



Owner's Manual

Original Instructions 
Air Conditioners

Versati Air-to-water Split Heat Pump

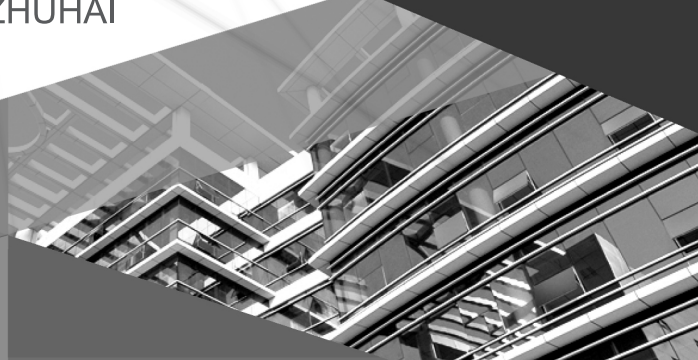
Models:

GRS-CQ4.0Pd/NpG4-E
GRS-CQ6.0Pd/NpG4-E
GRS-CQ8.0Pd/NpG4-E
GRS-CQ10Pd/NpG4-E
GRS-CQ12Pd/NpG4-E
GRS-CQ14Pd/NpG4-E
GRS-CQ16Pd/NpG4-E
GRS-CQ8.0Pd/NpG4-M
GRS-CQ10Pd/NpG4-M
GRS-CQ12Pd/NpG4-M
GRS-CQ14Pd/NpG4-M
GRS-CQ16Pd/NpG4-M

Thank you for choosing GREE air conditioners. Please read this Owner's Manual carefully before operation and retain it for future reference.

If you have lost the Owner's Manual, please contact the local agent or visit www.gree.com or send an email to global@cn.gree.com for the electronic version.

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



To Users

Thank you for selecting Gree's product. Please read this instruction manual carefully before installing and using the product, so as to master and correctly use the product. In order to guide you to correctly install and use our product and achieve expected operating effect, we hereby instruct as below:

- (1) This equipment should be installed, operated or maintained by the qualified servicemen who have had specific training. During operation, all safety issues covered in the labels, User's Manual and other literature should be followed strictly. This equipment 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 should be supervised to ensure that they do not play with the appliance.
- (2) This product has gone through strict inspection and operational test before leaving the factory. In order to avoid damage due to improper disassembly and inspection, which may impact the normal operation of unit, please do not disassemble the unit by yourself. You can contact our designated dealer or local service center for professional support if necessary.
- (3) When the product is faulted and cannot be operated, please contact our designated dealer or local service center as soon as possible by providing the following information..
 - Contents of nameplate of product (model, cooling/heating capacity, product No., ex-factory date).
 - Malfunction status (specify the situations before and after the error occurs).
- (4) All the illustrations and information in the instruction manual are only for reference. In order to make the product better, we will continuously conduct improvement and innovation without further notice.

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Safety Notices (Please be sure to abide)

 **WARNING:** If not abide strictly, it may cause severe damage to the unit or the people.

 **NOTE:** If not abide strictly, it may cause slight or medium damage to the unit or the people.

 This sign indicates that the operation must be prohibited. Improper operation may cause severe damage or death to people

 This sign indicates that the items must be observed. Improper operation may cause damage to people or property.

NOTE

After receipt of the unit, check it for appearance, unit model compared with your desire and attachments.

Design and installation work of the unit must be performed by authorized personnel according to applicable laws and regulations and this Instruction.

After installation work, the unit cannot be energized unless there is not any problem in check.

Ensure periodical clean and maintenance of the unit after normal operation of the unit for longer life and reliable operation.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

The appliance shall be installed in accordance with national wiring regulations.

This product is a kind of comfort air conditioning, and is not allowed to be installed where there are corrosive, explosive and inflammable substances or smog; otherwise it would lead to operation failure, shortened service life, five hazard or even severe injuries. Special air conditions are required for where mentioned above.



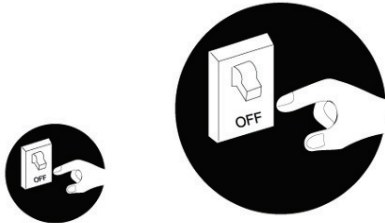
Correct Disposure

This marking indicates that this product should not be disposed with other household wastes throughout the EU.To prevent possible harm to the environment or human health from uncontrolled waste disposal,recycle it responsibly to promote the sustainable reuse of material resources. To return your used device,please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

R290:3

WARNING

Once abnormality like burning smell occurs, please cut off the power supply immediately and then contact with service center.



If the abnormality still exists, the unit may be damaged and electric shock or fire may result.

Don't operate the unit with wet hand.



Otherwise, it may cause electric shock.

Before installation, please see if the voltage of local place accords with that on nameplate of unit and capacity of power supply, power cord or socket is suitable for input power of this unit.

