

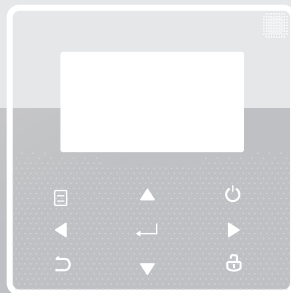


Scan the QR code to read the manual in different languages.



Scan the QR code to install the control APP.

OPERATION MANUAL



Thank you very much for purchasing our product.
Before using your unit, please read this manual carefully and keep it for future reference.

- This manual gives detailed description of the precautions that should be brought to your attention during operation.
- In order to ensure correct service of the wired controller, please read this manual carefully before using the unit.
- For convenience of future reference, keep this manual after reading it.

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1 GENERAL SAFETY PRECAUTIONS

1.1 About the documentation

- The original documentation is written in English. All other languages are translations.
- The precautions described in this document cover very important topics, follow them carefully.
- All activities described in the installation manual must be performed by an authorized installer.

1.1.1 Meaning of warnings and symbols



DANGER

Indicates a situation that results in death or serious injury.



DANGER: RISK OF ELECTROCUTION

Indicates a situation that could result in electrocution.



DANGER: RISK OF BURNING

Indicates a situation that could result in burning because of extreme hot or cold temperatures.



WARNING

Indicates a situation that could result in death or serious injury.



CAUTION

Indicates a situation that could result in minor or moderate injury.



NOTE

Indicates a situation that could result in equipment or property damage.



INFORMATION

Indicates useful tips or additional information.

1.2 For the user

- If you are not sure how to operate the unit, contact your installer.

- The appliance is not intended for use by persons, including children, with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children must be supervised to ensure that they do not play with the product.



CAUTION

Do NOT rinse the unit. This may cause electric shocks or fire.



NOTE

- Do NOT place any objects or equipment on top of the unit.
- Do NOT sit, climb or stand on the unit.

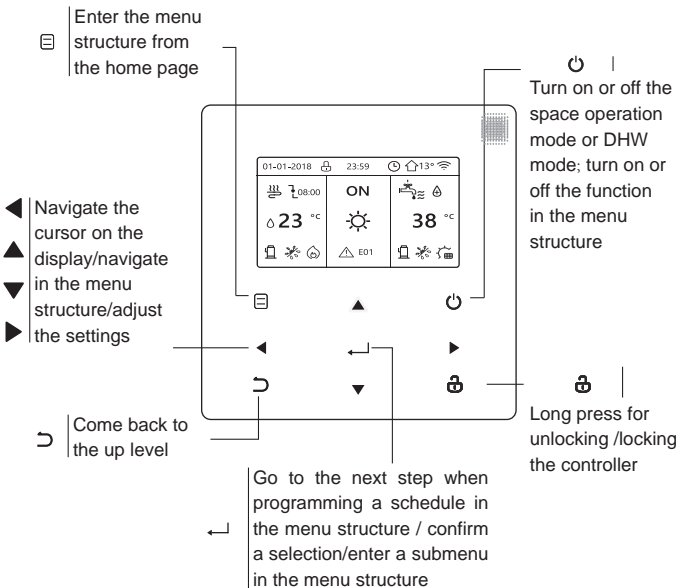
- Units are marked with the following symbol:



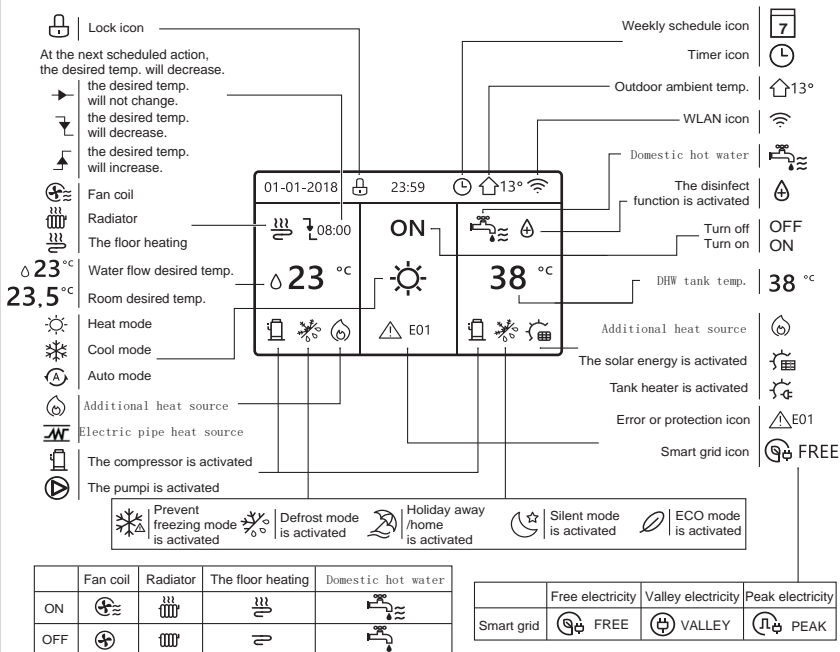
This means that electrical and electronic products may not be mixed with unsorted household waste. Do not try to dismantle the system yourself: the dismantling of the system, treatment of the refrigerant, of oil and of other parts must be done by an authorized installer and must comply with applicable legislation. Units must be treated at a specialized treatment facility for reuse, recycling and recovery. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. For more information, contact your installer or local authority.

