Wired controller Instructions

- For the purpose of easy operation, please read this manual carefully and follow its instructions.
- Please keep the manual carefully for reference.
- For A-thermal Unit.

Notice for use

To ensure correct use, please read and follow these notes carefully.

Warning	There is a great possibility of serious accidents such as death, serious injury, fire or property damage caused by ignoring the contents of the warning.
Note	There is a great possibility that the optimum operation result cannot be obtained due to ignoring the contents of the precautions.

- Please entrust a local dealer or local service network station to arrange professional personnel who have air conditioner installation certificate to carry out the installation, users are strictly prohibited to carry out the installation.
- Before cleaning or maintenance, please cut off power switch; water washing is prohibited, which has the risk of electric shock.
- Wet hand operation is prohibited, which has the risk of electric shock.
- Pesticides, disinfectants, and flammable spray materials are prohibited for direct spraying; otherwise, it may cause a fire or the deformation of devices.
- Do not peel off the display panel by hand, which has the risk of electric shock.
- The wire controller is low-voltage circuit, it is prohibited to directly contact with a high-voltage line or be placed together with a high-voltage line in the same wiring pipe, and interval shall be 500mm at least or more.

- During the period of not being connected to the internet, the power consumption information on the APP and the wire controller cannot be synchronized, so it is normal for the APP to display abnormal power consumption on the day of connection.
- During the power outage, the power cannot be reported. To avoid abnormal power curve on the APP on the day of power on, it is recommended to manually reset the power once (Manual reset should be achieved by restoring factory settings).

Technical indicators

- Power voltage range: DC 24V;
- Mounting hole spacing: 58-62mm;
- Button: Touch button;
- Humidity:RH20%~RH90%;
- Max communication line length:60m;
- Working ambient humidity: 0°C-50°C;
- Dimensions(W*H*D): 120*120*20mm.
- Wi-Fi:2.4GHz, The Max E.I.R.P.: 18.52dBm;
  Frequency band of operation:2400-2483.5MHz.

Main functions

- 9-key touch button input;
- Display the failure of main controller;
- Color LCD.

Icon Explanation

Icon	Name	Icon	Name	Icon	Name	Icon	Name
	SCREEN LOCK		WLAN		WIFI FAULT		WLAN WITHOUT CLOUD
	SCHEDULE		TIME BOOKING		DEFROST		ECO
	HOLIDAY		FREE ELEC.		CURRENT LIMITION		GAS
	ERROR		PEAK ELEC.		VALLEY ELEC		SILENT
	SOLAR		OUTDOOR TEMP		Zone1		Zone2
	INDOOR TEMP		WATER TEMP		WEATHER TEMP		SETTING TEMP
	COOL		HEAT		AUTO		EMERGENCY
	FLOOR PREHEAT		FLOOR DRYING		IBH		DHW PUMP
	ANTIFREEZE		COMPRESSOR		USB		Adjust temp
	TEMP KEEP		TEMP UP		TEMP DOWN		DHW
	FAST DHW		DISINFECT		TBH		RADIATOR
	2-WAY VALVE		KIT ROOM NUMBER		OFF		ON
	FLOOR HEAT				FAN COIL		

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Upward

Confirm

Leftward

Mode

Menu

Rightward

Back

ON/OFF

downward

Note: The product adopts touch buttons. To ensure the validity of operation, please touch the center of each icon.

The wired controller button

Logo	Name	Description
☰	Menu	Enter to menu interface
○	Confirm	setting confirmation
∧	Upward	Upward selection/value increase or content change
∨	Downward	Downward selection/decrease value or content change
↰	Back	Return to the previous level
⊞	Mode	Mode Switch
‹	Leftward	Change selected item
›	Rightward	Change selected item
⏻	ON/OFF	Control unit on/off

Instructions

1 Area selection

In the main interface, the regions from left to right are Zone2, Zone1, and DHW (Domestic hot water). you can switch area by pressing the [<] or [>].
When an area is selected, the area is highlighted (the surrounding is lighted up).

2 Power [⏻]

By pressing the [⏻],you can control the unit on and off, the color of the device turn to bright orange or bright blue (depending on which operation mode you select), which means the heat pump is now working on Heating or Cooling for that area.

3 Mode Setting

By selecting the Zone1 display area and pressing the [⊞], the unit will switch according to the following order:

HEAT → COOL → AUTO → HEAT
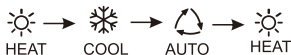
4 Temperature Setting

When the unit is running, press [⌃] or [⌄] to increase or decrease the setting temperature by 1°C or 0.5°C (depending on which temp type you select)

5.Function Setting
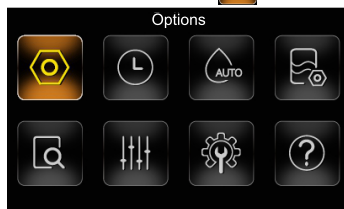
On the home screen, press [☰] to enter the menu page.

Switch to different sub menu by pressing [⌃] or [⌄] or [＜] or [＞].

5.1 Options

On the Menu page, select Options and press [○] to enter Options page.

5.1.1 ECO MODE
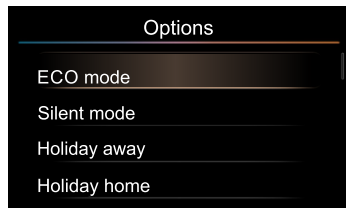
On the Options page, select ECO mode and press the [O] to enter the ECO mode page.
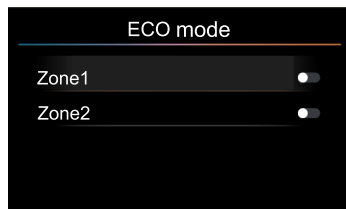
On the ECO mode page, select Zone1 or Zone2 and press the [<] or [>] to set On/Off .
Zone2 appears only when the DOUBLE ZONE is enabled.
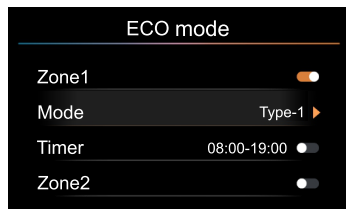
On the ECO page, Select Mode and press the [<] or [>] to select the different level according to the following order:
TYPE-1→TYPE-2→TYPE-3→TYPE-4→ TYPE-5→TYPE-6→TYPE-7→TYPE-8→ TYPE-9→TYPE-1.

ECO mode

Zone1

Mode   Type-1 ▶

Timer   08:00-19:00

Zone2
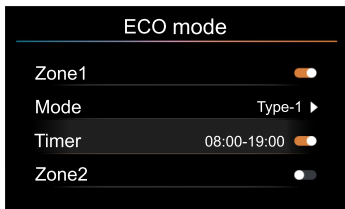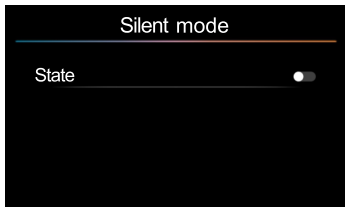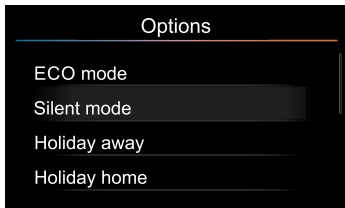
On the ECO mode page, select Timer and press the [<] or [>] to set On/Off. When set Timer off, the unit operates in ECO mode all the way. By pressing [O] and pressing the [<] or [>] to select hour/minute of the start time and hour/minute of the end time, you can change time.

5.1.2 Silent mode

Options

ECO mode

Silent mode

Holiday away

Holiday home

On the Options page, select Silent mode and press the [O] to enter the Silent mode page.

Silent mode

State

On the Silent mode page, select State and press the [<] or [>] to set On/Off.
If the Silent mode is inactive, the page looks as left.

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Silent mode

State

Mode   Type-1 ▶

Timer   00:00-00:00
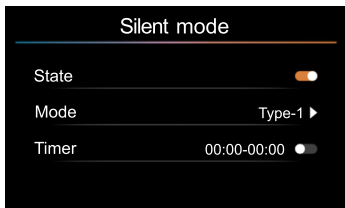
On the Silent mode page, select Mode and press the [<] or [>] to select the different level according to the following order: TYPE-1→TYPE-2→TYPE-1.

Silent mode

State

Mode   Type-1 ▶

Timer   20:00-06:00
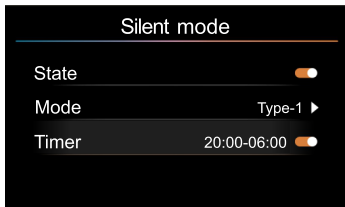
On the Silent mode page, select Timer and press the [<] or [>] to set On/Off. When set Timer off, the unit operates in Silent mode all the way. By pressing [O] and pressing the [<] or [>] to select hour/minute of the start time and hour/minute of the end time, you can change time.

