
Name0					5							
Name1	V				6							
Name2					7							
Name3					8							
					9							
					10							
					11							
			Confirm		12							
			Confirm Can	Help	Hom	e Previous					Next	La

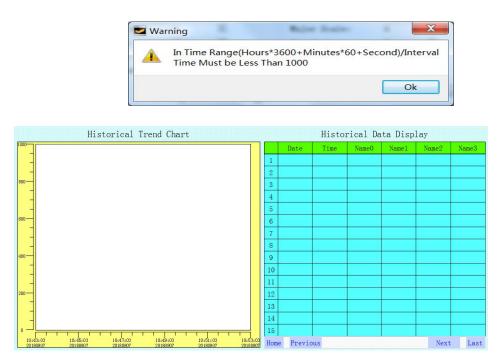
After the device operating, on HMI it will display the change of the corresponding component address variable value, and data will be saved when power off .

5. When adding historical trend picture at scene, set the corresponding attribute of the XY axis interface, including the time setting of the X axis, the numerical range setting of the Y axis, etc.

X Amis		Y Axis		
🗹 Show Ticks	Tick Color:	Show Ticks	Tick Color:	
🗌 Show Axis Gri	d	Show Axis Grid		
Major Scale:	6	Major Scale:	6	
Sub Scale:	3	Sub Scale:	3 🗘	
🔽 Display Time		Show Marks		
Time Range —		Tick		
Date:	2018-8-14	Font Size:	10	
Hour :	0			
Minute:	10	Min:	0	
Second:	0	Max:	1000	
Format:	hh:mm:ss			
Font Size:	10	Fractional Digits:	0	



In the process of setting the time range, if the following errors appear, please check the time setting of historical data collection time and historical trend map and make reasonable changes to the corresponding time range or sampling time.



6. Historical data query. We can query historical data and record information according time. Just pull a function button and select the query history data on the function button.

7. Download the historical data. Download the collected historical data to the USB disk in CSV file format. It can be opened directly by Excel. Just pull a function button and select the query history data on the function button.

General Label Advanced Visibility F Border Color: Preground: Background: Pattern: Solid	E Function Button	Function Button
Function: Find historical data Y Function: Export historical data to USB	F Background:	F Background:
Confirm Cancel Help Confirm Cancel		



User encryption

Function introduction

The function of user encryption is mainly to protect user's permission. It can add and delete users, and set user permission level.

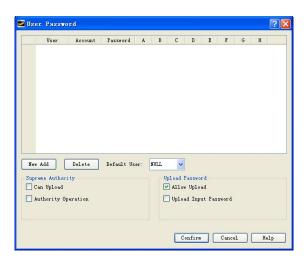
Project initial user setting:

When the system has not set the user encryption, the default user is NULL, namely can touch all components.

This function coordinates components' user level which is in advanced pages to use. For example, the user level control in the advanced page setting the bit button is D, the D level of the Uni001 user in the user password setting is N, and the D level of the Uni002 user is Y, then the Uni001 user can not touch the use button, and the Uni002 user can touch the use button.

Users can set up the upload password here. When setting up the password, you need to enter the correct password to upload the configuration of HMI to PC.

The highest permission: the user uses this password can open all hierarchical controls.



<u>Note: when a user has multiple levels of authority (for example, A/B/D), as long as it</u> is unlocked in one of the controls, the corresponding all permissions are unlocked (when the A is opened, B and D are open at the same time, before logon the login, no more password is required).

Log out: in the screen button, you can set log out and quit the current user. If you do not click log out, then at the screensaver time and log out automatically.

The setting for the advanced components user



P

User login: this function is mainly used for user login. The user click this control to log in.

this control into the scene. When any user login, it displays the current user name. When no user login, it shows that the user does not exist as NULL.

Add User Add user: this function is used to add users, set up their passwords and corresponding permissions, and its authority is only owned by administrator. Clicking this control to add a user, enter a new user name in the account, enter his password, and enter the highest permission password of the administrator (the password is set in the user password in the project window, the password is the highest permission operation:s), corresponding A-H is the user level, clicking one means having the authority, click confirm then finish this operation.

Delete User Delete user: this function is used to delete unnecessary users, and authority are only owned by administrator. Clicking this control can delete users, select the users who need to be deleted in the account, enter the administrator password, click the confirmation to delete the user.

Modify Password Modify the password: this function is used to modify the user's password. Any login user can modify his password. Using this control, click to modify the password of the current login user, enter the old password, and then enter the new password to click confirm. If the old password is incorrect, the new password can not be entered.

Modify Level Modify the level: this function is used to modify the user's level permissions, and the authority is only owned by the administrator. Using this control, you can modify the right of the current users and re-assign the corresponding permissions after entering the administrator password.

Note: the administrator's password can be logged in any valid account.