2 A GLANCE OF THE USER INTERFACE

2.1 The appearance of the wired controller



2.2 Status icons



3 USING HOME PAGES

3.1 About home pages

You can use the home pages to read out and change settings that are meant for daily usage. What you can see and do on the home pages is described where applicable. Depending on the system layout, the following home pages may be possible:

- Room desired temperature (ROOM)
- Water flow desired temperature (MAIN)
- DHW tank actual temperature (TANK)

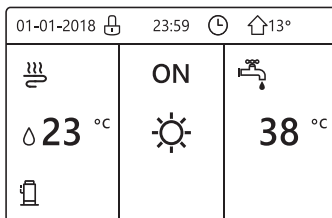
DHW=domestic hot water

home page1 :

If you have set the WATER FLOW TEMP. as YES and ROOM TEMP. as NON, the system has the function including floor heating and making hot water. The following page will appear:

NOTE

All the pictures in the manual are used to explain, the actual pages in the screen may have some difference.










home page2 :

If you have set the WATER FLOW TEMP. as NON and ROOM TEMP. as YES, the system has the function including floor heating and making hot water. The following page will appear:

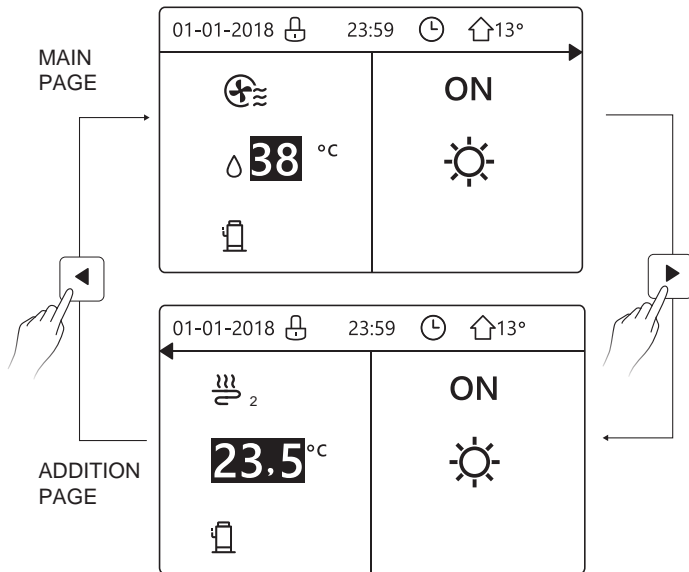
NOTE

The interface should be installed in the floor heating room to check the room temperature.

01-01-2018  23:59   13°		
 23.5 °C 	ON 	 38 °C

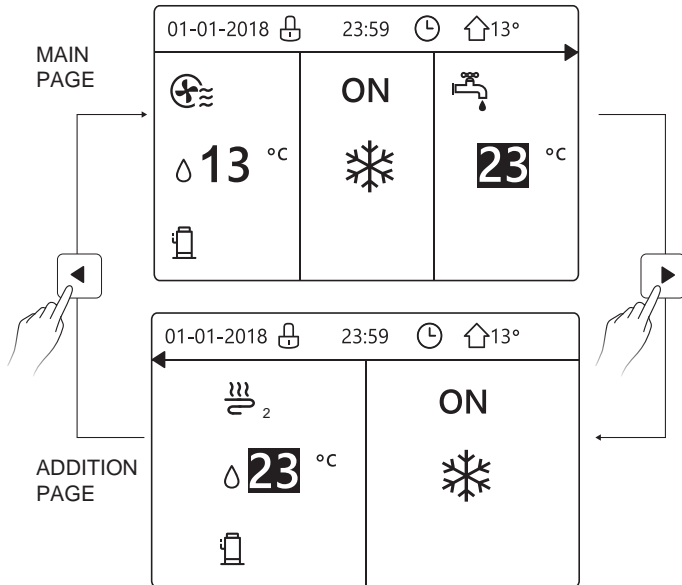
home page3 :

If the DHW MODE is set NON , and if "WATER FLOW TEMP." is set YES, "ROOM TEMP." is set YES, There will be main page and additional page. The system has the function including floor heating and space cooling for fan coil, home page 3 will appear:



home page4 :

If the DHW MODE is set YES. There will be main page and addition page. The system has the function including floor heating, space cooling for fan coil and domestic hot water, home page 4 will appear:





4 MENU STRUCTURE



4.1 About the menu structure

You can use the menu structure to read out and configure settings that are NOT meant for daily usage. What you can see and do in the menu structure is described where applicable.

4.2 To go to the menu structure

From a home page, press "  ". Result: The menu structure appear:

MENU	1/2
OPERATION MODE	
PRESET TEMPERATURE	
DOMESTIC HOT WATER(DHW)	
SCHEDULE	
OPTIONS	
CHILD LOCK	
 ENTER	


MENU	2/2
SERVICE INFORMATION	
OPERATION PARAMETER	
FOR SERVICEMAN	
WLAN SETTING	
SN VIEW	
ENERGY METERING	
 ENTER	

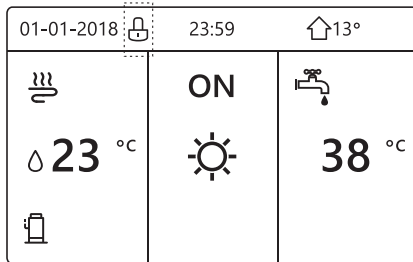
4.3 To navigate in the menu structure




Use "▼", "▲" to scroll.