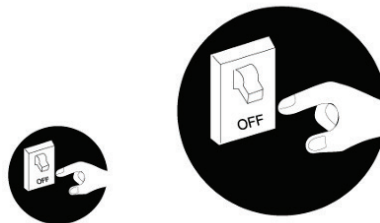


Special circuit must be adopted for power supply to prevent fire.



Do not use octopus multipurpose plug or mobile terminal board for wire connection.

Be sure to pull out the power plug and drain the indoor unit and water tank when unit is not in use for a long time.

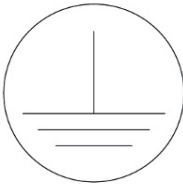
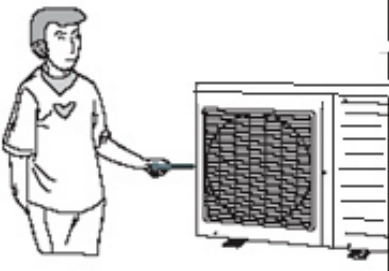


Otherwise, the accumulated dust may cause overheating, fire or freeze of water tank or coaxial heater exchanger in winter.

Never damage the electric wire or use the one which is not specified.



Otherwise, it may cause overheating or fire.

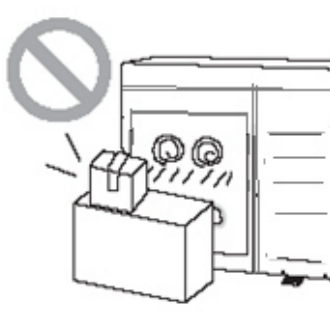
Before cleaning please cut off the power supply.   Otherwise, it may cause electric shock or damage.	The power supply must adopt special circuit with leakage switch and enough capacity.	User can not change power cord socket without prior consent. Wiring working must be done by professionals. Ensure good earthing and don't change earthing mode of unit.
Earthing: the unit must be earthed reliably ! The earthing wire should connect with special device of buildings.   If not, please ask the qualified personnel to install. Furthermore, don't connect earth wire to gas pipe, water pipe, drainage pipe or any other improper places which professional does not recognize.	Never insert any foreign matter into outdoor unit to avoid damage . And never insert your hands into the air outlet of outdoor unit. 	Don't attempt to repair the unit by yourself.  Improper repair may cause electric shock or fire, so you should contact the service center to repair.

Don't step on the top of the unit or place anything on it.



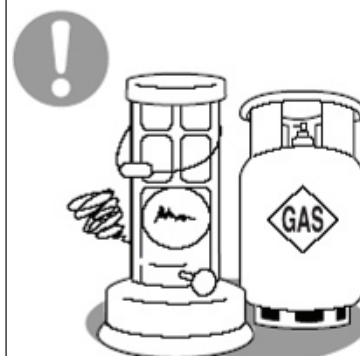
There is the danger of fall of things or people.

Never block the air inlet and outlet of unit.



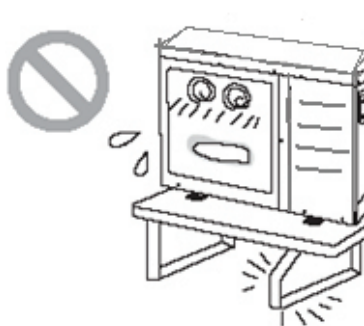
It may reduce efficiency or cause stop of the unit and even fire.

Keep pressurized spray, gas holder and so on away from the unit above 1m .



It may cause fire or explosion.

Please note whether the installation stand is firm enough or not.



If damaged, it may cause fall of the unit and injury of people.

Unit should be installed at the place with good ventilation to save energy.

When there is not water in water tank, never power the unit on to run.

WARNING

Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer. Should repair be necessary, contact your nearest authorized service centre. Any repairs carried out by unqualified personnel may be dangerous. The appliance shall be stored in a room without continuous operating ignition sources. (for example: open flames, an operating gas appliance or an operating electric heater.) Do not pierce or burn.

Appliance shall be installed, operated and stored in a room with a floor area larger than Xm . (Please refer to table “a” in section of “ Safety Operation of Inflammable Refrigerant” for space X.)

Appliance filled with flammable gas R290. For repairs, strictly follow manufacturer’s instructions only. Be aware that refrigerants not contain odour. Read specialist’s manual.

If a stationary appliance is not fitted with a supply cord and a plug, or with other means for disconnection from the supply mains having a contact separation in all poles that provides full disconnection under overvoltage category III conditions, the instructions shall state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.

The appliance shall be stored in a room without continuously operating open flames (for example an operating gas appliance) and ignition sources (for example an operating electric heater).

The appliance shall be stored so as to prevent mechanical damage from occurring.

NOTE

	Appliance filled with flammable gas R290.
	Before use the appliance, read the owner’s manual first.
	Before install the appliance, read the installation manual first.
	Before repair the appliance, read the service manual first.

To realize the function of the air conditioner unit, a special refrigerant circulates in the system. The used refrigerant is the fluoride R290, which is specially cleaned. The refrigerant is flammable and inodorous. Furthermore, it can lead to explosion under certain conditions. But the flammability of the refrigerant is very low. It can be ignited only by fire.