Example

1. Create the relevant user name, user password and the corresponding user rights, can set the highest authority, the highest authority can open all functional rights, when the password is allowed to upload, in the upload process need to input the corresponding upload password to upload the project of HMI.



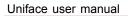
		liser	Account	Password	A	B	C	n	E	F	G	н
⊢⊈ Communication −Link1	1	Uni001	Uni001	Uni001	N	N	N	N	N	N	N	N
Setting	-	0111001	onicor	0.0001		-	-		-	-"	-	
₩ Setting - 死 Parameter Setting	2	Uni002	Uni002	Uni002	N	N	N	N	N	N	N	N
User Password	з	Uni003	Uni003	Uni003	ท	N	N	N	N	N	N	N
O Clock Setting	4	Uni004	Uni004	Uni004	Y	Y	Y	Y	ท	N	N	N
 File Protection Deadline Protection 	5	Uni005	Uni005	Uni005	Y	Y	Y	N	N	N	N	N
□ ♥ Language Setting	6	Uni006	Uni006	Uni006	Y	Y	N	N	ท	N	N	N
🗑 Alarm	7	Uni007	Uni007	Uni007	Y	Y	N	N	N	N	N	N
🛢 Historical Data	l i i	10200 A. 2000	00000000		1	1000			1000			100
🕑 Data Transmission								-				
Power Down Maintenance	N	ew Add	Delete	Default U	ser:	NULL	~					
A Ladder	Su	preme Autho	rity				Jpload	Passw	ord			
🖽 Ladder Edit	1.1.1.2.2	Can Upload					Alla					
≓ Ladder Address Nap		Authority	Oneration			ſ		ad Tra	ant Pa	r r word		
ž Scenes			operación				_ opto	au inj	pucia	SSN01 u		
		ssword:										

2. To encrypt a control, at "advanced" select controlled by user level, set the corresponding level, if setting level is B, then the user with the B level can use it. Display element invalid logo has an invalid touch on the current control.

Vord B	itton			?
General	Label	Advanced	Visibility	
	rolled by	bit user level		
Touch L		в	~	
Disp	lay eleme	nt invalid l	ogo	
Noti	ce Bit ce Word			
			Confirm	Cancel Help

3. A control is encrypted Visibility, that is the user who has the relevant right can log in and touch.

Screen	Button				?
General	Label	Advanced	Visibility		
Contro	olled by b	oit			
Contro	olled by w	vord			
Contro	olled by u	iser level			
Touch L	evel: C	~			
		Lange of the second sec			
				Confirm Cancel	Help





4. The Supreme Authority Operation is that the task user enters the corresponding password and then can operate on all controls.

	User	Account	Password	A	В	С	D	E	F	G	H
1	Uni001	admin	1	Y	Y	Y	N	N	Ν	Ν	N
2	Uni002	Uni002	234	Y	N	Ν	N	N	Ν	N	N
3	Uni003	Uni003	333	N	Y	N	N	N	N	N	N
Mo		Delete	Default	Щ	NIII I						
St	w Add (preme Au Can Uplo Authorit		Default	Us		Uploa	ld Pa low I	sswo: Jploa	rd d	sswor	

5. Logout user that is after an operator has finished the operation, click logout to exit the current user login. The relevant setting is in the screen button, choose to logout user.

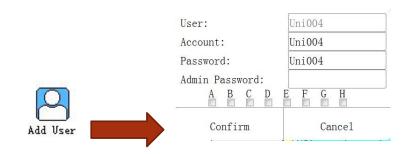
eneral Label	Advanced Visibility
	Sorder Color:
S	foreground Color:
	Background Color:
	Pattern:
Functions	
Open Scene	Open Previous Scene
🔘 Close/Open Scen	e 🔘 Close Window
Scene:	Scene000 ·
🔽 Logout User 🔭	
Open Function:	• Press Button 💿 Release Button

6. The file protection function under project window can protect users' rights, opening the file need password.

Project Window ×	🗹 File Protection 🛛 💽 🔀
OOO Generation Link1 Generating Were Parameter Setting Were Password Gelock Setting Gelock Set	 Vse Password Protection Password: Confirm Password: Attention After setting the password, you need password to open the file, please remember your password, and passwords are case sensitive.
⊂ 000:Scene000 − ⊐ Window - Ϫ Template	Confirm Cancel Help



7. It supports show user, add user, delete user, modify password, modify level. In the advanced components, drag into the new user, the related interface is automatically generated, where the rights of the corresponding user can be added, the administrator password is the highest authority password, such as the above figure (step 4) the max. password is 123.



Update program by U DISK

Function

Using USB disk can update HMI's program and firmware version, at the same time, it can also download the historical data of HMI.