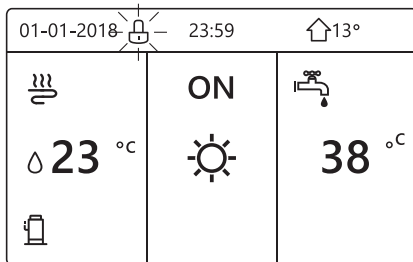
5 BASIC USAGE

5.1 Screen Unlock

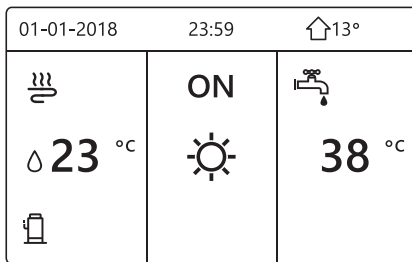
If the icon  is on the screen, the controller is locked. The following page is displayed:



Press any key, the icon  will flash. Long press the "  " key. The icon  will disappear, the interface can be controlled.



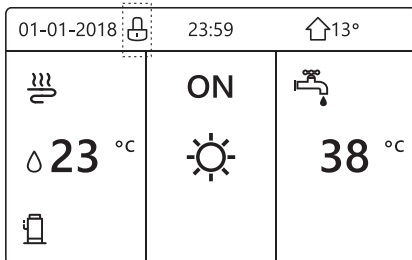
The interface will be locked if there is no handling for a long time (about 120 seconds). If the interface is unlocked, long press "🔒", the interface will be locked.



Long press
🔒



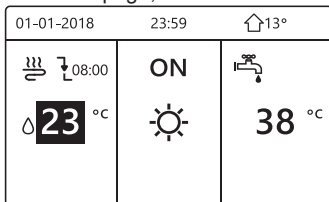
Long press
🔒






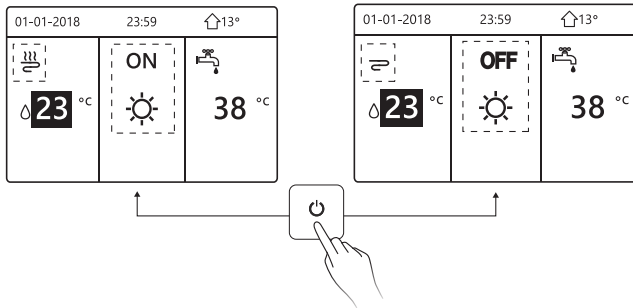
5.2 Turning ON/OFF controls

Use the interface to turn on or off the unit for space heating or cooling.

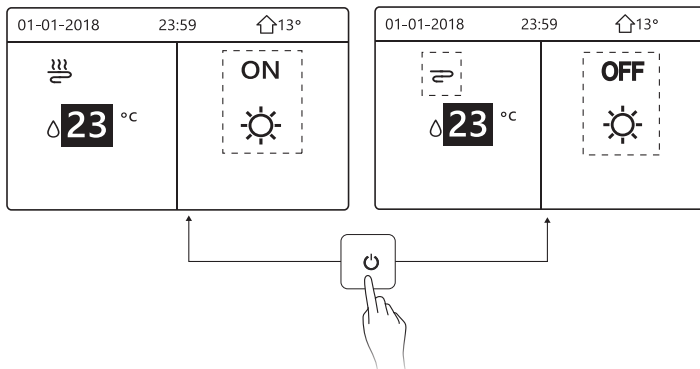
- The ON/OFF of the unit can be controlled by the interface if the ROOM THERMOSTAT is NON. (See "ROOM THERMOSTAT SETTING" in "Installation and owner's manual (OPTIMUS PRO split indoor unit)")
- Press "◀", "▲" on home page, the black cursor will appear:



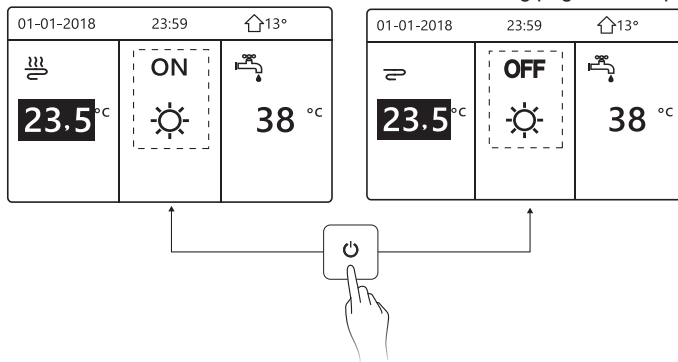
1) When the cursor is on the temperature of space operation mode side (Including heat mode , cool mode  and auto mode , press "⏻" key to turn on/off space heating or cooling.




If the DHW TYPE is set NON, then following pages will display:





If the TEMP. TYPE is set ROOM TEMP. , then following pages will display:



















Use the room thermostat to turn on or off the unit for space heating or cooling.