Compared to common refrigerants, R290 is a nonpolluting refrigerant with no harm to the ozonosphere. The influence upon the greenhouse effect is also lower. R290 has got very good thermodynamic features which lead to a really high energy efficiency. The units therefore need a less filling.

Before installation, please check if the adopted power is accordance with that listed on nameplate, and check the safety of power.

The unit shall contact with the supply mains by a full disconnection device under overvoltage category III .

Before using, please check and confirm if wires and water pipes are connected correctly to avoid water leakage, electric shock or fire etc.

Don't operate the unit with wet hand, and don't allow children to operate the unit.

The On/off in the instruction is for the operation to on and off button of PCB for users; cut off power means to stop supplying power to the unit.

Don't directly expose the unit under the corrosive ambient with water or dampness.

Don't operate the unit without water in water tank .The air outlet/inlet of unit cannot be blocked by other objects.

Never press the button with sharp objects to protect manual controller. Never use other wires instead of special communication line of the unit to protect control elements. Never clean the manual controller with benzene, thinner or chemical cloth to avoid fading of surface and failure of elements. Clean the unit with the cloth soaked in neutral eradicator. Slightly clean the display screen and connecting parts to avoid fading.

The power cord must be separated with the communication line.

Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorises their competence to handle refrigerants safely in accordance with an industry recognised assessment specification.

Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.

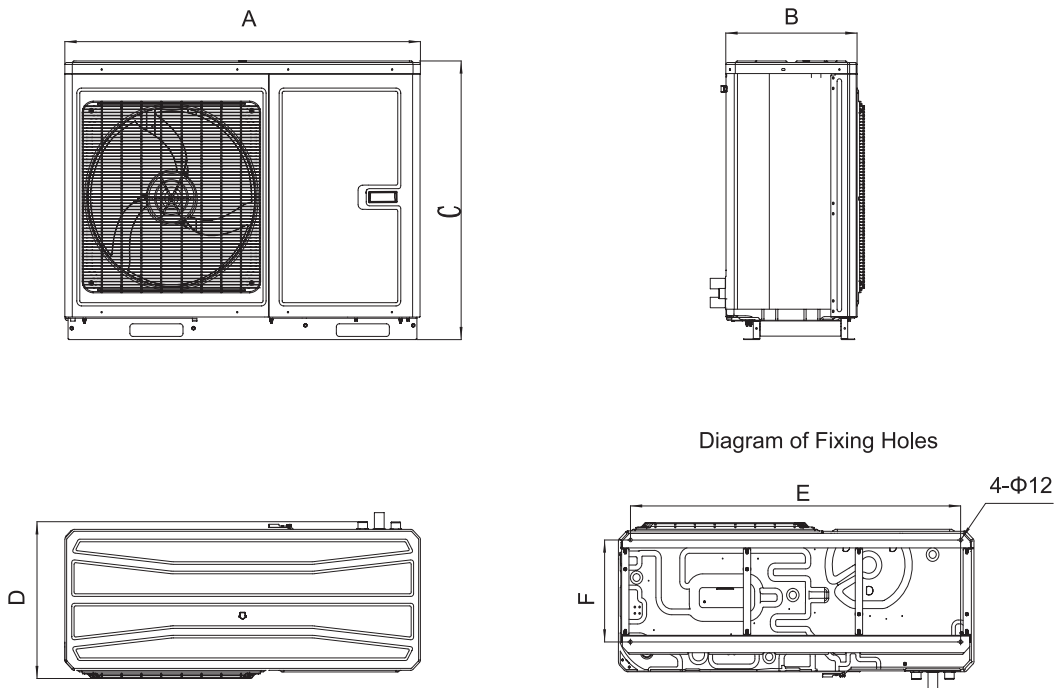
The range of external static pressures at which the appliance was tested (add-on heat pumps, and appliances with supplementary heaters, only); If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

The appliance is intended to be permanently connected to the water mains and connected by a hose-set.

If there is any question, please contact with local dealer, authorized service center, agencies or our company directly.