5.1.3 Holiday away

Options

ECO mode

Silent mode

Holiday away

Holiday home
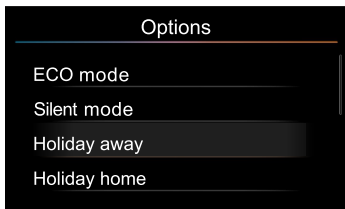
On the Options page, select Holiday away and press the [O] to enter the Holiday away page.

Holiday away

| State | ⬤ |

On the Holiday away page, select STATE and press the [<] or [>] to set On/Off.
If the Holiday away is inactive, the page looks as left.
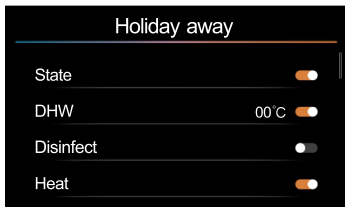
Holiday away

State	⬤
DHW	00°C ⬤
Disinfect	⬤
Heat	⬤

On the Holiday away page, Select DHW and press the [<] or [>] to set On/Off.
On the Holiday away page, Select DHW and press the [O] to activate setting temp,
if DHW is On.

Holiday away

State	⬤
DHW	30°C ⬤
Disinfect	⬤
Heat	⬤

On the Holiday away page, select Disinfect and press the [<] or [>] to set On/Off.

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On the Holiday away page, select Heat and press the [<] or [>] to set On/Off.
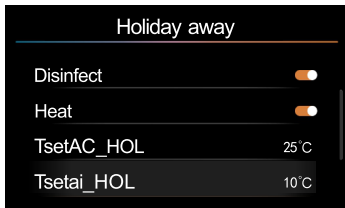
On the Holiday away page, TsetAC_HOL means setting water temperature, and Tsetai_HOL means setting room temperature. Select TsetAC_HOL and press [<] or [>] to set temp.
Select Tsetai_HOL and press [<] or [>] to set temp.
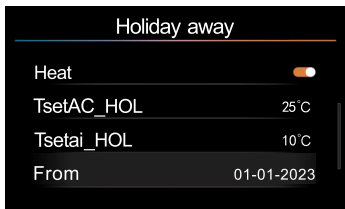
On the Holiday away page, select From and press the [O] to set the start date.
On the Holiday away page, select until and press the [O] to set the end date.
Press the [<] or [>] to select day/month/year, and the [∧] or [∨] to set the date.

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5.1.4 Holiday home

Options
ECO mode
Silent mode
Holiday away
Holiday home
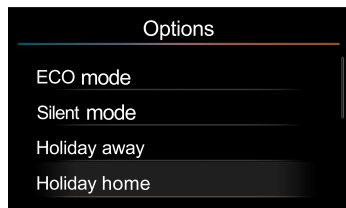
On the OPTIONS page, select Holiday home and press the [O] to enter the Holiday home page.

Zone1 holiday timer ⬤
Zone2 holiday timer ⬤
From 01-01-2023
Util 01-01-2023

On the Holiday home page, select Zone1 holiday timer or Zone2 holiday timer and press the [<] or [>] to set On/Off.
Zone2 holiday timer appears only when the DOUBLE ZONE is enabled.

Holiday home
Zone1 holiday timer ⬤
Zone2 holiday timer ⬤
From 01-01-2023
Util 01-01-2023

On the Holiday home page, select From and press the [O] to set the start date.
On the Holiday home page, select until and press the [O] to set the end date.
Press the [<] or [>] to select day/month /year, and the [⌃] or [⌄] to set the date.

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Timer	
01	00:00-00:00 ●
02	00:00-00:00 ●
03	00:00-00:00 ●
04	00:00-00:00 ●

On the Holiday home page, select Zone1 holiday timer and press the [O] to enter the Zone1 Timer page.
Select Timer and Press the [<] or [>] to set On/Off, select Timer and Press the [O] to Set page.

Set	
Timer	00:00-00:00
AC	●
DHW	●
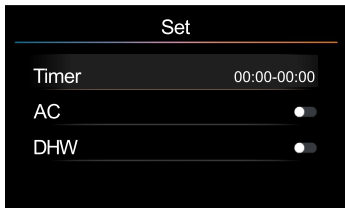
On the Set page, select Timer and press the [O] to active setting the start and end time. Press the [<] or [>] to select hour/minute, and the [∧] or [∨] to set the time.

Set	
Timer	00:00-00:00
AC	●
AC mode	Heat ▶
AC temp	25℃

On the Set page, select AC and Press the [<] or [>] to set On/Off.
On the Set page, select AC mode and Press the [<] or [>] to select AC mode according to the following order: Heat→Cool→ Heat. On the Set page, select AC temp and press the [<] or [>] to set temperature.

Set	
Timer	00:00-00:00
AC	
DHW	
DHW temp	55℃

On the Set page, select DHW and press the [<] or [>] to set On/Off.
On the Set page, select DHW temp and press the [<] or [>] to set water temperature.

5.1.5 Floor preheat

Options
Silent mode
Holiday away
Holiday home
Floor preheat
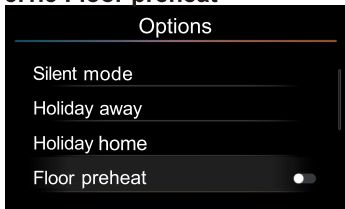
On the Options page, select Floor preheat and press the [<] or [>] to set On/Off.

5.1.6 Floor drying

Options
Holiday away
Holiday home
Floor preheat
Floor drying
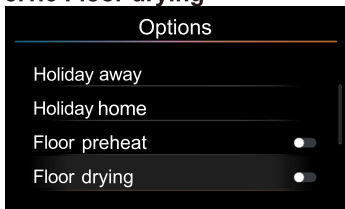
On the options page, select Floor drying and press the [<] or [>] to set On/Off.

5.1.7 Auto reload
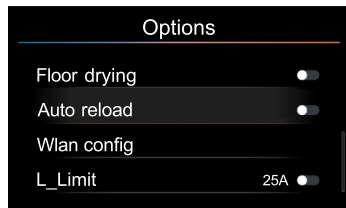
On the options page, select Auto reload and press the [<] or [>] to set On/Off.

5.1.8 Wlan config
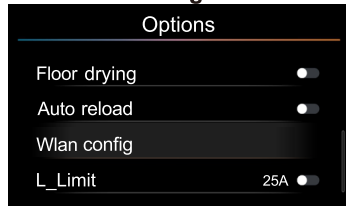
The wird controller realizes intelligent control with a built-in module, which receives control signal from the APP.
Wlan equipment is connected normally, On the options page, select Wlan Config and press the [O] to enter Wlan Config.

Press the [<] or [>] to select Yes/No.
Select "Yes" to reset Wlan.

5.1.9 Modbus
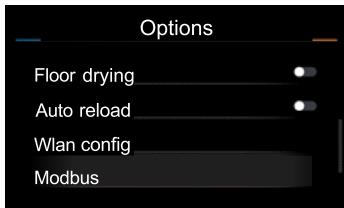
On the Options page, select Modbus and press the [O] to enter the Modbus page.
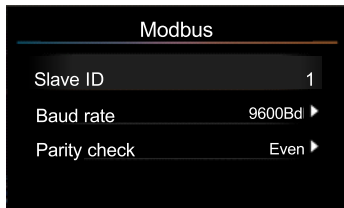
On the Modbus page, select Slave ID and press the [<] or [>] to set it.
On the Modbus page, select Baud rate and press the [<] or [>] to set it.
On the Modbus page, select Parity check and press the [<] or [>] to set it.

5.1.10 I_Limit
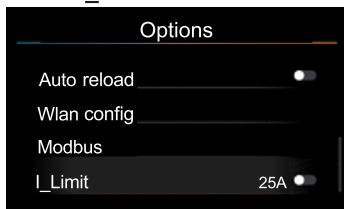
On the Options page, Select I_Limit and press the [<] or [>] to set On/Off.
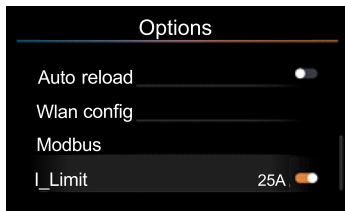
On the Options page, Select I_Limit and press the [O] to activate current settting , if I_Limit is On.

5.2 Booking and schedule
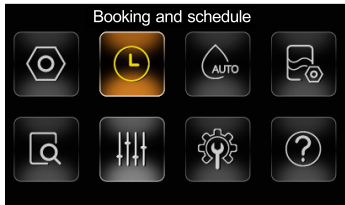
On the Menu page, select Booking and schedule and press the [O] to enter the Booking and schedule page.
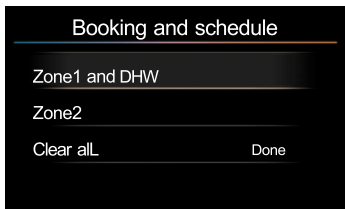
On the Booking and schedule page, select Zone1 and DHW or Zone2 and press the [O] to set.
Zone2 appears only when the DOUBLE ZONE is enabled.