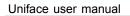
Example

1. Click the tool to pop the drop-down menu and select U disk update.

nifaceC:/Program Files/UniM						
(<u>F</u>) Edit(<u>E</u>) View(<u>V</u>) Graphic Compo	nents Button Comp	onents Object Component	s Advanced Components	RF Components Setting(S)	Tool (I) Help (H)	
(1 🗄 🤪 🗠 🍗 🖣 🗎 🕷 🤇	Q 16 16 A I	u 🐼 🕸 🖗 🔶 🖨) 🖪 🍟 🕒 👭 🤇	9 🖻 🖬 🔀 💷 🔍 🚅	🕽 🛠 Compile	F7
YC200000	A 🎟 💱 🕅 🗌	⊕ ○ ○ 125%		8 🖷 🕪 🖶 🖩 🔤 🗄	🛃 Off_Line_Simulation	F8
ct Window >	<			Component		F9
niface	1			Button	🛾 🙆 Download Configuration	F10
-000_					🧏 🙆 Upload Configuration	
🖻 로 Communication — Linkl					🌆 Recipe Manager	
Setting					S S Compression/Uncompressi	on
- W Parameter Setting			Add User		🎾 UdiskUpgrade	

2. Pop up the U disk update window to update the configuration and firmware of the current project, and update the three files to the U disk. Mode of operation: choose the firmware and click the "..." on the right, select save path and store it in the U disk. Click confirm. Check the configuration again, click on the right "..." select save path and store it in the U disk. Click confirm.

Note: firmware is the version of the upper computer software. It is recommended to save it into the U disk to ensure that the version matches the configuration. U disk max. supports up to 8 different configuration projects. A project needs to modify the engineering name if it needs multiple configurations and adjust it in the "file name please" during updating by U disk. The configuration file is required to be placed in the U disk.





🛛 UdiskUpgrade		?
🔽 firmware		
Save Path		
component		
Save Path		
please input File name:		
configuration file		
Save Path		
	ok Cancel	Help

3. After the storage is finished, there are three files in the U disk:

component.uupf	2017/3/1 15:08	UUPF 文件	3,046 KB
firmware.uupf	2017/3/1 10:28	UUPF 文件	995 KB
bootconfig	2016/11/8 17:50	配置设置	1 KB

4. Insert the U disk which loaded the files onto the touchscreen and restart the touch screen.

5. After power on, the touch screen enters the system setting interface.

after 56 seconds enter calibration mode	
set(IP/Time/BlackLight)	version: 1.40.05.04371
Touch screen calibration	Product model: UH310E
Checkself	Resolution: 1024 X 600
upgrade	

6. Click on the bottom button upgrade to enter the USB update interface.

7. The top 8 are configurations, and the following is the firmware. Click the firmware and the two red buttons that need to be updated, and then click Upgrade to start updating program and firmware. After the update, pop-up Update all success.

You can update firmw	are or component !	You can update firmware	or component !			
component.uupf	work1.uupf	component. uupf	workl. uupf			
	Component4	Componen	mponent4			
Comportent 5	Component6	Componen Update all such	cess. mponent6			
Component7	Component 8	Componen	mponent8			
Firmware	Upgrade	I Znoare	Ungrade			
UniM	AT	UniMAT				

8. Pull out the U disk and restart the touch screen to complete the U disk update.



QR Code

Function

In application, some information needs to be converted to QR code on the touch screen. In Uniface, we can achieve this function through QR code display. The method of setting a QR code display is listed as below:

Click the two-dimensional code display under the menu of advanced components, move the mouse to the screen area, the mouse displays the cross, click the left mouse button and drag the mouse to add a control. Double click the control to pop up a dialog box, which is the dialog box that set the properties of the two-dimensional code.

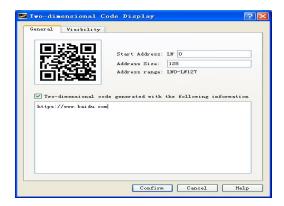
- Start address: the information used to generate the two-dimensional code is stored in the memory address of the touch screen. The starting address is the first address read by the two-dimensional code display.
- Address length: the length of address read by the two-dimensional code display.
- Check box: (two-dimensional code generates the following information): if checked, when the project starts running, the contents of the edit box are written to the address to be read by the two-dimensional code display.
- Edit box: input information that you want to write to the specified address to edit box when the check box is checked.

Note: the two-dimensional code generator only displays the default two-dimensional code in the offline simulation and online simulation, and does not generate a new two-dimensional code. It generates a new two-dimensional code on the screen only.

Example

1. two dimensional code is the fixed information.

Select two-dimensional code in the advanced component, select the suitable size and position in the scene, select the "two-dimensional code generated with the following information" in the two-dimensional code properties, input the two-dimensional code information and click confirm.





2. Two-dimensional code is controlled by address variable

Create a two-dimensional code control, set the length of the two -dimensional code address and address length, pull into a ASCII input display control, and set the address to start address. Download the project to the touch screen, editing the contents of the ASCII to change the contents of the two-dimensional code, and the corresponding information can be displayed by scanning the changed two-dimensional code.