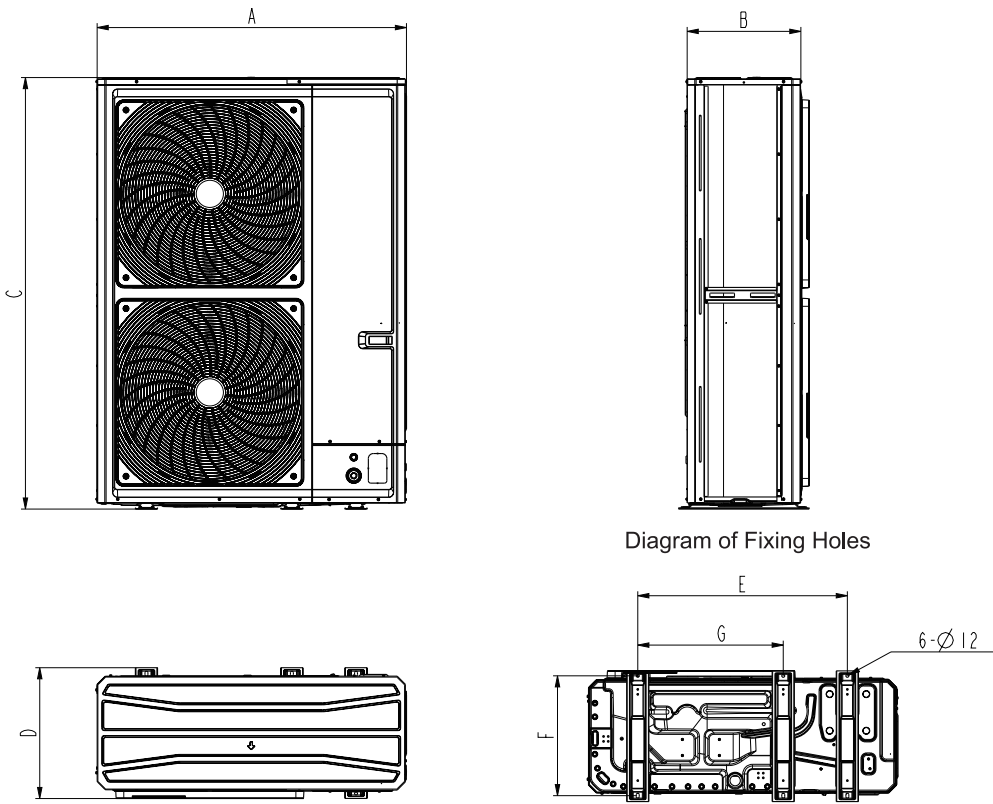
1. Product Data

1.1 Outline Dimensions



Unit: mm

Model	A	B	C	D	E	F
4/6/8/10/12/14kW	1206	451	880	445	1150	400



Unit: mm

Model	A	B	C	D	E	F	G
16kW	943	464	1615	530	610	482	\

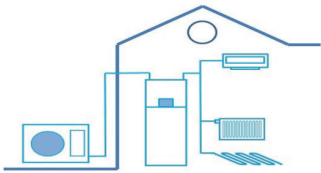
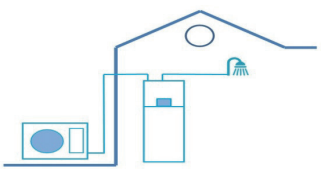
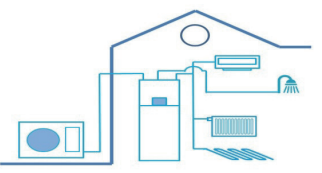
1.2 Operation Temperature Range

Mode	Heat Source Side Temperature (°C)	User Side Temperature (°C)
Heating	-25~35	20~65
Cooling	-15~48	5~25
Water Heating	-25~45	40~80

1.3 Sizes of Pipelines

Model	Name	Size
4/6/8/10/12/14kW	Leaving Water Pipe	G1
	Returning Water Pipe	G1
16kW	Leaving Water Pipe	G1-1/4
	Returning Water Pipe	G1-1/4

1.4 Operation Modes

		
Space heating/cooling	DHW heating	Space heating/cooling + DHW heating

There are five basic working modes, including space cooling, space heating, domestic water heating, space cooling plus domestic water heating, and space heating plus domestic water heating.

- (1) **Spacing cooling**: it's used to reduce indoor temperature when ambient temperature is quiet high so as to make occupants in comfort.
- (2) **Space heating**: it's used to raise indoor temperature when ambient temperature is quiet low so as to make occupants in comfort.
- (3) **Domestic water heating**: it's used to provide domestic hot water in daily life for the user.
- (4) **Space cooling plus domestic water heating**: it is used to not only reduce indoor temperature but also provide domestic hot water.
- (5) **Space heating plus domestic water heating**: it is used to not only raise indoor temperature but also provide domestic hot water.

These five basic working modes can meet almost daily life requirements of air conditioning and domestic water hot for users.

2. Installation Introduction to the Control Panel

There is a capacitor touch screen for the control panel, which is applicable to R290 series heat pump water heaters equipped with a certain number of temperature sensors for detecting ambient and water temperature etc., and pressure sensors as well. These detected data are used to control stable operation of the unit, and is displayed at the control panel in real time. Display interfaces and parameters will vary according to the functions of each model. For example, functions related to domestic hot water requires a water tank. Parameters are subject to the actual display.

2.1 Applicable Conditions

Do not use this product where:

- (1) There is corrosive gas, heavy dust, salty fog, smog
- (2) It is moist or there is direct sunlight
- (3) There is high-temperature object or it likely suffers water splash.

2.2 Wiring Instructions

Interface	CN1	CN2
Description	Power supply interface, communication interface with the main board	Communication interface with other host computer (reserved)

The standard length of the communication line is 8m. If it fails to meet the installation requirements of the control panel, please purchase one with the same materials on the market (reference specification: UL2464 26AWG; Port A: XH-4P-K3, with a locker and a keeper; Port B: ZHR-6). The longest communication line is allowed to be 30m.