5.2.1 TEMP BOOKING

Zone1 and DHW

Temp booking
Time booking
Schedule
Add schedule
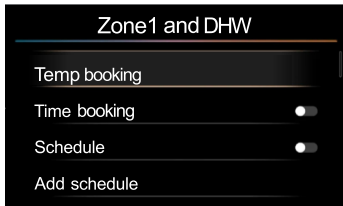
On the Zone1 and DHW page, select Temp booking and press the [O] to enter the Temp booking page.

Temp booking
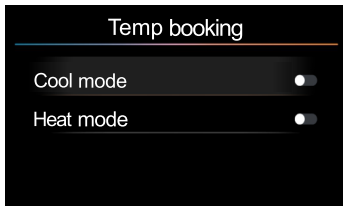
Cool mode
Heat mode

On the Temp booking page, select Cool mode/Heat mode and press the [O] to enter the Cool mode/Heat mode page.

5.2.2 Time booking

Zone1 and DHW

Temp booking
Time booking
Schedule
Add schedule
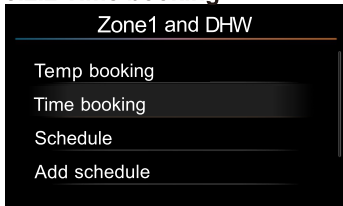
On the Zone1 and DHW page, select Time booking and press the [O] to enter the Time booking page.

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Time booking	
01	00:00-00:00,heat,25℃,55℃ 🔵
02	00:00-00:00 ⚪
03	00:00-00:00 ⚪
04	00:00-00:00 ⚪
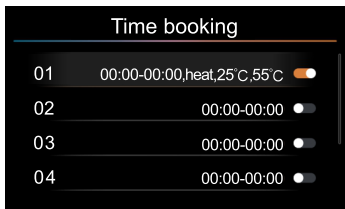
On the TIME BOOKING page, select any one and press the [O] to enter the Set page. Switch to different sub menu by pressing [∧] or [∨].

Set	
Timer	00:00-00:00
AC	🔴
AC mode	Heat ▶
AC temp	25℃

On the Set page, select Timer and press the [O] to set the start and end time.
Press the [<] or [>] to select hour/minute, and the [∧] or [∨] to set the time.

Set	
Timer	00:00-00:00
AC	🔴
AC mode	Heat ▶
AC temp	25℃

On the Set page, select AC and Press the [<] or [>] to set On/Off.
On the Set page, select AC mode and Press the [<] or [>] to select AC mode according to the following order: Heat→Cool→ Heat. On the Set page, select AC temp and Press the [<] or [>] to set temperature.

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Set	
Timer	00:00-00:00
AC	●
DHW	●
DHW temp	55℃

On the Set page, select DHW and Press the [<] or [>] to set On/Off.
On the Set page, select DHW temp and Press the [<] or [>] to set water temperature.

5.2.3 Schedule

Schedule list	
01	00:00-00:00 ●
02	00:00-00:00 ●
03	00:00-00:00 ●
04	00:00-00:00 ●
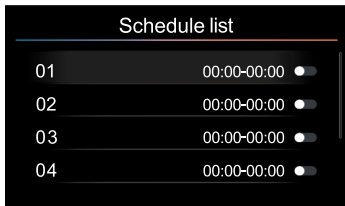
On the Zone1 and DHW page, select Schedule and press the [O] to enter the Schedule list page.

Change schedule	
Timer	00:00-00:00
AC	●
AC mode	Heat ▶
AC temp	25℃
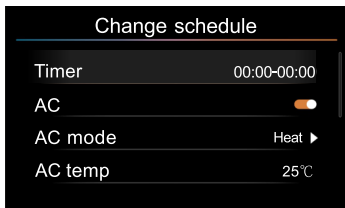
On the LIST page, select any one and press the [O] to enter the Change schedule page.

Change schedule

DHW

Sun Mon Tue Wed Thu Fri Sat
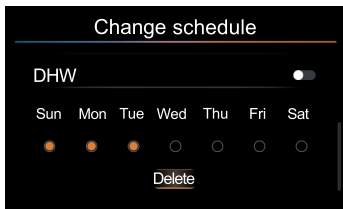
Delete

Select WEEK and press the [O] whether to select.

Sure delete ?

No   Yes
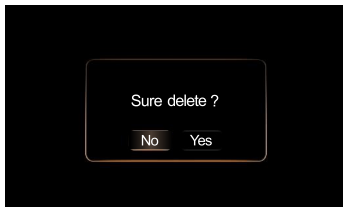
Select Delete and press the [O] ,the following prompts will appear. Press the [<] or [>] to select Yes/No.

5.2.4 Add schedule

Add schedule

Timer   00:00-00:00

AC

DHW

Sun Mon Tue Wed Thu Fri Sat
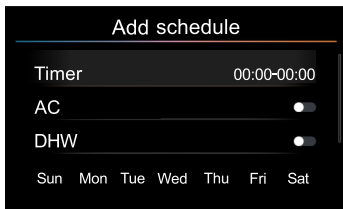
On the Zone1 and DHW page, select Add schedule and press the [O] to enter the Add schedule page.
The setting method is the same as the schedule setting.

When the settings are completed, select SAVE by pressing the [⌄], and press the [O], the following prompts will appear.
Select Yes, then the settings are valid, otherwise, it does not take effect.

5.2.5 schedule check
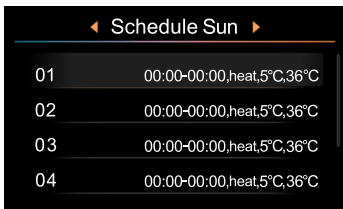
On the Zone1 and DHW page, select Schedule check and press the [O] to enter the Schedule check page.
On the Schedule check page, switch weekly schedule by press the [<] or [>].
The weekly schedule is displayed on the title bar, and the page is displayed according to the content of the schedule setting.
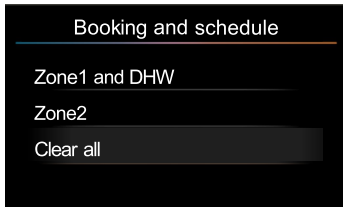
On the Booking and schedule page, select Clear all and press the [O] , the following prompts will appear.

Press the [<] or [>] to select Yes/No.

5.3 Weather Temp
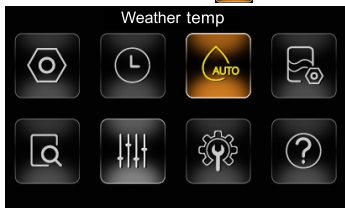
On the Menu page, Select Weather Temp, press the [o] to enter the Weather Temp page.
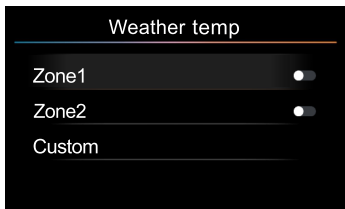
On the Weather Temp page, select Zone1 and press the [<] or [>] to set On/Off.

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Weather temp	
Zone1	🔘
Mode	Type-1 ▶
Timer	08:00-19:00 🔘
Zone2	🔘
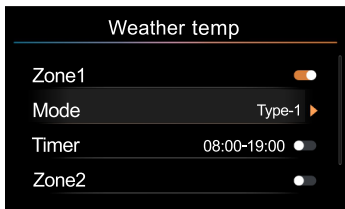
On the Weather Temp page, Select MODE and press the [<] or [>] to select the different level according to the following order: TYPE-1→TYPE-2→TYPE-3→TYPE-4→ TYPE-5→TYPE-6→TYPE-7→TYPE-8→ Custom→TYPE-1.

Weather temp	
Mode	Custom ▶
Timer	08:00-19:00 🔘
Zone2	🔘
Custom	
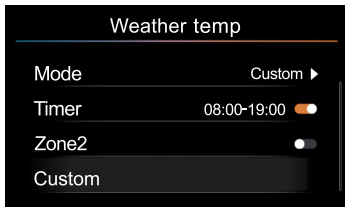
For Custom curve, you can customize the curve according to your demand.

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Custom

	Tao_H1	Tao_H2	TsetAC_H1	TsetAC_H2
Heat	-5℃	07℃	35℃	28℃
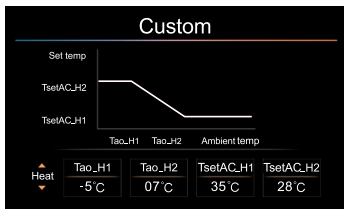
Take heating as example:
TsetAC_H1 and TsetAC_H2 is the set temperature for heating. Tao_H1 and Tao_H2 is the ambient temperature for heating.
For cooling, the corresponding parameter is TsetAC_C1, TsetAC_C2, Tao_C1, Tao_C2.
If TsetAC_H2<TsetAC_H1 or Tao_H1>Tao_H2, the system will switch them automatically.