One panel connects with multi-devices

Function introduction

One screen multi-devices (extension mode): HMI as a master device, communicates with multiple slaves, when using the extended mode, the configuration address of HMI needs to be distinguished the slave number by # (Slave1: 1#, slave2: 2#).

Minimum communication combination

1.HMI (master) +PLC (slave1) +PLC (slave2)
2.HMI (master) +PLC (slave1) +HMI (slave2)
3.HMI (master) +HMI (slave1) +HMI (slave2)

Communication protocol which extension mode supported: PPI, MPI, MODBUS.

Parameter settings at extension mode: baud rate, slave number, data bits, parity bits and other system parameters.

Master HMI number is not recommended to be broadcast address or same as the slave number, which cause the communication failure.

Example

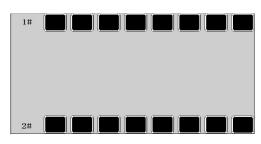
One panel with multi-devices (PPI) :

On Uniface double-click to open communication port settings of Link1, and change the address mode at extended mode and save it in parameter interface.

C	on Parameters	Other		
	on rarameters	Other		_
Baud Rate:	9600	Touch ID: (0-255)	0	\$
Data Bits:	8	PLC ID: (0-255)	1	()
Check Bit:	NONE	Communication Time (0-65535)	s: 20 🗘	ms
Stop Bit:	1	Timeout Times: (100-65535)	1000 😂	ms
Restore	Default Setting	Retry Numbers: (0-5)	3	\$
		Address Mode:	Expanded Mode	~
		PLC Address Space: (1-255)	32	\$



Add corresponding components of two PLC slave address at screen,1# is PLC Slave1, 2# is PLC slave2

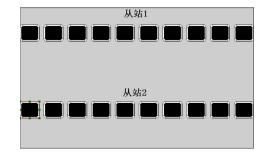


One panel with multi-devices (MODBUS) :

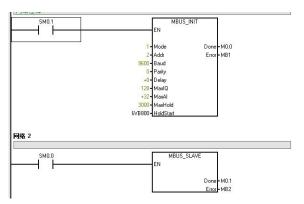
On Uniface double-click to open communication port settings of Link1, and change the address mode at extended mode and save it in parameter interface.

Communicati	on Parameters	Other	
Baud Rate:	9600 💌	Touch ID: (0-255)	0
Data Bits:	8	PLC ID: (0-255)	1 🗘
Check Bit:	NONE	Communication Time (0-65535)	s: 20 🗢 m:
Stop Bit:	1	Timeout Times: (100-65535)	1000 🗢 m:
Restore	Default Setting	Retry Numbers: (0-5)	3
		Address Mode:	Expanded Mode 👻
		PLC Address Space: (1-255)	32

Add corresponding components of two PLC slave address at screen,1# is PLC Slave1, 2# is PLC slave2



plc program as below,





One device connects to multi-panels

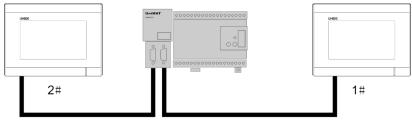
Function introduction

One device multi screen: this connection is PLC as master, the screens as slaves which PLC supports MODBUS. All touch screens are connected to PLC by RS485.

Example

One device multi screen (PLC has multiple PPI ports): PPI communication

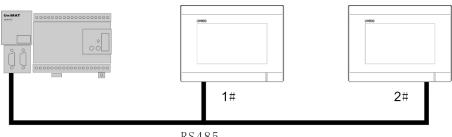
1. Two screens are connected to a serial port respectively according to the standard single link screen mode.



RS485串口线

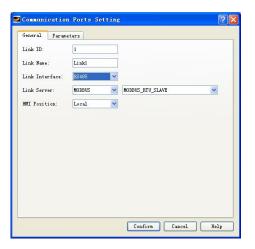
One device multi screen occupies only one serial port (PLC as master, all touch-screens as slaves): MODBUS communication.

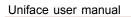
1. PLC communication port is RS485, connecting two slave stations touchscreen. The wiring is as follows:





2. Two touch screen communication protocols are MODBUS-Slave







3. Set the number of stations on two screens, requiring station numbers to be inconsistent. For example, one of them is 1, the other is 3. The communication parameters are guaranteed to be the same, and the station number interval can only be between 1~247.

eneral Parameters	ε ? 🗙	General Parameters	
eneral Parameters Communication Parameters Baud Rate: 9600 Data Bits: 8 Check Bit: NONE Stop Bit: 1 Restore Default Setting	Other [0-255] PLC ID; [0-255] Communication Times: 20 \$\overline\$ [0-65355] Timeout Times: 1000 \$\overline\$ ms (0-65551) Retry Numbers: 3< \$\overline\$ (0-5) Address Mode: Standard Mode \$\verline\$	Communication Parameters Band Rate: 9600 V Data Bits: 8 V 0-255)	5) pers: 3
	PLC Address Space: 52	PLC Addres (1-255)	s Space 32

4. Set up the address of the control that needs to be connected, the address is the internal address of the system, and address conversion on PLC.