2.3 Installation Instructions

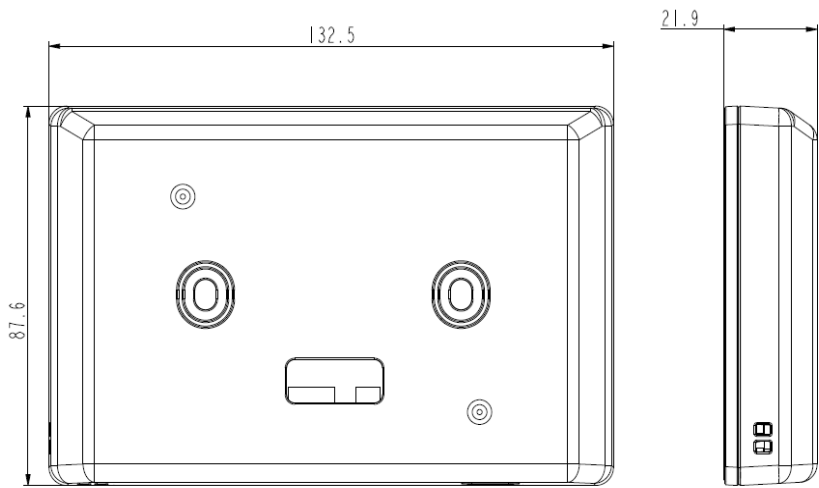


Figure 1-1 Outline Dimensions

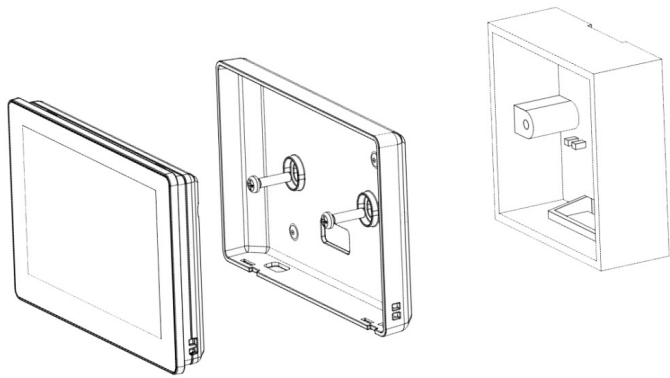


Figure 1-2 Installation Diagram

3. Operation Instructions to the Control Panel

3.1 Homepage

After the control panel is powered on, the system will go to initialization, the buzzer will sound within about 10 seconds, and then it will enter the home page.

In the case of no touch operation for 10 consecutive minutes, the control panel will light off and automatically return to the home page. When it is touched under the light-off state, it will light up again.