E.g.
TsetAC_H1=35℃，TsetAC_H2=28℃，Tao_H1=-5℃，Tao_H2=7℃.
When Tao(outdoor ambient temperature)= 7℃, then Tset (set temperature)= 28℃.
When Tao(outdoor ambient temperature)= -5℃, then Tset (set temperature)= 35℃.
When Tao(outdoor ambient temperature)= -2℃, then Tset (set temperature)= 33℃.
When Tao(outdoor ambient temperature)= 3℃, then Tset (set temperature)= 30℃.

Weather temp

Zone1	🔘
Mode	Type-1 ▶
Timer	08:00-19:00 🔘
Zone2	🔘
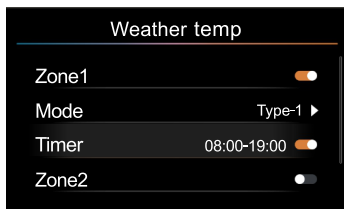
On the Weather Temp page, select Timer and press the [<] or [>] to set On/Off.
When set Timer off, the unit operates in Weather Temp all the way.
By pressing [O] and pressing the [<] or [>] to select hour/minute of the start time and hour/minute of the end time, you can change time.

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5.4 Domestic Hot Water(DHW)
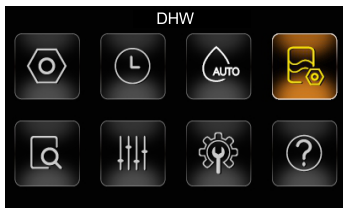
On the Menu page, select Domestic Hot Water and press the [o] to enter the Domestic Hot Water page.

5.4.1 Disinfection setting
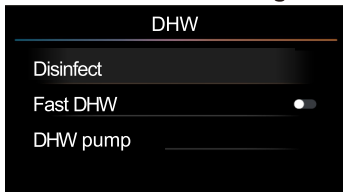
On the DHW page, select Disinfect and press the [o] to enter the Disinfect page.
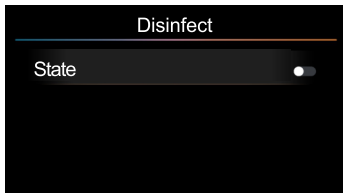
On the Disinfect page,Select State and press the [<] or [>] to set On/Off.
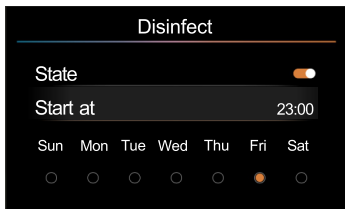
Select Start at and press the [O] to start the time setting.
Press the [<] or [>] to select hour/minute, and press the [<] or [>] to set the clock. Select Week and press the [O] whether to select.

5.4.2 Fast DHW setting
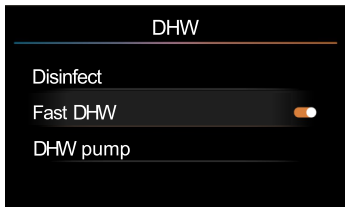
On the DHW page, select Fast DHW and Press the [<] or [>] to set On/Off.
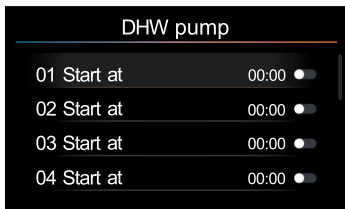
On the DHW page, select DHW pump and press the [O] to enter the DHW pump page.

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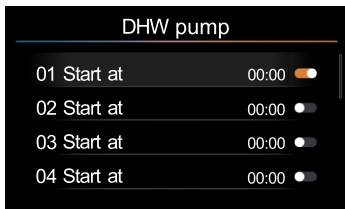
Select Start at and Press the [O] to active start time setting, then press the [<] or [>] to select hour/minute, and press the [∧] or [∨] to change the clock number.

5.5 Unit status

On the MENU page, select Unit status and press the [O] to enter the Unit status page.
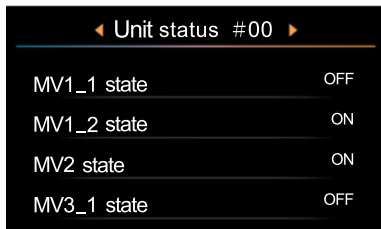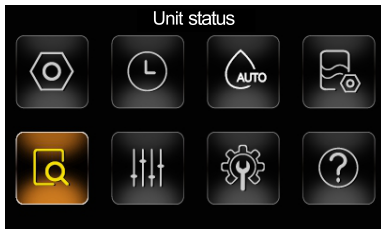
5.6 HMI config ||||

On the Menu page, select HMI config and press the [O] to enter the HMI config page.

5.6.1 Clock
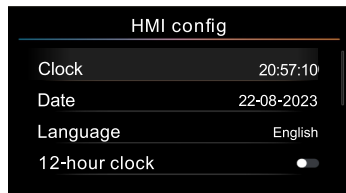
On the HMI config page, select Clock and press the [O] to set the time. Press the [<] or [>] to select hour/minute/second, and press the [∧] or [∨] to set the clock.

5.6.2 Date
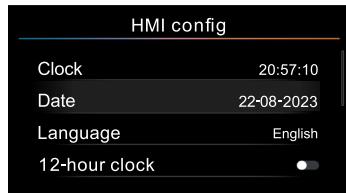
On the HMI config page, select Date and press the [O] to set Date.
Press the [<] or [>] to select day/month /year, and the [∧] or [∨] to set the date.

5.6.3 Language

On the HMI config page, select Language and press the [<], [>], [⌃] or [⌄] to select different language.

5.6.4 12-hour clock
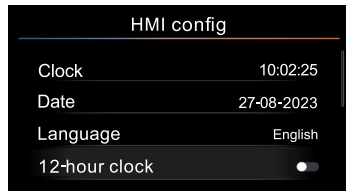
On the HMI config page, select 12-hour clock and press the [<] or [>] to set On/Off.

5.6.5 Backlight
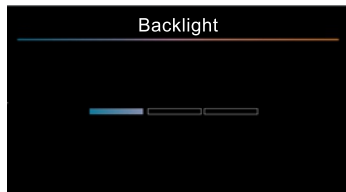
On the HMI config page, select Backlight and press the [O] to enter the Backlight page. On the Backlight page, press the [<] or [>] to set screen brightness

5.6.6 Buzzer
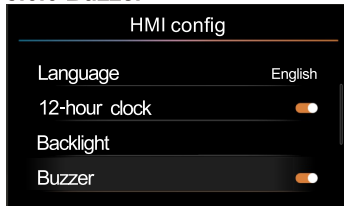
On the HMI config page, select Buzzer and press the [<] or [>] to set On/Off.

On the HMI config page, select Screen lock and press the [<] or [>] to set On/Off. On the HMI Config page, select Screen lock time and press the [<] or [>] to set the time. The time range is 10-120s (default 60s).

5.7 For Serviceman
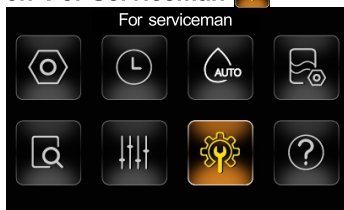
On the Menu page, select For Serviceman and press the [O] to enter the For Serviceman page. Initial password is "1234".

Enter For Serviceman page requires the password, and this only for serviceman.

5.8 USB

When a USB signal is detected, serviceman can operate system update, import config data, and export config data after entering right password. Initial password is "1120".

WIFI Module Instruction Manual

1. APP Download

The control software can be downloaded and installed as follows.

a) For mobile devices such as phones and tablets, search and download " Thaleos Connect " from Google Play or App Store and install it.

b) You can also scan the "QR code" below, which will automatically direct you to the download interface for installing the software.

c) Follow the instructions on the app step by step.

2. APP Configuration

a) Device reset: Confirm after selecting "OPTIONS" in the "Menu" of the wired controller, select "WLAN CONFIG" and confirm, and confirm again after a pop-upbox appears;

b) Open the app, tap the "+" icon in the upper right corner, select "Scan," and scan the network configuration QR code.

c) After scanning successfully, the air conditioner product name will appear. Tap "Add."

d) Enter the Wi-Fi account and password, then tap "Next." Note: The Wi-Fi connected to your phone must be 2.4GHz Tap "Next" and follow the instructions step by step.

e) A prompt will appear indicating the need to connect to the device's hotspot.

f) The hotspot name follows the format : Thaleosconnect - XXXX." After connecting your phone to the hotspot, return to the app and proceed to the next step.

g) Wait for the network configuration to complete. Once successful, tap "Finish."
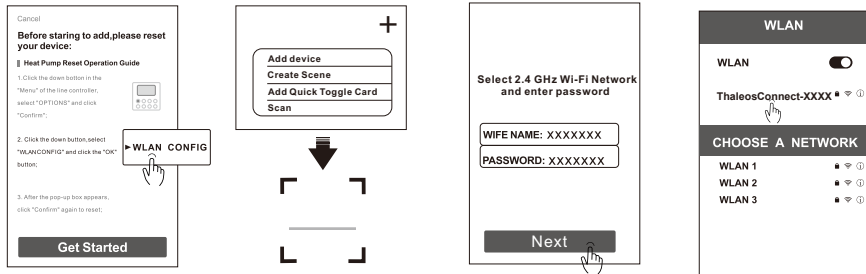
(Modbus)

1.Modbus introduction

Product can be used to BMS system by Modbus RTU protocol.255 Slave ID can be chosen. Max 1 million control order can be send to a indoor unit through the gateway, please make sure no exceed this limit.