① The room thermostat is SET YES(see "ROOM THERMOSTAT SETTING" on "Installation and owner's manual (OPTIMUS PRO split indoor unit) the unit is turned on or off by the room thermostat, press  on the interface, the following page will display:






01-01-2018	23:59	 13°
Turning on or off cooling/ heating mode is controlled by the room thermostat. Please turn on or off cooling/ heating mode by the room thermostat.		
 CONFIRM		

② DUAL ROOM THERMOSTAT is set YES(see "ROOM THERMOSTAT SETTING" in "Installation and owner's manual (OPTIMUS PRO split indoor unit)").The room thermostat for fan coil is turned off ,the room thermostat for the floor heating is turned on,and the unit is running, but the display is OFF. The following page is displayed:

01-01-2018 23:59  13°			01-01-2018 23:59  13°		
  38 °C	ON 	 38 °C	 ₂ 23.5 °C	ON 	

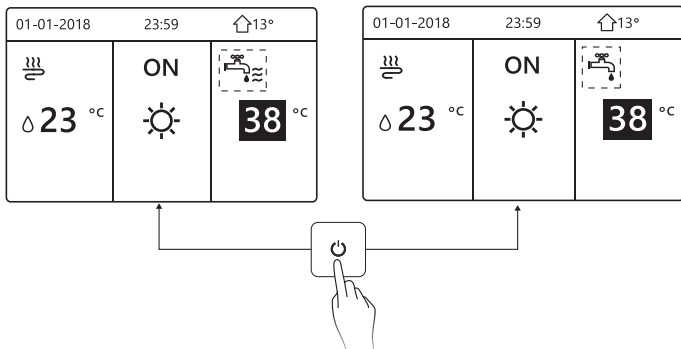
01-01-2018 23:59  13°			01-01-2018 23:59  13°		
	OFF			OFF	
 38 °C		38 °C	23.5 °C		

Use the interface to turn on or off the unit for DHW. Press "►", "▼" on home page, the black cursor will appear:

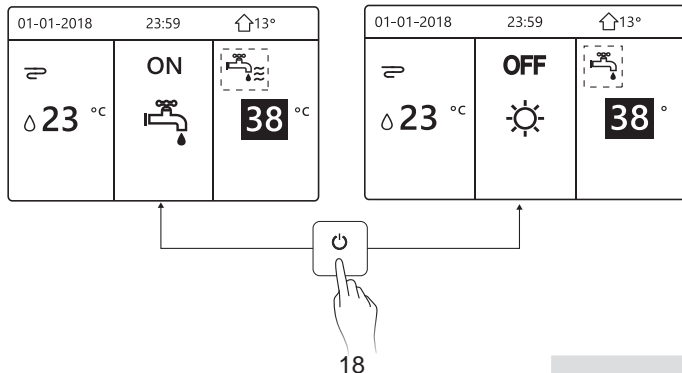
01-01-2018 23:59  13°		
	ON	
 23 °C		38 °C

2) When the cursor is on DHW operation mode. Press " ⏻ " key to turn on/off the DHW mode.

If the space operation is ON, then following pages will display:

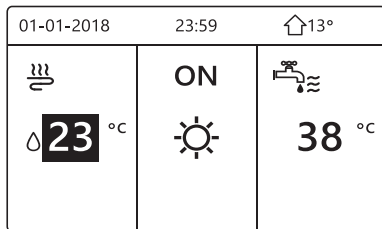


If the space operation mode is OFF, then following pages will display:

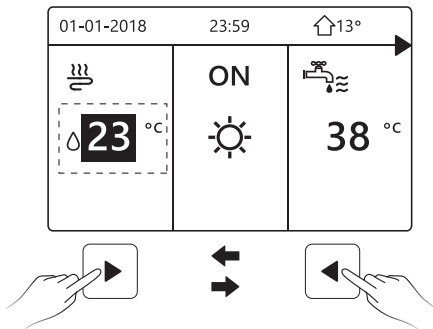


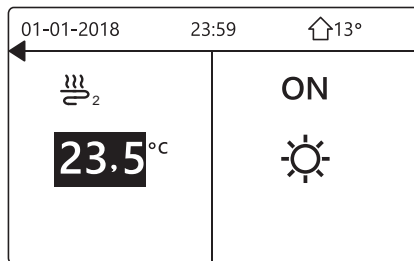
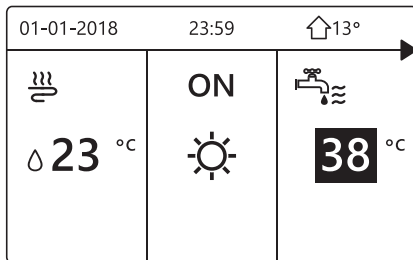
5.3 Adjusting the temperature

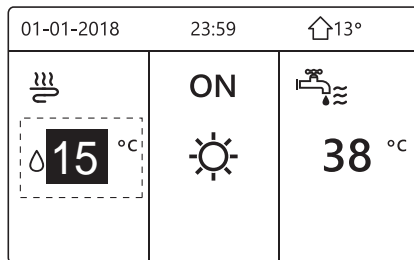
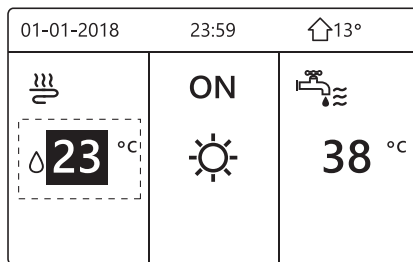
Press "◀", "▲" on home page, the black cursor will appear:



- If the cursor is on the temperature, use the "◀", "▶" to select and use "▼", "▲" to adjust the temperature.