Time set up

Function introduction

The clock setting function can be divided into three functions: downloading system time to HMI, writing time to PLC and synchronizing with PLC.

✓ Write Time/Dat Synchronize Ti	
Data Type:	16-Bit BCD 💌
Length:	7
Write Address: Start Method Timed Int Trigger	

- 1. Download system time to HMI
- 2. Write time to PLC
- Trigger: when the trigger address is 1, write the system time information to the corresponding PLC address. The data type and length are defaults. The default value of data type is 16 bit BCD, and the default value of length is 7.



- Write address: write the system time to the corresponding PLC address.
- The start-up model
- Time interval: set the time interval as a time unit and write the system time information to the corresponding PLC address circularly.
- Trigger: when the trigger address is 1, write the system time information to the corresponding PLC address.
- 3. Time synchronization with PLC
- Data type and length are defaults. The default value of data type is 16 bit BCD, and the default value of length is 7.
- Read the address: read the address information in the PLC
- The start-up model
- Time interval: set the time interval as the time unit, and read circularly the information in the corresponding PLC address.
- Trigger: when the trigger address is 1, read the information in the corresponding PLC address.

Note: the range of the input year is (1970 - 2037).

Example

1. Set the system time on the touch screen

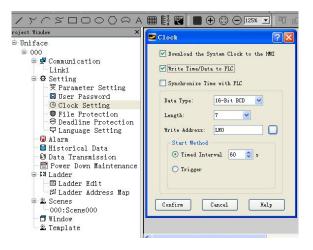
Achieve by the function button to set system time function, or to enter the touch screen system setting interface for system time settings.

General	Label	Advanced	Visibility	1	
	F	Border O Foregrou Backgrou Pattern:	md:	olid	V
Function	n:			current recipe write current recipe write current recipe read current recipe save toch voice ON/OFF alarm voice ON/OFF	
				setting screensaver time(minute) setting system time and date	
Left: 6	1 T	op: 65 S	ize: Width:	setting current language Siemens S7-200 Smart Bun	

2. Download system time to HMI

In the project window, select the clock settings, click the download system time to HMI, you can update the time in the upper to HMI.





3. Write time to PLC

 \bigcirc PLC without real time clock

A, new clock settings, select write time to PLC, set the clock address, such as VW100. The starting time interval is 1s, that is, write PLC once per second.

✔ Write Time/Dat	
Data Type:	16-Bit BCD
Length:	7
Write Address: Start Method ③ Timed Inte ③ Trigger	VW100

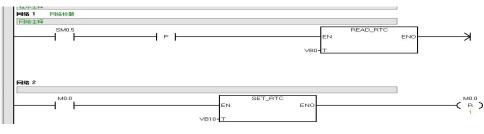
B, Set 7 numeric display or numeric input display in the screen and set their address as VW100 to VW112 respectively, which as year, month, day, time, minute, second, week correspondingly.

HMI时钟写时间到PLC												
	年		月		B		时		分		秒	周
PLC时钟	9999) (9999) (9999) (9999		9999		9999	9999

C, Monitor corresponding VM100 to VM112 address at PLC, and adjust the corresponding format to hexadecimal to display the time.

2 PLC has a real time clock and updates the clock through one bit.

A, Add clock addresses of PLC, such as the VB0



B, Add 8 numerical inputs in Uniface as PLC time display, the data type is 16 bit BCD code, address is VB0~VB7.

C, Add 8 numerical inputs in Uniface as PLC time setting address, the data type is 16 bit BCD code, address is VB10~VB17.

D, Add a bit button, the address is M0.0, set it as the trigger switch of the clock.

PLC时钟设置		9999	C	9999		9999		9999		9999		9999		9999	9999
							时钟设置确认								
PLC时钟显示		9999		9999		9999	DC	9999		9999		9999		9999	9999

Pay at installments

Function introduction

The installment function is: the user is able to use HMI within a certain period, if the time exceeds the time limit, then HMI will jump to the specified screen of the user, so that the HMI cannot continue to use it. If you want to reuse the HMI, the user has to unlock it through the deadline protection control and enters the correct unlock password.

🖬 D	ea	dline Protec	tion				? 🛛
	Pas	se Deadline Prot sword Level: 1 ameter Setting	ection				
		Password Level	Limit Date	Lim	Date:	2018-09-13	~
	1	1	2018-09-13	15:32:	Time:	15:32:52	\$
					Scene:	password input	~
					Password:	0	
					🔲 use super password		
					Prompt to expire		
					Close password screen trigger	Trigger Address: LBO	
	<			>	🗌 open password screen trigger	Trigger Address: LBO	
Ľ	-		2 02 2 D	_			
A	ter	r setting the pr	otection functio	n, you ne	ed this password to remove protecti	on, and use deadline unlock to cancel the pass	word. (elp

1. Call Deadline protection

In the project window, the deadline protection settings is optional, and the default is not chosen. If you want to use, you can make the deadline protection settings.