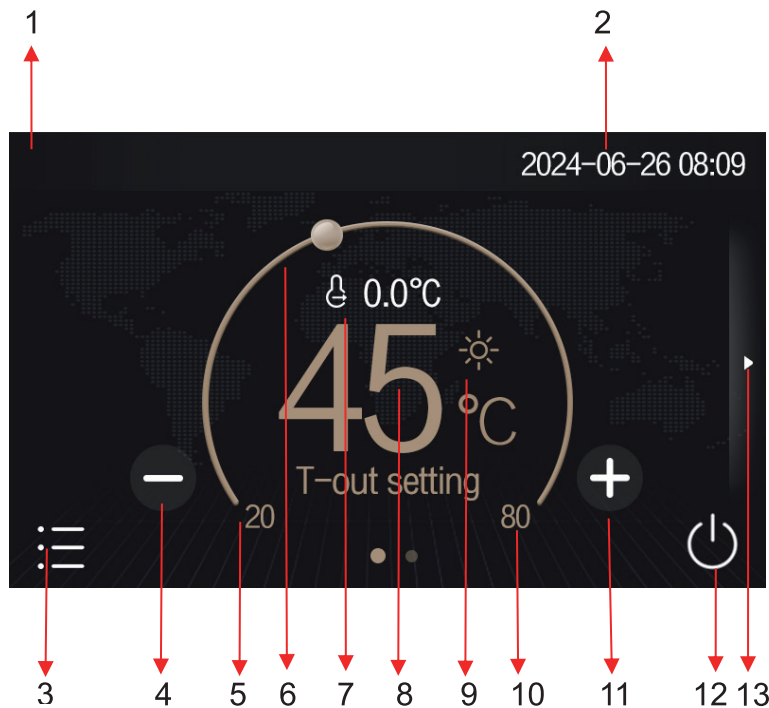


Figure 3-1 Homepage

No.	Name	Description
1	Status	It is the status of the unit.
2	Clock	It is the clock time.
3	Menu	It is used to go to the menu page.
4	Temperature control (-)	It is used to decrease the temperature target.
5	Minimum temperature	It is the minimum of the temperature target .
6	Temperature control knob	It is used to control the temperature quickly.
7	Leaving water temperature	When “Control mode” is set to “T-water out”, it will be displayed. In the “Heating” mode, if the auxiliary electric heater or backup heat source work, it is their leaving water temperature; if not, it is the leaving water temperature of the heat pump.
	Room temperature	When “Control mode” is set to “T-room”, it will be displayed in the modes except “Water heating”.
	Water tank temperature	It will be displayed in the “Water heating” mode.
8	Temperature target	“Water heating” mode: it is the water tank temperature. “Heating” mode, “Heating + water heating” mode:t is the leaving water temperature for heating. “Cooling” mode, “Heating + water heating”mode:it is the leaving water temperature for cooling.
9	Mode	It is the current operating mode.
10	Maximum temperature	It is the maximum of the temperature target .
11	Temperature control (+)	It is used to increase the temperature target.
12	Start/Stop	It is used to turn on or off the control panel.
13	Zone control	When the zone control function is activated, you can quickly switch to the zone temperature setting.

Icon	Description	Icon	Description	Icon	Description	Icon	Description
	"Cool" mode		"Emergency heating"		Floor heating commissioning		Off
	"Heat" mode		Other thermal		Floor heating error		On
	"DHW" mode		Thermostat		Back		Unselected
	"Cool+DHW" mode		SG		Homepage		Selected
	"Heat+DHW" mode		EVU		OK		Delete
	"Cool+DHW" mode (Priority to "DHW")		Optional electric heater		Cancel		Parameter Setting
	"Heat+DHW" mode (Priority to "DHW")		Water tank electric heater		Menu		Check
	Timer		Leaving water temperature		Stop		System setting
	Error		Water tank temperature		Start		Edit
	"Quiet mode"		Remote room temperature		Decrease		Delete
	"Holiday mode"		"Gate control"-card out		Increase		Delete
	"Disinfection" mode		Defrosting state		Error guide		Solar
	Compensation mode		Wi-Fi				

3.2 Start/Stop

It locates at the right lower corner of the home page and is used to start or stop the control panel.



It indicates the control panel is turned off.



It indicates the control panel is turned on.

The control panel is not allowed to be started when "Thermostat", "Holiday mode", "Emergency heating" works or the card for "Gate control" is drawn out.

3.3 Menu

By clicking , the control panel will go to the menu page, which categorizes parameters into three types.

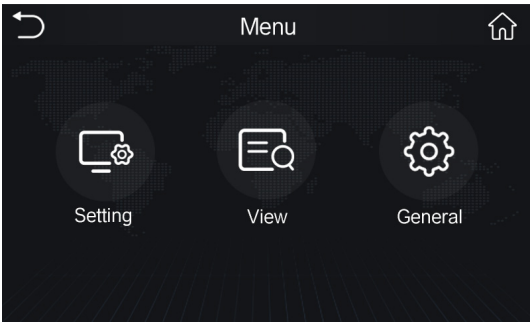


Figure 3-2 Menu Page

No.	Menu Type	Description
1	Setting	It indicates operating parameters.
2	View	It indicates status parameters.
3	General	It indicates parameters of the control panel itself.

3.4 Parameter Setting

At the the “Setting” page, parameters can be switched over by sliding the finger up and down in the middle area of the screen, and it is the same for other pages. Unless specified specially, parameter settings are defaulted to be memorized upon power failure.

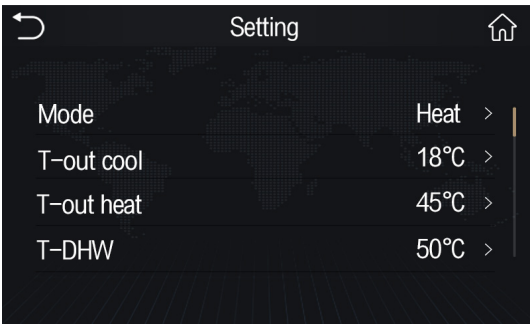


Figure 3-3 Setting Page

No.	Item	Range	Default	Description
1	Mode	Cool	Heat	The“Cool+DHW” and “Heat +DHW”modes are unavailable if the water tank is not configured. The “Cool” and “Cool+DHW”modes are unavailable for the heating only unit.
		Heat		
		DHW		
		Cool+DHW		
		Heat+DHW		
2	T-out cool	5~25°C	18°C	It is unavailable for the heating only unit.
3	T-out heat	20~80°C	45°C	
4	T-DHW	40~80°C	50°C	It is unavailable if the water tank is not configure.
5	T-room cool	18~30°C	24°C	
6	T-room heat	18~30°C	20°C	
7	Cool+DHW	Cool/DHW	DHW	It is unavailable if the water tank is not configure.
8	Heat+DHW	Heat/DHW	DHW	It is unavailable if the water tank is not configure.