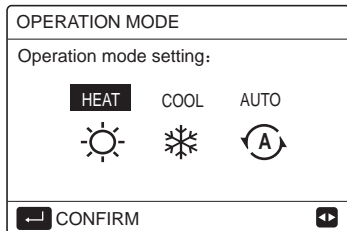






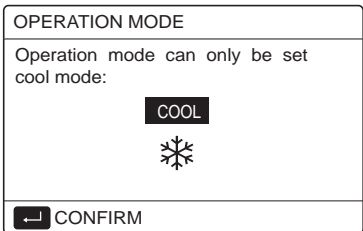
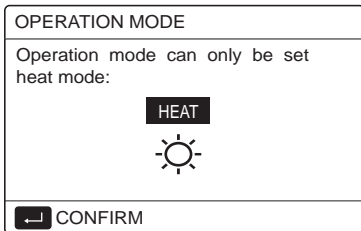
5.4 Adjusting space operation mode

- Adjusting space operation mode by interface. Go to "☰" > "OPERATION MODE". Press "↵", the following page will appear:






- There are three modes to be selected including HEAT, COOL and AUTO mode. Use the "◀", "▶" to scroll, press "↵" to select. Even if you don't press OK button and exit the page by pressing "⏮" button, the mode would still effective if the cursor have be moved to the operation mode.


If there is only HEAT(COOL) mode, the following page will appear:





- The operation mode can not be changed see cool MODE SETTING on installation and owner's manual.



If you select...	Then the space operation mode is...
 heat	Always heating mode
 cool	Always cooling mode
 auto	<p>Automatically changed by the software based on the outdoor temperature (and depending on installer settings of the indoor temperature), and takes monthly restrictions into account.</p> <p>Note: Automatic changeover is only possible under certain conditions.</p> <p>See the FOR SERVICEMAN> AUTO MODE SETTING in "Installation and owner's manual (OPTIMUS PRO split indoor unit)".</p>

- Adjust space operation mode by the room thermostat, see "ROOM THERMOSTAT" on "Installation and owner's manual (OPTIMUS PRO split indoor unit)" .

Go to  >OPERATION MODE, if you press any key to select or adjust, the follpage will appear:



01-01-2018	23:59	 13°
<p>Cool/heat mode is controlled by the room thermostat.</p> <p>Please adjust the operation mode by the room thermostat.</p>		
 CONFIRM		

6 Network Configuration Guidelines

- The wired controller realizes intelligent control with a built-in module, which receives control signal from the APP.
- Before connecting the WLAN, please check for it if the router in your environment is active and make sure that the wired controller is well-connected to the wireless signal.
- During the Wireless distribution process, the LCD icon “” flashes to indicate that the network is being deployed. After the process is completed, the icon “” will be constantly on.

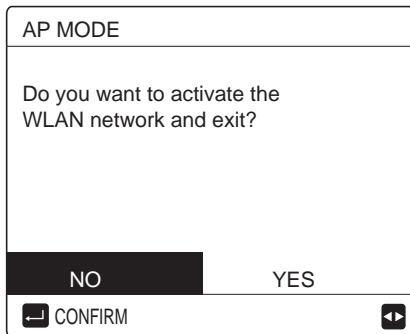
6.1 Wired Controller Setting

The wired controller settings include AP MODE and RESTORE WLAN SETTING.

WLAN SETTING
AP MODE
RESTORE WLAN SETTING
 ENTER 

- Activate the WLAN by interface. Go to "☰">"WLAN SETTING">"AP MODE".

Press "↵", the following page will appear:





Use "◀", "▶" to move to "YES", press "↵" to select AP mode. Select AP Mode correspondingly on the mobile device and continue the follow-up settings according to the APP prompts.

CAUTION

After enter Ap mode, if it's not connected with mobile phone, the LCD icon "📶" will flash 10 minutes then disappear.

If it's connected with the mobile phone, the icon "📶" will be constantly display.


- Restore WLAN setting by interface. Go to “”> “WLAN SETTING”> “RESTORE WLAN SETTING” .
Press “”, the following page will appear:


RESTORE WLAN SETTING




Do you want to restore the
WLAN setting and exit?

NO

YES

 CONFIRM



Use “”, “” to move to “YES”, press “” to restore WLAN setting.
Complete the above operation and wireless configuration is reset.

6.2 Mobile Device Setting

AP Mode is available for wireless distribution on mobile device side.

- AP Mode connecting WLAN:

6.2.1 Install APP

- ① Scan the following QR code to install the Smart Home APP.



- ② Please research "Comfort Home" in APP STORE or GOOGLE PLAY to install the APP.

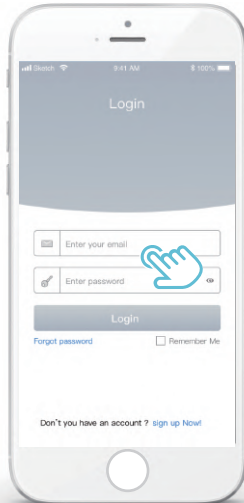
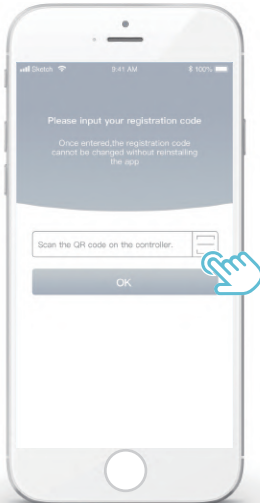
This APP is only applicable to Android 7.0 and IOS7, or newer operation systems.

6.2.2 Sign in/Sign up

Please input your registration code.