2.Signal port

2 core signal wiring(shielding) be connected to gateway's RS485 and central controller or BMS system

Note: the power cable and communication cable of the gateway must be routed separately. Otherwise, the gateway may be damaged.

3.Anti-interference-Matching resistance setting

in order to eliminate the signal reflection caused by impedance mismatch or discontinuity in long-distance communication, when the communication distance exceeds 300m,a terminal matching resistance must be configured, that is, the matching resistance should be add on the both ends of the RS485 communication, so network is effectively connected.

4.Function code

The following function codes are supported. If the function code outside this table is received, it will be regarded as illegal function code and abnormal code will be fed back.

Function code	Definition	Broadcast
0×03(03)	Read holding register	/
0×06(06)	Preset single holding register	Support
0×10(16)	Preset multiple holding register	Support

5.Address

Address	Content	Access type(W/R)	Definition	Type	Unit
0	Indoor unit ON/OFF setting	W/R	0:OFF, 1:ON	Signed word	/
1	Indoor unit running mode	W/R	0: Auto, 1: cooling, 4: heating	Signed word	/
2	Indoor unit setting temperature	W/R	cooling:[5,25]°C, heating:[25,80]°C	Signed word	0.1°C
3	Hot water ON/OFF setting	W/R	0:OFF, 1:ON	Signed word	/
4	Hot water setting temperature	W/R	[30,75]°C	Signed word	0.1°C
5	ECO mode	W/R	0: Cancel ECO 1: ECO mode1 … 9: ECO mode9	Signed word	/
6	Weather temp	W/R	0: cancel automatic water temperature 1: Automatic water temperature mode1 … 9: Automatic water temperature mode 9	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
7	DHW Pump	W/R	1:ON(after opening the water module automatically closes)	Signed word	/
8	Fast DHW	W/R	0:OFF, 1:ON	Signed word	/
9	Disinfect	W/R	1:ON(After opening the water module automatically closes)	Signed word	/
10	Air purge	W/R	0:OFF, 1:ON	Signed word	/
11	Floor drying	W/R	0:OFF, 1:ON	Signed word	/
12	Floor preheat	W/R	0:OFF, 1:ON	Signed word	/
13	Silent mode	W/R	0:OFF, 1:type-1, 2:type-2	Signed word	/
14	Zone1 Room temp set	W/R	Cooling/heating: [16,32]°C	Signed word	0.1°C
15	Zone2 heat mode ON/OFF	W/R	0:OFF, 1:ON	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
16	Zone2 heating target water temp set	W/R	[25,45]℃	Signed word	0.1℃
17	Zone2 ECO	W/R	0: Cancel ECO 1: ECO mode1 … 9: ECO mode9	Signed word	/
18	Zone2 room temp set	W/R	Cooling/heating: [16,32]℃	Signed word	0.1℃
19	Weather temp mode (Zone2)	W/R	0:cancel automatic water temperature 1:Automatic water temperature mode1 … 8:Automatic water temperature mode 8	Signed word	/
20	I_LIMIT	W/R	0:OFF, 1:ON	Signed word	/
21	I_LIMIT SET	W/R	[0-50]A	Signed word	1A

Address	Content	Access type(W/R)	Definition	Type	Unit
40	ODU CAP	R	/	Signed word	100W
41	ODU operate mode	R	0:stop, 1:Cooling, 2:heating, 3:hot water	Signed word	/
42	Comp frequency	R	/	Signed word	0.1rps
43	Fan speed	R	/	Signed word	1rpm
44	Expansion valve	R	/	Signed word	1pls
45	Comp current	R	/	Signed word	0.1A
46	Target frequency	R	/	Signed word	0.1rps
47	DC bus voltage	R	/	Signed word	1V
48	INV input current	R	/	Signed word	0.1A

Address	Content	Access type(W/R)	Definition	Type	Unit
49	INV module temp	R	/	Signed word	0.1℃
50	Suction temp	R	/	Signed word	0.1℃
51	Discharge temp	R	/	Signed word	0.1℃
52	Exchanger temp	R	/	Signed word	0.1℃
53	Outdoor temp	R	/	Signed word	0.1℃
54	Comp pressure	R	/	Signed word	1kpa
55	MV1_1	R	0:OFF, 1:ON	Signed word	/
56	MV1_2	R	0:OFF, 1:ON	Signed word	/
57	MV2	R	0:OFF, 1:ON	Signed word	/
58	pump-I	R	0:OFF, 1:ON	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
59	pump-O	R	0:OFF, 1:ON	Signed word	/
60	pump-D	R	0:OFF, 1:ON	Signed word	/
61	Pipe backup heater	R	0:OFF, 1:ON	Signed word	/
62	Tank backup heater	R	0:OFF, 1:ON	Signed word	/
63	Two_B	R	/	Signed word	0.1°C
64	Plate w - in temp	R	/	Signed word	0.1°C
65	Plate w - out temp	R	/	Signed word	0.1°C
66	Water tank temp	R	/	Signed word	0.1°C
67	Plate F - OUT temp	R	/	Signed word	0.1°C
68	Plate F - IN temp	R	/	Signed word	0.1°C

Address	Content	Access type(W/R)	Definition	Type	Unit
69	Room temp (zone1)	R	/	Signed word	0.1℃
70	ODU error code	R	[0,255]. For example,0×A1 indicates that A1 is faulty. Communication data B corresponds to display character H Communication data D corresponds to display character J	Signed word	/
71	IDU error code	R		Signed word	/
72	ODU software	R	BCD code, 0x10 indicates V1.0	Signed word	/
73	IDU software	R		Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
74	MV3_1	R	0:OFF, 1:ON	Signed word	/
75	MV3_2	R	0:OFF, 1:ON	Signed word	/
76	PUMP - M	R	0:OFF, 1:ON	Signed word	/
77	PUMP - S	R	0:OFF, 1:ON	Signed word	/
78	Plate E - heater	R	0:OFF, 1:ON	Signed word	/
79	ET E - heater	R	0:OFF, 1:ON	Signed word	/
80	GAS	R	0:OFF, 1:ON	Signed word	/
81	Target water temp(Zone1)	R	Main zone current target water temp	Signed word	0.1°C
82	Target water temp (Zone2)	R	Second zone current target water temp	Signed word	0.1°C

Address	Content	Access type(W/R)	Definition	Type	Unit
83	Buffer tank 1 temp	R	Current buffer tank 1 temp	Signed word	0.1℃
84	Floor heating inlet water temp	R	Current floor heating inlet water temp	Signed word	0.1℃
85	Solar temp	R	Current water flow	Signed word	0.1℃
86	Water flow	R	Current water flow	Signed word	0.01m³/h
87	Total power consum of today	R	Total power consum of today	Unsigned Word	1KWh
88	Defrost	R	0: NON-defrost, 1: defrosting	Signed word	/
89	Chassis heater	R	0:OFF, 1:ON	Signed word	/
90	Wired controller software	R	Current version	Signed word	/
91	Unit capacity	R	Current unit capacity	Unsigned Word	0.01kW
92	Average unit capacity of 1h	R	Current average unit capacity of 1h	Unsigned Word	0.01kW

Address	Content	Access type(W/R)	Definition	Type	Unit
93	power	R	Current power	Unsigned Word	0.01kW
94	Average power of 1h	R	Current average power of 1h	Unsigned Word	0.01kW
95	cop	R	Current cop	Unsigned Word	0.01
96	Average cop of 1h	R	Current Average cop of 1h	Unsigned Word	0.01
97	Room temp (Zone2)	R	/	Signed word	0.1℃
98	Current limit percent	R	[0,100]%	Unsigned Word	1
99	COMP RUN TIME	R	/	Unsigned Word	1min
100	Buffer tank2 temp	R	Current buffer tank2 temp	Signed word	0.1℃
200	DHW mode	W/R	0:OFF, 1:ON	Signed word	/
201	Disinfect	W/R	0:OFF, 1:ON	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
202	DHW priority	W/R	0:OFF, 1:ON	Signed word	/
203	DHW pump	W/R	0:OFF, 1:ON	Signed word	/
204	Tao_DHWMAX	W/R	$[35,43]^\circ C$	Signed word	$1^\circ C$
205	Tao_DHWMIN	W/R	$[-25,5]^\circ C$	Signed word	$1^\circ C$
206	Twt_DI	W/R	$[60,70]^\circ C$	Signed word	$1^\circ C$
207	t_TBH_DELAY	W/R	$[0,240]$ min	Signed word	1min
208	t_DI_HIGHTEMP	W/R	$[5,60]$ min	Signed word	1min
209	t_DI_MAX	W/R	$[90,300]$ min	Signed word	10min
210	t_DHWHP_RESTRICT	W/R	$[10,600]$ min	Signed word	10min
211	t_DHWHP_max	W/R	$[10,600]$ min	Signed word	10min