No.	Item	Range	Default	Description
9	Fast DHW	On/Off	Off	It is unavailable if the water tank is not configured. This function will make the temperature of the water tank reach the target quickly through the electric heater of the water tank.
10	Quiet mode	On/Off/Timer	Off	
11	Timer	/	/	Time, day and operation mode can be set for start/stop.
12	△ T-Cool	2~10°C	5°C	
13	△ T-Heat	2~10°C	10°C	
14	△ T-DHW	2~25°C	2°C	
15	△ T-Room	1~5°C	2°C	
16	Compensation mode	On/Off	Off	
17	Disinfection	On/Off	Off	It is unavailable if the water tank is not configure.
18	Holiday mode	On/Off	Off	
19	Zone control	On/Off	Off	
20	Wi-Fi reset	/	/	It is to reset the Wi-Fi configuration.
21	Emergency heating	On/Off	Off	This function is only available when a electric heater or backup heat source is configured.
22	Commissioning	/	/	Only professional personnel is allowed!

3.4.1 Mode

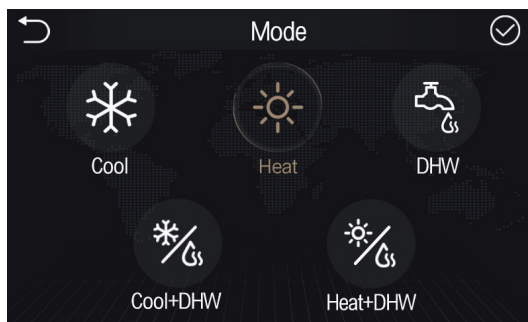


Figure 3-4 Mode Setting

Unselected mode icons are white and the selected are brown. After the mode is selected, it needs to be determined by clicking  at the upper right corner.

- (1) The operation mode can only be switched when the control panel has been turned off.
- (2) The “Cool+DHW” and “Heat +DHW” modes are unavailable if the water tank is not configured;
- (3) The “Cool” and “Cool+DHW” modes are unavailable for the heating only unit.

3.4.2 Temperature

For the temperature setting, a keyboard input page will pop up. The top displays the parameter name, the left side displays the range of the parameter, and the right displays the current value of the parameter.



Figure 3-5 Temperature Setting

The temperature “Range” allows no negative numbers (“-” can not be input) and the parameter precision is “1” (“.” can not be input).

The outlet water temperature (room temperature setting) works only when “Control mode” is set to “T-water out” (“T-room”).

3.4.3 Priority



Figure 3-6 Priority Setting

The combination mode is controlled by modifying the priority. The selected will be in brown and will be saved by clicking .

When “DHW” takes the priority, the heat pump will be used to heat the domestic hot water and then go to space cooling or heating after the domestic hot water reaches the target point.

When “Cool” or “Heat” takes the priority, the heat pump will be used for space cooling or heating, and domestic hot water is heated by the electric heater of the water tank.

3.4.4 Fast hot water

This function will make the temperature of the water tank reach the target quickly through the electric heater of the water tank.

3.4.5 Quiet mode

When the unit is operating in the “Quiet” mode, the operation noise will be reduced by limiting the frequency of the compressor and also the fan speed.

“Timer”: when “Quiet mode” is set to “Timer”, once the control panel is turned on, the “Quiet” mode will work and will be deactivated when the control panel is turned off.

“Start timer” and “End timer”: you can set the start time and end time of the “Quiet” mode. When the system time is between “Start timer” and “End timer”, the “Quiet” mode will be automatically turned on; when the system time is beyond the “Start timer “ and “End timer”, the “Quiet” mode will be automatically deactivated.

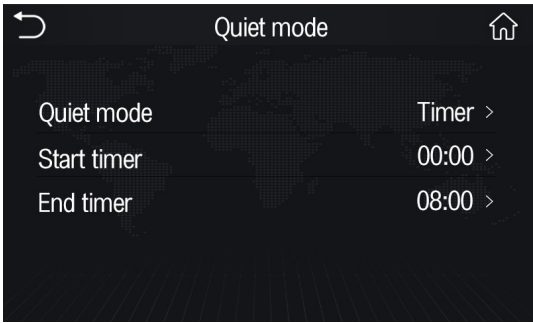


Figure 3-7 Quiet Mode Setting

Note: the “Quiet” mode will limit the action of the unit load,degrade the cooling, heating or water heating performance, and lower the output capacity.

3.4.6 Timer

- Up to 5 Timers can be set, and each timer can set the “Start timer”, “End timer”, “Mode” and “Period”.
- “Start timer”: it is the start time for this timer.
- “End timer”: it is the end time for this timer.
- “Mode”: it is the operation mode for this timer.
- “Period”: it it the day on which this timer works. Multiple days are allowed.



Figure 3-8 Timer Setting

Click “+”to add more timers.



Figure 3-9 "Timer 01" Setting

Set “Timer” parameters in turn.



Figure 3-10 "Start timer" Setting

Set the time by sliding up and down. After it, click  to save this setting.