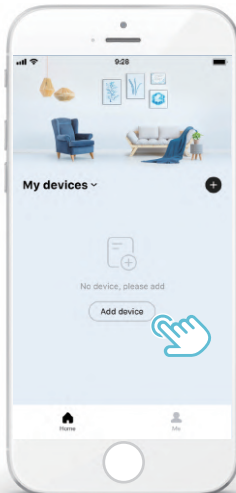
Or scan the QR code on the controller packaging box if existed.

And register your account according to the guidance.

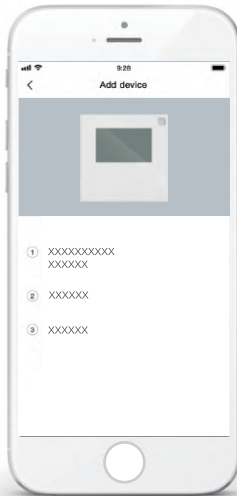


6.2.3 Add Home Appliances:

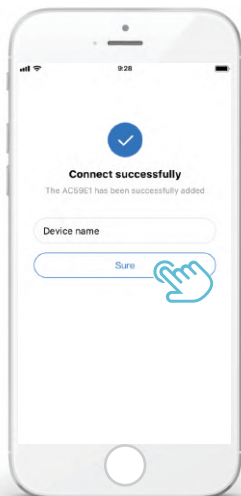
- 1) Add your device following the guidance.




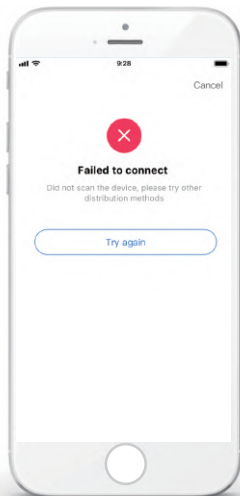
2) Operate the wired controller according to APP prompts.



3) Wait for the home appliance to connect, and click “Sure”.



- 4) After the appliance is successfully connected, the LCD icon“” of the wired controller is constantly on, and the heat pump can be controlled through the APP.
- 5) If the network distribution process fails, or the mobile connection demands reconnection and replacement, operate “RESTORE WLAN SETTING” on the wired controller, and then repeat the above process.





Warning and troubleshooting for networking failures

When the product is connected to the network, please make sure that the phone is as close as possible to the product.

We only support 2.4GHz band routers at present.

Special characters (punctuation, spaces, etc.) are not recommended as part of the WLAN name.

It is recommended that you connect no more than 10 devices to a single router lest home appliances are affected by weak or unstable network signal.

If the password of the router or WLAN is changed, clear all settings and reset the appliance.

The contents of APP might change in version updates and actual operation shall prevail.

WIFI information

WIFI transmit frequency range: 2.400 ~ 2.4835 GHz
EIRP not more than 20dbm

7 INSTALLATION MANUAL

7.1 Safety precaution

- Read the safety precautions carefully before installing the unit.
- Stated below are important safety issues that must be obeyed.
- Conform there is no abnormal phenomena during test operation after complete, then hand the manual to the user.
- Meaning of marks:



WARNING

Means improper handling may lead to personal death or severe injury.



CAUTION

Means improper handling may lead to personal injury or property loss.



WARNING

Please entrust the distributor or professionals to install the unit. Installation by other persons may lead to imperfect installation, electric shock or fire.

Strictly follow this manual.

Improper installation may lead to electric shock or fire.

Reinstallation must be performed by professionals.

Improper installation may lead to electric shock or fire.

Do not disassemble your heat pump at will.

A random disassembly may cause abnormal operation or heating, which may result in fire.



CAUTION

Do not install the unit in a place vulnerable to leakage of flammable gases.

Once flammable gases are leaked and left around the wired controller, fire may occur.

The wiring should adapt to the wired controller current.

Otherwise, electric leakage or heating may occur and result in fire.

The specified cables shall be applied in the wiring. No external force may be applied to the terminal.

Otherwise, wire cut and heating may occur and result in fire.

Do not place the wired remote controller near the lamps, to avoid the remote signal of the controller to be disturbed. (refer to the right figure)



7.2 Other Precautions

7.2.1. Installation location

Do not install the unit in a place with much oil, steam, sulfide gas. Otherwise, the product may deform and fail.

7.2.2 Preparation before installation

1) Check whether the following assemblies are complete.

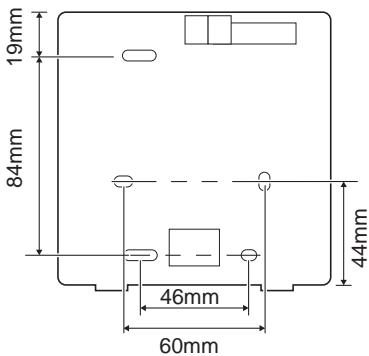
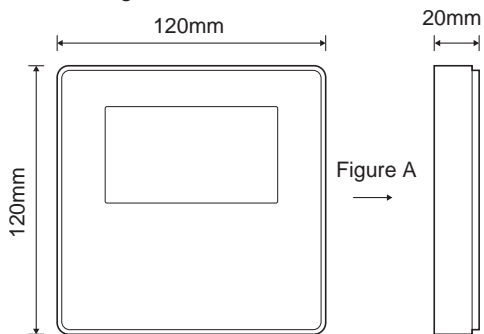
No.	Name	Qty.	Remarks
1	Wired Controller	1	_____
2	Cross round head wood mounting screw	3	For Mounting on the Wall
3	Cross round head mounting screw	2	For Mounting on the Electrical Switch Box
4	Installation and Owner's Manual	1	_____
5	Plastic bolt	2	This accessory is used when install the centralized control inside the electric cabinet
6	Plastic expansion pipe	3	For mounting on the Wall