Address	Content	Access type(W/R)	Definition	Type	Unit
212	DHW PUMP RUN TIME	W/R	[5,120] min	Signed word	5min
213	COOL MODE	W/R	0:OFF, 1:ON	Signed word	/
214	TAO_CMAX	W/R	[35,60]°C	Signed word	1°C
215	TAO_CMIN	W/R	[−5,25]°C	Signed word	1°C
216	Tset AC_C1	W/R	[5,25]°C	Signed word	1°C
217	Tset AC_C2	W/R	[5,25]°C	Signed word	1°C
218	Tao_C1	W/R	[−5,46]°C	Signed word	1°C
219	Tao_C2	W/R	[−5,46]°C	Signed word	1°C
220	dTSC-OFF	W/R	[2,10]°C	Signed word	1°C
221	dTSC-ON	W/R	[2,10]°C	Signed word	1°C

Address	Content	Access type(W/R)	Definition	Type	Unit
222	ZONE1 C_EMISSION	W/R	1:RAD, 2:FLH, 3:FCU	Signed word	/
223	ZONE2 C_EMISSION	W/R	1:RAD, 2:FLH, 3:FCU	Signed word	/
224	HEAT MODE	W/R	0:OFF, 1:ON	Signed word	/
225	Tao_HMAX	W/R	[20,35]°C	Signed word	1°C
226	Tao_HMIN	W/R	[−25,15]°C	Signed word	1°C
227	TsetAC_H1	W/R	[25,60]°C	Signed word	1°C
228	TsetAC_H2	W/R	[25,60]°C	Signed word	1°C
229	Tao_H1	W/R	[−25,35]°C	Signed word	1°C
230	Tao_H2	W/R	[−25,35]°C	Signed word	1°C
231	dTSH-OFF	W/R	[2,10]°C	Signed word	1°C

Address	Content	Access type(W/R)	Definition	Type	Unit
232	dTSH-ON	W/R	[0,10]℃	Signed word	1℃
233	ZONE1 H_EMISSION	W/R	1:RAD, 2:FLH, 3:FCU	Signed word	/
234	ZONE2 H_EMISSION	W/R	1:RAD, 2:FLH, 3:FCU	Signed word	/
235	Tao_AUTOCMIN	W/R	[20,35]℃	Signed word	1℃
236	Tao_AUTOCMAX	W/R	[10,17]℃	Signed word	1℃
237	WATER FLOW TEMP	W/R	0:OFF, 1:ON	Signed word	/
238	ROOM TEMP (ZONE1)	W/R	0:OFF, 1:ON	Signed word	/
239	DOUBLE ZONE	W/R	0:OFF, 1:ON	Signed word	/
240	ROOM THERMOSTAT	W/R	0:OFF, 1:ON	Signed word	/
241	INNER BACKUP	W/R	0:OFF, 1:ON	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
242	dTSDHW_ON	W/R	[2,10]°C	Signed word	1°C
243	Tao_IBH_ON	W/R	[-15,10]°C	Signed word	1°C
244	Tao_TBH_ON	W/R	[-5,20]°C	Signed word	1°C
245	Tao_AHS_ON	W/R	[-25,10]°C	Signed word	1°C
246	t_IBH_DELAY	W/R	[15,120]min	Signed word	5min
247	t_AHS_DELAY	W/R	[5,120]min	Signed word	5min
248	dTwi_FLH_ON	W/R	[2,10]°C	Signed word	1°C
249	dTwi_FLH_OFF	W/R	[-10,-2]°C	Signed word	1°C
250	Tset_FLH	W/R	[30,35]°C	Signed word	1°C
251	Two_H_H.A	W/R	[25,35]°C	Signed word	1°C

Address	Content	Access type(W/R)	Definition	Type	Unit
252	Twt_DHW_H.A	W/R	[30,35]°C	Signed word	1°C
253	Tset_B_PREHEATING	W/R	[30,45]°C	Signed word	1°C
254	t_fristFH	W/R	[24,72]Hrs	Signed word	1Hour
255	t_DRYPEAK	W/R	[35,45]°C	Signed word	1°C
256	t_DRYUP	W/R	[2,8]days	Signed word	1day
257	t_HIGHPEAK	W/R	[1,5]days	Signed word	1day
258	t_DRYDOWN	W/R	[0,5]days	Signed word	1day
259	Twi_FLH	W/R	0:OFF, 1:ON	Signed word	/
260	Twt_BT1	W/R	0:OFF, 1:ON	Signed word	/
261	EXPANSION BOARD	W/R	0:OFF, 1:ON	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
262	SMART GRID	W/R	0:OFF, 1:ON	Signed word	/
263	SOLAR INPUT	W/R	0:NON, 1:Tsolar, 2:SL1SL2	Signed word	/
264	SMART GRID RUN TIME	W/R	[0,24] Hrs	Signed word	1Hour
265	AUTO RELOAD	W/R	0:YES, 1:NO	Signed word	/
266	E-HEATER1 POWER	W/R	[0,40] kw	Signed word	0.5KW
267	E-HEATER2 POWER	W/R	[0,40] kw	Signed word	0.5KW
268	TBH	W/R	0:OFF, 1:ON	Signed word	/
269	TANK E-HEATER POWER	W/R	[0,40] kw	Signed word	0.5KW
270	MODE_ PUMP_FLH	W/R	0:Mode1, 1:Mode2	Signed word	/
271	POWER INPUT LIMITATION	W/R	0-100%	Signed word	10%

Address	Content	Access type(W/R)	Definition	Type	Unit
272	TIME ADJUST	W/R	[1,60] min	Signed word	1min
273	PER START	W/R	0-100%	Signed word	20%
274	Tao_PUMP_ON	W/R	[-25,10]°C	Signed word	1°C
275	WC_T_ROOM	W/R	0:IDU, 1:WIRED CONTROLLER	Signed word	/
276	MODE_PUMP_I	W/R	0:NORMAL, 1:EMERGENCY	Signed word	/
277	TH_INITIAL_FLH	W/R	[25,40]°C	Signed word	1°C
278	TH_INITIAL_RAD	W/R	[35,60]°C	Signed word	1°C
279	TH_INITIAL_FCU	W/R	[30,50]°C	Signed word	1°C
280	TC_INITIAL_FCU	W/R	[5,25]°C	Signed word	1°C
281	t_REFRESH	W/R	[1,30]min	Signed word	1min

Address	Content	Access type(W/R)	Definition	Type	Unit
282	TC_ADJUST_UP	W/R	[0,15]°C	Signed word	1°C
283	TC_ADJUST_DOWN	W/R	[-15,0]°C	Signed word	1°C
284	TH_ADJUST_UP	W/R	[0,15]°C	Signed word	1°C
285	TH_ADJUST_DOWN	W/R	[-15,0]°C	Signed word	1°C
286	TH_MAX_FLH	W/R	[35,60]°C	Signed word	1°C
287	TH_MIN_FLH	W/R	[25,35]°C	Signed word	1°C
288	TH_MAX_RAD	W/R	[35,60]°C	Signed word	1°C
289	TH_MIN_RAD	W/R	[25,35]°C	Signed word	1°C
290	TH_MAX_FCU	W/R	[35,60]°C	Signed word	1°C
291	TH_MIN_FCU	W/R	[25,35]°C	Signed word	1°C

Address	Content	Access type(W/R)	Definition	Type	Unit
292	dTRC_OFF	W/R	[-5,0]°C	Signed word	0.1°C
293	dTRC_ON	W/R	[0, 5]°C	Signed word	0.1°C
294	dTRH_OFF	W/R	[0, 5]°C	Signed word	0.1°C
295	dTRH_ON	W/R	[-5,0]°C	Signed word	0.1°C
296	t_PUMP_ON	W/R	[1,10] min	Signed word	1min
297	t_PUMP_OFF	W/R	[3,30] min	Signed word	1min
298	IBH POWER SELECTION	W/R	1:3kW, 2:6kW, 3:9kW	Signed word	3kW
299	TC_CORRECT	W/R	[-5,5]°C	Signed word	0.5°C
300	TH_CORRECT	W/R	[-5,5]°C	Signed word	0.5°C
301	TC_INTERVAL	W/R	[0. 1,3]°C	Signed word	0.1°C