2. Set deadline protection

Password level: up to 12 levels, pop-up password numbers according to actual needs.

Date: the date of expiration prompt under the current selected password level.

Time: the time of expiration prompt under the current selected password level.



Scene: the scene with expiration prompt under current password level. (multilevel password level can share a deadline protection screen).

Password: password required to be completed at the current password level.

When the date and time of the corresponding password level arrive, automatically pop-up deadline unlock screen, after input the password then withdraw from the time frame and return to the original picture. Otherwise, continue to stay in the current deadline screen.

3. Super Password

Set up super password. It's aim to use the super password to unlock all deadline protections.

4. Prompt to expire

When click prompt to expire, when the expiry date is 1 day, 2 days and 3 days, then will pop-up the days to the expiry date, the detail time is same as upper time. The pop-up window can be closed directly.

5. Screen trigger address

When you click close password screen trigger and open password screen trigger, you can set the notification trigger address with the PLC or HMI address.

<u>Remarks: modifying the system time will not affect the expiration date. The expiration</u> <u>date is based on the download time of the project. That is, there is still 1 days before the</u> <u>expiration date, if modify time at this moment, will still be triggered on the second day.</u>

6. User expiration pop-up.

When create a new deadline protection, there will be two blanks in the screen, password input is the expiration pop-up window. When the deadline reaches, the window is popped up automatically, and the password of the response is required to exit the window. The window screen can be edited and input user-defined information.

请	点击输入维护	密码	
请	点击输入维护	密码	

7. Deadline management window

Password edit, another window that automatically pop-up, is the deadline management window, using the screen button to click out the window, in which the expiration date of the corresponding level and password can be set on the touch screen.



总结算期数: 88888 起始期数设置: 88888
超级密码: 999999
目前设置处于: 第 88888 期设置
分期密码: 999999
分期时间: 999999 年 999999 月 999999 日

Example

1. Project target

A project can have three levels password, respectively, at three different time pop-up deadline screen to remind the client trial time has arrived and should pay the related equipment. When a part of the money is paid, the next level password is provided until the next deadline is reached to pop-up again. When the customer provides all the payment, give the highest password permissions and unlock all renewals.

2. Sample operation

A. In the left side of the project window, click the deadline protection, pop-up deadline protection settings window. Check use deadline protection, select 3 in the password level, select the corresponding date and password respectively. When the setting is completed, click OK.

Image: Communicat	Components Button Co	mponents Objec	t Compone	password edit* nts Advanced Components NF Comp	
- Linkl • \$ Setting - \$ Paramet - \$ User Pa - \$ Clock S • \$ File Pr - \$ Deadlin \$ Deadlin \$ Deadlin \$ Deadlin	Parameter Setting Password Level 1 1 2 2 3 3	Limit Date 2018-09-29 2018-09-29 2018-09-29	Lim 11:03: 11:03: 11:03:	Date: Time: Scene: Password: use super password	2018-09-29 11:03:28 password input 0
Historical… Data Trans… Power Dow… Lidder Ladder Ladder Ladder Ladder Ladder Ladder Ladder	After setting the pro	stection function), you ne	Prompt to expire Close password screen trigger open password screen trigger ed this password to remove protecti	
		Size: Widt)		Height:	Confirm Cancel

B.Click on the password input window, set the corresponding manufacturer and contact information, and put the corresponding payment two-dimensional code. The image of this window screen can be user-defined edited.



	目前在第 88888 次维护期间
(请点击输入维护密码
	输入维护密码才能够使用 如有疑问请联系王工: 13666666666

C. To save the above two steps then complete the set up of installment payment.

Ladder chart

Function introduction

Support for ladder logic control in Uniface software. The associated external or internal address is corresponding to the address dedicated to the ladder diagram, and is programmed by the special address of the ladder diagram. The instruction contains the standard instruction of the IEC61131/1 international ladder diagram. The editing mode is similar to that of Japanese PLC.

Ladder address mapping: you can add bit address, word address, double word address. The register is the address type, number is the ladder address number, and can write the address actual meaning information. For example, LQD0 is the register LQD+ number 0, the relevant address VD100, VD100=LQD0. You can import and export addresses, which can be repeated in other projects.

		reg	ister	number	relevance address	note	
BIT	Address						
	BIT Address1	LI	_ (I 🕂	LBO		
WORD	Address						
	WORD Address1	LIW	- 0	ا ب	LWO		
	D Address						
	DWORD Address1	LID	<u> </u>	-	LWO		

Ladder diagram editing: the left is a ladder diagram instruction set, in the ladder diagram editing screen, if click the instruction position which should be placed, click the corresponding instructions, input address information, then the editing screen shows the corresponding ladder diagram instructions. The editing method is basically same as PLC. And, there are common instructions on the ladder menu, which can be directly clicked. Insert line, Into insert structure vertical line, Into insert structure vertical line, Into insert structure vertical line, Into insert address, Into insert address, Into insert address, Into insert address, Into insert line, Into insert address, Into insert addr



diagram. After editing, it will automatically detect the editing correct or not. If not, it will remind the ladder diagram transfer failure. Click confirm automatically saving the ladder diagram project.