7.2.3 Note for installation of wired controller:

- 1) This installation manual contains information about the procedure of installing Wired Remote Controller. Please refer to Indoor Unit Installation Manual for connection between Wired Remote Controller and Indoor Unit.
- 2) Circuit of Wired Remote Controller is low voltage circuit. Never connect it with a standard 220V/380V circuit or put it into a same Wiring Tube with the circuit.
- 3) The shielded cable must be connected stable to the ground, or transmission may fail.
- 4) Do not attempt to extend the shielded cable by cutting, if it is necessary, use Terminal Connection Block to connect.
- 5) After finishing connection, do not use Megger to have the insulation check for the signal wire.

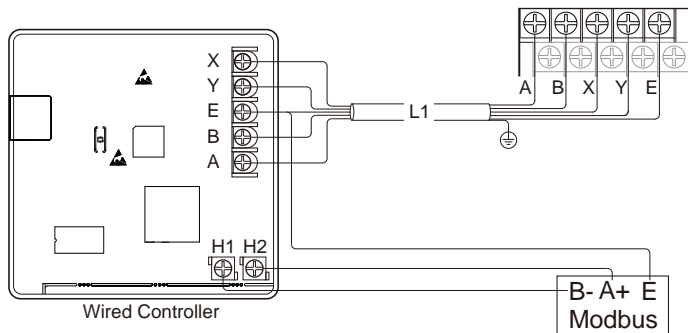
7.3 Installation procedure and matching setting of wired controller

7.3.1 Structure size figure

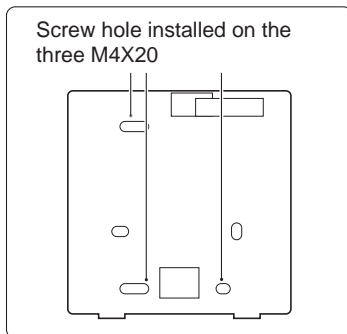
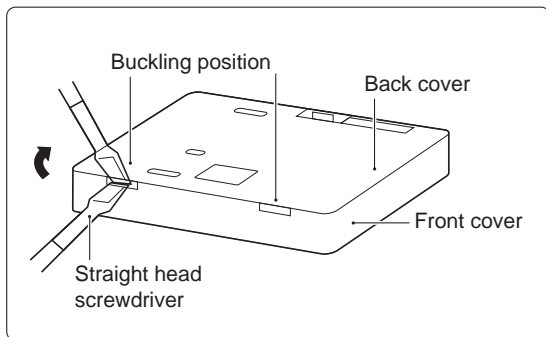


7.3.2 Wiring

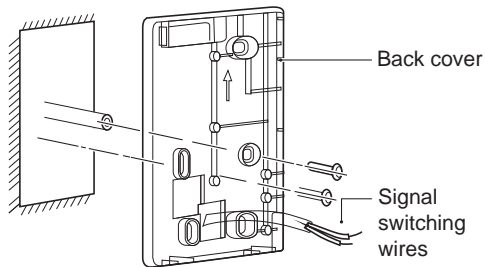
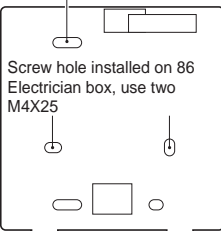
Input Voltage(A/B)	13.5VAC
Wiring size	0.75mm ²



7.3.3 Back cover installation



Screw hole installed on the
three M4X20



1) Use straight head screwdriver to insert in the buckling position in the bottom of wired controller, and spin the screwdriver to take down the back cover. (Pay attention to spinning direction, otherwise will damage the back cover!)

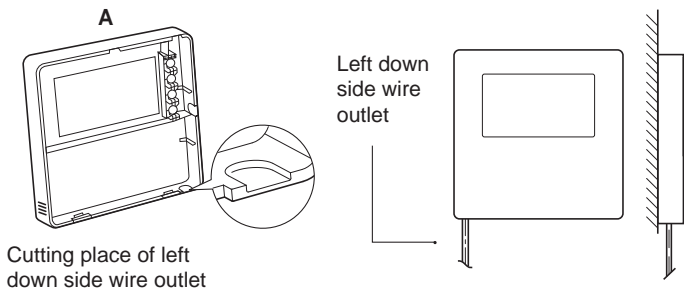
2) Use three M4X20 screws to directly install the back cover on the wall.

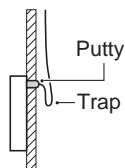
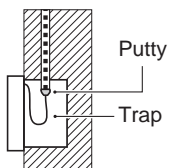
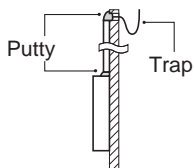
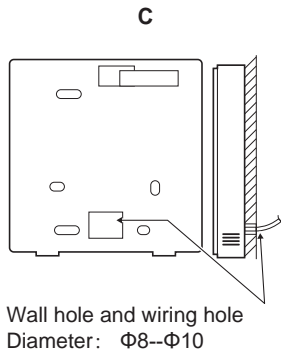
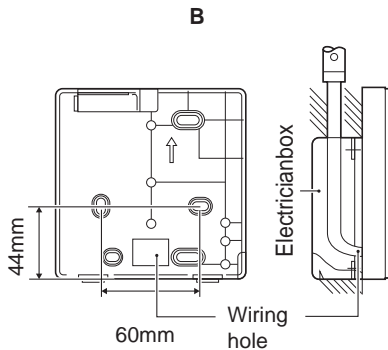
3) Use two M4X25 screws to install the back cover on the 86 electrician box, and use one M4X20 screws for fixing on the wall.