Address	Content	Access type(W/R)	Definition	Type	Unit
302	TH_INTERVAL	W/R	[0. 1,3]$^{\circ}$C	Signed word	0.1°C
303	TW_AV	W/R	[0. 1,3]$^{\circ}$C	Signed word	0.1°C
304	ROOM TEMP (ZONE2)	W/R	0:OFF, 1:ON	Signed word	/
305	Twt_BT2	W/R	0:OFF, 1:ON	Signed word	/
306	MODE_GAS	W/R	HEAT& DHW/HEAT/DHW	Signed word	/
307	Tao_(-∞, -16)_L	W/R	TYPE1-TYPE8	Signed word	/
308	Tao_(-∞, -16)_H	W/R	TYPE1-TYPE8	Signed word	/
309	Tao_ [-16, -8)_L	W/R	TYPE1-TYPE8	Signed word	/
310	Tao_ [-16, -8)_H	W/R	TYPE1-TYPE8	Signed word	/
311	Tao_ [-8, 0)_L	W/R	TYPE1-TYPE8	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
312	Tao_ [-8, 0)_H	W/R	TYPE1-TYPE8	Signed word	/
313	Tao_ [0, 8)_L	W/R	TYPE1-TYPE8	Signed word	/
314	Tao_ [0, 8)_H	W/R	TYPE1-TYPE8	Signed word	/
315	Tao_ [8, 16)_L	W/R	TYPE1-TYPE8	Signed word	/
316	Tao_ [8, 16)_H	W/R	TYPE1-TYPE8	Signed word	/
317	Tao_ [16, +∞)_L	W/R	TYPE1-TYPE8	Signed word	/
318	Tao_ [16, +∞)_H	W/R	TYPE1-TYPE8	Signed word	/
319	Tao_(-∞, 15)_L	W/R	TYPE1-TYPE8	Signed word	/
320	Tao_(-∞, 15)_H	W/R	TYPE1-TYPE8	Signed word	/
321	Tao_ [15, 22)_L	W/R	TYPE1-TYPE8	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
322	Tao_ [15, 22)_H	W/R	TYPE1-TYPE8	Signed word	/
323	Tao_ [22, 30)_H	W/R	TYPE1-TYPE8	Signed word	/
324	Tao_ [22, 30)_H	W/R	TYPE1-TYPE8	Signed word	/
325	Tao_ [30, +∞)_L	W/R	TYPE1-TYPE8	Signed word	/
326	Tao_ [30, +∞)_H	W/R	TYPE1-TYPE8	Signed word	/
327	V_ADJUST	W/R	1-100%	Signed word	1%
328	dTSH_ADJUST	W/R	0.2-3℃	Signed word	0.2℃
329	V_INITIAL	W/R	2-8V	Signed word	1V
330	V_MIN	W/R	0-4V	Signed word	1V
331	V_MAX	W/R	5-10V	Signed word	1V

Address	Content	Access type(W/R)	Definition	Type	Unit
332	t_DURATION	W/R	1-30min	Signed word	1min
333	BACKUP POWER	W/R	0:OFF, 1:ON	Signed word	/
334	Static pressure	W/R	0:OFF, 1:ON	Signed word	/
335	Cascade	W/R	0:OFF, 1:ON	Signed word	/
336	t_Tao_FRESH_C	W/R	1-30min	Signed word	1min
337	t_Tao_FRESH_H	W/R	1-30min	Signed word	1min
338	kit	W/R	0:OFF, 1:ON	Signed word	/
339	Room1	W/R	0:OFF, 1:ON	Signed word	/
340	Room2	W/R	0:OFF, 1:ON	Signed word	/
341	Room3	W/R	0:OFF, 1:ON	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
342	Room4	W/R	0:OFF, 1:ON	Signed word	/
343	Room5	W/R	0:OFF, 1:ON	Signed word	/
344	Room6	W/R	0:OFF, 1:ON	Signed word	/
345	Room7	W/R	0:OFF, 1:ON	Signed word	/
346	Room8	W/R	0:OFF, 1:ON	Signed word	/
347	ROOM1 H_EMISSION	W/R	1:RAD, 2:FLH 3:FCU	Signed word	/
348	ROOM2 H_EMISSION	W/R	1:RAD, 2:FLH 3:FCU	Signed word	/
349	ROOM3 H_EMISSION	W/R	1:RAD, 2:FLH 3:FCU	Signed word	/
350	ROOM4 H_EMISSION	W/R	1:RAD, 2:FLH 3:FCU	Signed word	/
351	ROOM5 H_EMISSION	W/R	1:RAD, 2:FLH 3:FCU	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
352	ROOM6 H_EMISSION	W/R	1:RAD, 2:FLH 3:FCU	Signed word	/
353	ROOM7 H_EMISSION	W/R	1:RAD, 2:FLH 3:FCU	Signed word	/
354	ROOM8 H_EMISSION	W/R	1:RAD, 2:FLH 3:FCU	Signed word	/
355	KIT_T_ROOM1	W/R	0:WIRED, 1:WIRELESS	Signed word	/
356	KIT_T_ROOM2	W/R	0:WIRED, 1:WIRELESS	Signed word	/
357	KIT_T_ROOM3	W/R	0:WIRED, 1:WIRELESS	Signed word	/
358	KIT_T_ROOM4	W/R	0:WIRED, 1:WIRELESS	Signed word	/
359	KIT_T_ROOM5	W/R	0:WIRED, 1:WIRELESS	Signed word	/
360	KIT_T_ROOM6	W/R	0:WIRED, 1:WIRELESS	Signed word	/
361	KIT_T_ROOM7	W/R	0:WIRED, 1:WIRELESS	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
362	KIT_T_ROOM8	W/R	0:WIRED, 1:WIRELESS	Signed word	/
363	TR1_CORRECT	W/R	[-5, 5]°C	Signed word	0.5°C
364	TR2_CORRECT	W/R	[-5, 5]°C	Signed word	0.5°C
365	TR3_CORRECT	W/R	[-5, 5]°C	Signed word	0.5°C
366	TR4_CORRECT	W/R	[-5, 5]°C	Signed word	0.5°C
367	TR5_CORRECT	W/R	[-5, 5]°C	Signed word	0.5°C
368	TR6_CORRECT	W/R	[-5, 5]°C	Signed word	0.5°C
369	TR7_CORRECT	W/R	[-5, 5]°C	Signed word	0.5°C
370	TR8_CORRECT	W/R	[-5, 5]°C	Signed word	0.5°C
371	P_SHIELD_C1	W/R	[2.5, 72.5]%	Signed word	7%

Address	Content	Access type(W/R)	Definition	Type	Unit
372	P_SHIELD_C2	W/R	[2.5, 72.5]%	Signed word	7%
373	P_SHIELD_C3	W/R	[2.5, 72.5]%	Signed word	7%
374	P_SHIELD_C4	W/R	[2.5, 72.5]%	Signed word	7%
375	P_SHIELD_C5	W/R	[2.5, 72.5]%	Signed word	7%
376	P_SHIELD_H1	W/R	[2.5, 72.5]%	Signed word	7%
377	P_SHIELD_H2	W/R	[2.5, 72.5]%	Signed word	7%
378	P_SHIELD_H3	W/R	[2.5, 72.5]%	Signed word	7%
379	P_SHIELD_H4	W/R	[2.5, 72.5]%	Signed word	7%
380	P_SHIELD_H5	W/R	[2.5, 72.5]%	Signed word	7%
381	TC_INITIAL_FLH	W/R	[18, 25]°C	Signed word	1°C

Address	Content	Access type(W/R)	Definition	Type	Unit
382	TH_CORRECT_FLH	W/R	[-5, 5]°C	Signed word	0.5°C
383	FLOOR HEATING setting temperature	W/R	[30, 40]°C	Signed word	1°C
400	MV1_1	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
401	MV1_2	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
402	MV2	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
403	MV3_1	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
404	MV3_2	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
405	pump-I	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
406	pump-O	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
407	pump-D	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
408	PUMP-M	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
409	PUMP-S	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
410	Pipe backup heater	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
411	Tank backup heater	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
412	ET E-heater	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
413	Plate E-heater	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
414	FORCED DEFROSTING	W/R	0:NON-defrost, 1:defrosting	Unsigned word	/
415	Fan speed	W/R	[0,1200]rpm, 32768 (0x8000H): cancel	Unsigned word	1rpm
416	Chassis heater	W/R	0:OFF, 1:ON, 32768 (0x8000H): cancel	Unsigned word	/
417	Expansion valve	W/R	[0,480]pls, 32768 (0x8000H): cancel	Unsigned word	1pls

Address	Content	Access type(W/R)	Definition	Type	Unit
418	Comp frequency	W/R	[0,130]rps, 32768 (0x8000H): cancel	Unsigned word	0.1rps
500+100*(n-1)	ODU CAP	R	/	Signed word	100W
500+100*(n-1)+1	ODU operate mode	R	0:stop, 1:Cooling 2:heating, 3:hot water	Signed word	/
500+100*(n-1)+2	Comp frequency	R	/	Signed word	0.1rps
500+100*(n-1)+3	Fan speed	R	/	Signed word	1rpm
500+100*(n-1)+4	Expansion valve	R	/	Signed word	1pls
500+100*(n-1)+5	Comp current	R	/	Signed word	0.1A
500+100*(n-1)+6	Target frequency	R	/	Signed word	0.1rps
500+100*(n-1)+7	DC bus voltage	R	/	Signed word	1V
500+100*(n-1)+8	INV input current	R	/	Signed word	0.1A