Note: timer instruction, timer base is 10ms.

Example

1. Project target

Design a three-person responder, when anyone of them in the first to press, the corresponding seat lights on, the other players press then invalid, the screen shows the name of the first player. The presenter button can turn off all the lights.



2. Project design

A, Establish corresponding table of the address. Establish the address separately, and relevant the ladder diagram address according to the actual address. The project contains 7 switch addresses (4 inputs, 3 outputs) and 1 multi-state display (word address). Add notices of the address name.

<u>Remarks: the address of the ladder diagram can be numbered arbitrary not relevant</u> with bit, word or double word. Register LI and LQ no need to attention actual input and output. For example, V0.0 can be relevant LQ10.

		register		number	relevance address	note
IT .	Address					
	BIT Address1	LI	-	0 +	V0.0	Person A button
	BIT Address2	ш	-	1 🕂	V0.1	Person B button
	BIT Address3	LI	-	2 -	V0.2	Person C button
	BIT Address4	LI	-	3 +	V0.3	Presenter button
	BIT Address5	LQ	-	0 +	Q0.0	Person A lamp
	BIT Address6	LQ	-	1 +	Q0.1	Person B lamp
	BIT Address7	LQ	-	2 +	Q0.2	Person C lamp
'ORD	Address					
	WORD Address1	LQW	-	0 📫	LWO	respond display
WOR	D Address					

B. Ladder diagram Programming is based on ladder address. During programming, click 🐻 to display the relevant address for easy writing.



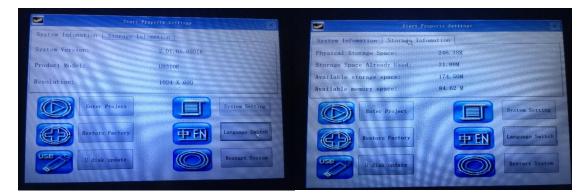
2 梯形图编辑	7世117 million 小	×
 ▲ 程序 MAIN ▲ 指令 > 位逻辑指令 > 定时器 > 注时器 > 计数器 > 字逻辑指令 		
 / 传输指令 传输字 / 传输字 / 卡納双字 > 比較指令 > 运算指令 > 循环和移位指令 		E
▷ 转换指令	40.1 122 160 131 132 162 V0.2 40.6 40.1 V0.3 40.2 100	
	40.2 	
	- 1.20 - [100 KL 1.200] 	

C. After editing the ladder diagram, the relevant controls can be placed in the screen, and the relevant logic is already operation.

System setup

Function instruction

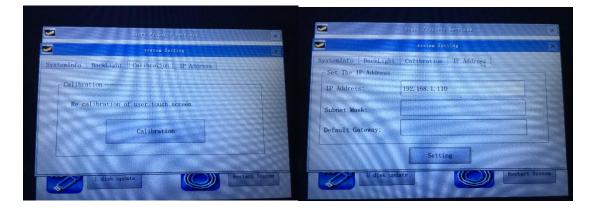
During starting up the HMI, a progress bar will appear, click the bar to enter the starting property interface. The hmi system can be set up, and the system storage information can be viewed.



System settings, in the system settings, you can view the current system information, including the current application software version number, version type, and the IP address of the machine (if no Ethernet shows no support); can adjust the backlight brightness through a scroll bar; in calibration, the touch screen can be calibrated; IP The address can set the IP of the Ethernet HMI.







U disk update, in the interface, plug in the U disk in the interface can identify the corresponding project files and firmware, click the corresponding update file to click the update, after the update is completed, click restart and pull out the U disk to complete the U disk update.

	disk update
You can update	firmware or component !
component.uupf	Component2
Component 3	- Component 4
Component 5	Computent6
Comportent 7	Component8
Firmware Restart	update updatefier exportLo

Internal register of the system

Function introduction

The internal registers of the system mainly display and control some special functions by the system address, which is convenient for users to trigger relevant system operation.