4) Adjust the length of two plastic screw bars in the accessory to be standard length from the electrical box screw bar to the wall. Make sure while installing the screw bar to the wall, making it as flat as the wall.

5) Use cross head screws to fix the wired controller bottom cover in the wall through the screw bar. Make sure the wired controller bottom cover is on the same level after installation, and then install the wired controller back to the bottom cover.

6) Over fastening the screw will lead to deformation of back cover.

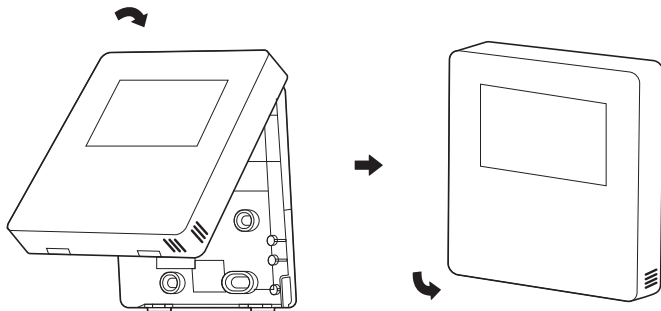




Avoid the water enter into the wired remote controller, use trap and putty to seal the connectors of wires during wiring installation.

7.4 Front cover installation

After adjusting the front cover and then buckle the front cover; avoid clamping the communication switching wire during installation.



Sensor can not be affected with damp.

Correct install the back cover and firmly buckle the front cover and back cover, otherwise will make the front cover drop off.



8 Error code

Unit	Register address	Content	Remarks
E0	1	Water flow fault(E8 displayed 3 times)	
E1	2	Phase loss or neutral wire and live wire are connected	Only applies to 3-phase models
E2	3	Communication fault between controller and hydraulic	
E3	4	Final outlet water temp. sensor(T1) fault	Sensor T1
E4	5	Water tank temp. sensor(T5) fault	Sensor T5
E5	6	The condenser outlet refrigerant temperature sensor(T3)	Sensor T3
E6	7	The ambient temperature sensor(T4) fault	Sensor T4
E7	8	Buffer tank up temp. sensor(Tbt1) fault	Sensor Tbt1
E8	9	Water flow failure	
E9	10	Compressor suction temp. sensor (Th) fault	Sensor Th
EA	11	Compressor discharge temp. sensor (Tp) fault	Sensor Tp
Eb	12	Solar temp. sensor(Tsolar) fault	
Ec	13	The balance tank low temp. sensor(Tbt2) fault	Sensor Tbt2
Ed	14	The plate exchanger water inlet temp. sensor(Tw_in) fault	Sensor Tw_in
EE	15	The main control board of hydraulic module EEPROM	
P0	20	Low pressure protection	
P1	21	High pressure protection	
P3	23	Compressor overcurrent protection	
P4	24	Compressor discharge temp. too high protection	
P5	25	High temperature difference protection between water inlet and water outlet of the plate heat exchanger	
P6	26	Inverter module protection	Displayed on user interface when any of L0, L1, L2, L4,L5, L7, L8 or L9 occur
Pb	31	Anti-freeze mode protection	
Pd	33	High temperature protection of refrigerant outlet temp. of condenser	
PP	38	Water inlet temperature is higher than water outlet in heating mode	
H0	39	Communication fault between main control board of hydraulic module and main control board PCB B	
H1	40	Communication fault between inverter module PCB A and main control board PCB B	
H2	41	The plate exchanger refrigerant outlet(liquid pipe) temp. sensor(T2) fault	Sensor T2
H3	42	The plate exchanger refrigerant outlet(gas pipe) temp. sensor(T2B) fault	Sensor T2B
H4	43	Three times L0/L1 protection	
H5	44	Room temp. sensor(Ta) fault	Sensor Ta
H6	45	DC fan motor fault	
H7	46	Main circuit voltage protection fault	

Unit	Register address	Content	Remarks
H8	47	Pressure sensor fault	
H9	48	Zone 2 water flow temp. sensor(Tw2) fault	Sensor TW2
HA	49	The plate heat exchanger water outlet temperature sensor(Tw_out) fault	Sensor Tw_out
Hb	50	3 times PP protection and Tw_out<7℃	
Hd	52	Communication fault between master unit and slave unit(in parallel)	
HE	53	Communication fault between main board of hydraulic module and Ta/room thermostat transfer PCB	
HF	54	Inverter module board EE PROM fault	
HH	55	H6 display 10 times in 120 minutes	
HP	57	Low pressure protection (Pe<0.6) occurred 3 times in 1 hour in cooling mode	
C7	65	High temp. protection of inverter module	
bH	112	PED PCB fault	
F1	116	DC bus low voltage protection	
L0	134	DC compressor inverter module fault	
L1	135	DC bus low voltage protection(from inverter module mostly when compressor running)	
L2	136	DC bus high voltage protection from DC driver	
L4	138	MCE fault	
L5	139	Zero speed protection	
L7	141	Phase sequence fault	
L8	142	Compressor frequency variation greater than 15Hz within one second protection	
L9	143	Actual compressor frequency differs from target frequency by more than 15Hz protection	

NOTE

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