Address	Content	Access type(W/R)	Definition	Type	Unit
500+100*(n-1)+9	INV module temp	R	/	Signed word	0.1A
500+100*(n-1)+10	Suction temp	R	/	Signed word	0.1℃
500+100*(n-1)+11	Discharge temp	R	/	Signed word	0.1℃
500+100*(n-1)+12	Exchanger temp	R	/	Signed word	0.1℃
500+100*(n-1)+13	Outdoor temp	R	/	Signed word	0.1℃
500+100*(n-1)+14	Comp pressure	R	/	Signed word	1kpa
500+100*(n-1)+15	MV1_1	R	0:OFF, 1:ON	Signed word	/
500+100*(n-1)+16	MV1_2	R	0:OFF, 1:ON	Signed word	/
500+100*(n-1)+17	MV2	R	0:OFF, 1:ON	Signed word	/
500+100*(n-1)+18	pump-I	R	0:OFF, 1:ON	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
500+100* (n-1)+19	pump-O	R	0:OFF, 1:ON	Signed word	/
500+100* (n-1)+20	pump-D	R	0:OFF, 1:ON	Signed word	/
500+100* (n-1)+21	Pipe backup heater	R	0:OFF, 1:ON	Signed word	/
500+100* (n-1)+22	Tank backup heater	R	0:OFF, 1:ON	Signed word	/
500+100* (n-1)+23	Two_B	R	/	Signed word	0.1°C
500+100* (n-1)+24	Plate w-in temp	R	/	Signed word	0.1°C
500+100* (n-1)+25	Plate w-out temp	R	/	Signed word	0.1°C
500+100* (n-1)+26	Water tank temp	R	/	Signed word	0.1°C
500+100* (n-1)+27	Plate F-OUT temp	R	/	Signed word	0.1°C
500+100* (n-1)+28	Plate F-IN temp	R	/	Signed word	0.1°C

Address	Content	Access type(W/R)	Definition	Type	Unit
500+100*(n-1)+29	Room temp (zone1)	R	/	Signed word	0.1℃
500+100*(n-1)+30	ODU error code	R	[0, 255]. For example, 0×A1 indicates that A1 is faulty. Communication data B corresponds to display character H Communication data D corresponds to display character J	Signed word	/
500+100*(n-1)+31	IDU error code	R		Signed word	/
500+100*(n-1)+32	ODU software	R	BCD code, 0x10 indicates V1.0	Signed word	/
500+100*(n-1)+33	IDU software	R		Signed word	/
500+100*(n-1)+34	MV3_1	R	0:OFF, 1:ON	Signed word	/

Address	Content	Access type(W/R)	Definition	Type	Unit
500+100*(n-1)+35	MV3_2	R	0:OFF, 1:ON	Signed word	/
500+100*(n-1)+36	PUMP-M	R	0:OFF, 1:ON	Signed word	/
500+100*(n-1)+37	PUMP-S	R	0:OFF, 1:ON	Signed word	/
500+100*(n-1)+38	Plate E-heater	R	0:OFF, 1:ON	Signed word	/
500+100*(n-1)+39	ET E-heater	R	0:OFF, 1:ON	Signed word	/
500+100*(n-1)+40	GAS	R	0:OFF, 1:ON	Signed word	/
500+100*(n-1)+41	Target water temp (Zone1)	R	Main zone current target water temp	Signed word	0.1°C
500+100*(n-1)+42	Target water temp (Zone2)	R	Second zone current target water temp	Signed word	0.1°C
500+100*(n-1)+43	Buffer tank1 temp	R	Current buffer tank temp	Signed word	0.1°C
500+100*(n-1)+44	Floor heating inlet water temp	R	Current floor heating inlet water temp	Signed word	0.1°C

Address	Content	Access type(W/R)	Definition	Type	Unit
500+100*(n-1)+45	Solar temp	R	Current water flow	Signed word	0.1°C
500+100*(n-1)+46	Water flow	R	Current water flow	Signed word	0.01m3/h
500+100*(n-1)+47	Total power consum of today	R	Total power consum of today	Unsigned word	1KWh
500+100*(n-1)+48	Defrost	R	0:NON-defrost, 1:defrosting	Signed word	/
500+100*(n-1)+49	Chassis heater	R	0:OFF, 1:ON	Signed word	/
500+100*(n-1)+50	Wired controller software	R	Current version	Signed word	/
500+100*(n-1)+51	Unit capacity	R	Current unit capacity	Unsigned word	0.01kW
500+100*(n-1)+52	Average unit capacity of 1h	R	Current average unit capacity of 1h	Unsigned word	0.01kW
500+100*(n-1)+53	power	R	Current power	Unsigned word	0.01kW
500+100*(n-1)+54	Average power of 1h	R	Current average power of 1h	Unsigned word	0.01kW

Address	Content	Access type(W/R)	Definition	Type	Unit
500+100* (n-1)+55	cop	R	Current cop	Unsigned word	0.01
500+100* (n-1)+56	Average cop of 1h	R	Current Average cop of 1h	Unsigned word	0.01
500+100* (n-1)+57	Room temp (Zone2)	R	/	Signed word	0.1°C
500+100* (n-1)+58	I_LIMIT PERCENT	R	[0, 100]%	Unsigned word	1
500+100* (n-1)+59	COMP RUN TIME	R	/	Unsigned word	1min
500+100* (n-1)+60	Buffer tank2 temp	R	Current buffer tank temp	Signed word	0.1°C
. . .	. . .	. . .	. . .	. . .	. . .
500+100* (n-1)+99	/	/	/	Unsigned word	/

Installation schematic (For the monobloc unit only)

1.Cut off the power of indoor unit.
2.As shown in Fig. 1, use a flathead screw driver to pry the bottom groove of the wire controller lightly (too much force would damage circuit board), pry rotationally to open the back cover.
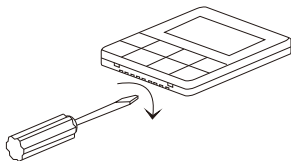

Fig.1

3.As shown in Fig.2,fix the wire controller to the wall with three screws through the three oval holes on the back cover of the wire controller.
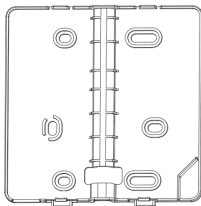(Prepare three screws which are readily available in the market)

Fig.2

4. Connect port introduction

①Signal to BMS/Central to controller
②Signal to Main control board of hydraulic module (plug-in connection)
③Signal to Main control board of hydraulic module (screw connection) For "②" and "③", you can select one of them depending on your installation conditions
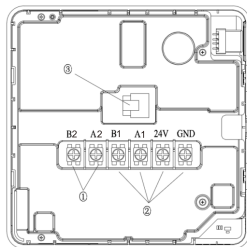

Fig.3

5.If the plug-in connection 485 communication wiring mode is selected, Connect the wire controller and main control board of hydraulic module through two communication wirings. (Check to prevent reverse connection of terminals) Communication wiring.
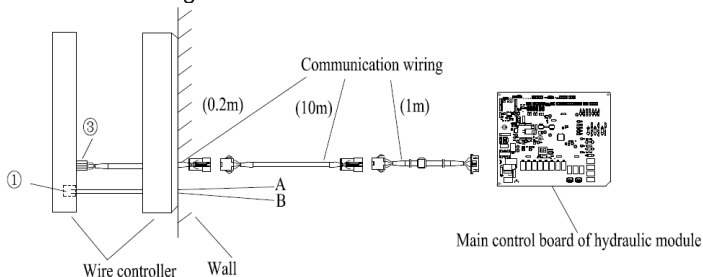

Fig.4

Main control board of hydraulic module

6.If screw connection 485 communication wiring mode is selected,Connect the wire controller and main control board of hydraulic module with screws. (Check to prevent reverse connection of terminals)
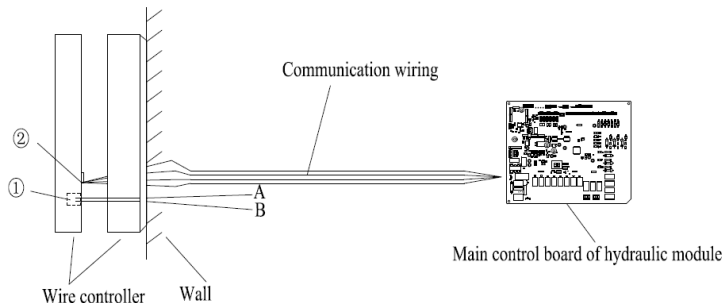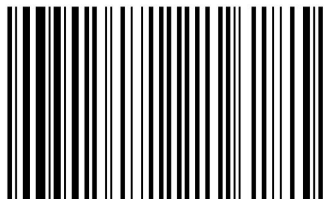

Fig.5

7.After connecting the connecting wire to the main body of the wire controller, as shown in Fig. 6, install main body part according to the following steps:
1).Push the upper part of main body into the clip.
2). Use the force of inclined top to install the lower part of main body (horizontal installation is prohibited,which is easy to damage the structural slot).

Fig.6

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