Bit Register	-	
Address	Description	read/write
LB60104	COM1 communication state, if ON communication abnormal, OFF ok	R
LB60105	COM2 communication state, if ON communication abnormal but OFF ok	R
LB60106	Network communication state, ON communication not normal, OFF ok	R
LB60107	Communication abnormal window, when set ON, abnormal window is not	W/R



	allowed to pop out, but set OFF then allowed.	
LB60112	Download recipe. set ON download recipe to device and reset automatically.	W/R
LB60113	Recipe upload. set ON upload recipe to HMI and reset automatically.	W/R
LB60114	Save recipe, set ON to save recipe to flash & reset automatically.	W/R
LB60115	Recipe download instruction, when recipe is in written to the device, it is ON download finished, then OFF.	W/R
LB60116	Recipe upload instruction, when recipe is in read to the device, it is ON, upload finished, then OFF.	W/R
LB60126	Save the instalment password which set deadline protection	W/R
LB60900	Level A automatic reset	W/R
LB60901	Level B automatic reset	W/R
LB60902	Level C automatic reset	W/R
LB60903	Level D automatic reset	W/R
LB60904	Level E automatic reset	W/R
LB60905	Level F automatic reset	W/R
LB60906	Level G automatic reset	W/R
LB60907	Level H automatic reset	W/R
LB60908	New User button, automatic reset	W/R
LB60909	Delete User button and reset automatically	W/R
LB60910	Modify Password button, automatic reset	W/R
LB60911	Modify level button, automatic reset	W/R
LB60920	Export History data Daily Report to U disk, automatic reset.	W/R
LB60921	Export History data Monthly Report to U disk, automatic reset.	W/R
LB60922	Export History data Summary Report to U disk, automatic reset.	W/R
LB60970	Link1 Shield Station No. 0	W/R
LB60971	Link1 Shield Station No. 1	W/R
LB60972	Link1 Shield Station No. 2	W/R
LB60973	Link1 Shield Station No. 3	W/R
LB60974	Link1 Shield Station No. 4	W/R
LB60975	Link1 Shield Station No. 5	W/R



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LB60976	Link1 Shield Station No. 6	W/R
LB60977	Link1 Shield Station No. 7	W/R
LB60978	Link1 Shield Station No. 8	W/R
LB60979	Link1 Shield Station No. 9	W/R
LB60980	Link2 Shield Station No. 0	W/R
LB60981	Link2 Shield Station No. 1	W/R
LB60982	Link2 Shield Station No. 2	W/R
LB60983	Link2 Shield Station No. 3	W/R
LB60984	Link2 Shield Station No. 4	W/R
LB60985	Link2 Shield Station No. 5	W/R
LB60986	Link2 Shield Station No. 6	W/R
LB60987	Link2 Shield Station No. 7	W/R
LB60988	Link2 Shield Station No. 8	W/R
LB60989	Link2 Shield Station No. 9	W/R
LB60990	Link3 Shield Station No. 0	W/R
LB60991	Link3 Shield Station No. 1	W/R
LB60992	Link3 Shield Station No. 2	W/R
LB60993	Link3 Shield Station No. 3	W/R
LB60994	Link3 Shield Station No. 4	W/R
LB60995	Link3 Shield Station No. 5	W/R
LB60996	Link3 Shield Station No. 6	W/R
LB60997	Link3 Shield Station No. 7	W/R
LB60998	Link3 Shield Station No. 8	W/R
LB60999	Link3 Shield Station No. 9	W/R
Word Regis	ster	I
address	Description	read/write
LW60000	16bit-bcd Local time: second, valid range 0-59	R
LW60001	16bit-bcd Local time: minute, valid range 0-59	R
LW60002	16bit-bcd Local time: hour, valid range 0-23	R



LW60003	16bit-bcd Local time: Daily,valid range 1-31	R
LW60004	16bit-bcd Local time: Month valid range 1-12	R
LW60005	16bit-bcd Local time: Year valid range 0-9999	R
LW60006	16bit-bcd Local time: Week valid range 1-7	R
LW60007	Total System Running time: hour	R
LW60008	Total System Running time: minute	R
LW60009	Total System Running time: second	R
LW60010	Touch status 1: touch, 0: no touch at present.	R
LW60011	Touch coordinate: X means the coordinate axis X when touch.	R
LW60012	Touch coordinate: Y means the coordinate axis Y when touch.	R
LW60013	Touch left coordinate: X, the coordinate value of X axis when touch left.	R
LW60014	Touch left coordinate: Y, the coordinate value of Y axis when touch left.	R
LW60802	index of recipe group: search one recipe group from some groups.	W/R
LW60803	index the present recipe: search one recipe from present formula group.	W/R
LW60900	account name	W/R
LW60930	Old password (new user: password modified password: old password)	W/R
LW60960	New password (new user: confirm password. modify Password: new password)	W/R
LW60990	Administrator password (new user: administrator password. Modify password: confirm password)	W/R
LW61000	installment passwords, 32 bits	W/R
LW61002	current installment numbers	W/R
LW61003	current editing installment	W/R
LW61004	total installment numbers	W/R
LW61005	initial installment	W/R
LW61006	Super Password, 32 bit	W/R
LW61008	YEAR of installment time	W/R
LW61009	Month of installment time for MONTH	W/R
LW61010	Day of installment time for DAY	W/R