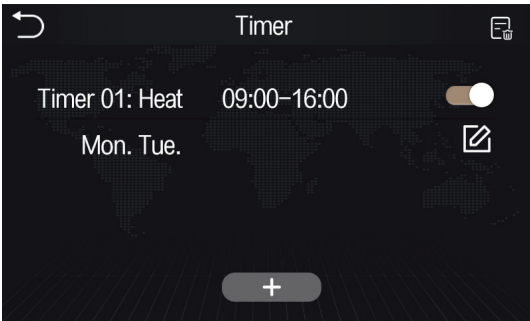


Figure 3-11 Timer Saving

Go back to the “Timer” page, activate “Timer 01” and this setting is finished. After this, you can reset it by clicking  or go to the deletion page by clicking .

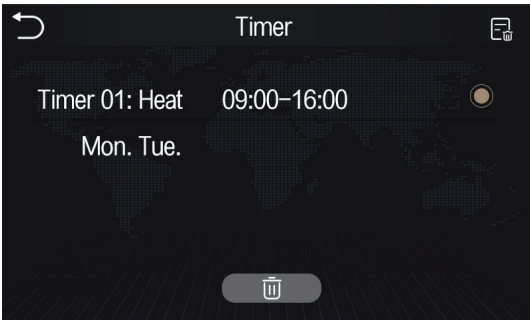


Figure 3-12 Timer Delection

Select the timer to be deleted and click .

As stated above,the unit will start in the “Heat” mode at 9:00 a.m. on Monday and Tuesday and it will shut down at 16:00 on these two days.

The operation logic is to judge the time first and then consider the timer order.

- If “Start timer” and “End timer”are the same, “End timer” takes the priority.
- If settings of two timers overlap, for example, “Timer 1”is 10:00 to 12:00 for heating, “Timer 2” is 9:00 to 11:00 for cooling, the unit will start cooling at 9:00, start heating at 10:00, and shut down at 11:00.
- Except the “Mode” setting, if others settings of the two timers are the same, for example, “Timer 1” is 10:00 to 12:00 for heating, “Timer 2” is 10:00 to 12:00 for cooling, then the unit will start cooling at 10:00 and shut down at 12:00.
- This setting does not work under the “Emergency heating, “Holiday mode”, and “Thermostat” modes.

3.4.7 Compensation mode

At the “Compensation mode” setting page, you can set the following temperature.

Full name	Displayed name	Range	Default
Upper limit of ambient temperature for space heating	Upper AT-Heat	10~37°C	25°C
Lower limit of ambient temperature for space heating	Lower AT-Heat	-20~9°C	-20°C
Upper limit of ambient temperature for water heating	Upper WT-Heat	20~80°C	55°C
Lower limit of ambient temperature for water heating	Lower WT-Heat	20~ 80°C	40°C
Upper limit of room temperature for space heating	Upper RT-Heat	22~30°C	24°C
Lower limit of room temperature for space heating	Lower RT-Heat	18~21°C	18°C
Upper limit of ambient temperature for space cooling	Upper AT-Cool	26~48°C	40°C
Lower limit of ambient temperature for space cooling	Lower AT-Cool	10~25°C	25°C
Upper limit of water temperature for space cooling	Upper WT-Cool	5~25°C	15°C

Full name	Displayed name	Range	Default
Lower limit of water temperature for space cooling	Lower WT-Cool	5~25°C	7°C
Upper limit of room temperature for space cooling	Upper RT-Cool	24~30°C	27°C
Lower limit of room temperature for space cooling	Lower RT-Cool	18~23°C	22°C
Compensation mode deviation enabled	△ T enable	Off/On	Off
Deviation of water temperature for space heating	△ WT-Heat	Calculated based on "Upper WT-Heat" and "Lower WT-Heat"	0°C
Deviation of room temperature for space heating	△ RT-Heat	Calculated based on "Upper AT-Heat" and "Lower AT-Heat"	0°C
Deviation of water temperature for space cooling	△ WT-Cool	Calculated based on "Upper WT-Cool" and "Lower WT-Cool"	0°C
Deviation of room temperature for space cooling	△ RT-Cool	Calculated based on "Upper RT-Cool" and "Lower RT-Cool"	0°C

After "Compensation mode" has been activated, "T-out setting" and "T-room setting" go invalid and the unit will be controlled by the target temperature of "Compensation mode". When "△T enable" has been activated, the temperature deviation works. In this case, the actual upper limit of water temperature for space heating will be "Upper WT-Heat" plus "△WT-Heat"; and the actual lower limit will be "Low WT-Heat" plus "△WT-Heat". However, the actual value is not allowed to go beyond the setting range.

Note: this function is only valid for the space heating or cooling. When the operation mode is water heating, it does not work.

3.4.8 Disinfection

The function is to heat domestic water in the water tank and kill bacteria through high temperature.

"Disinfection": it is to activate or deactivate this function.

"Set clock": it is to set the start time for disinfection.

"Set temp": it is the target temperature for disinfection.

"Set day": it is to set on which day to run this function.

The disinfection icon will be displayed only when the unit is operating in this mode. After this function has been activated, it will work once a week at the same time.

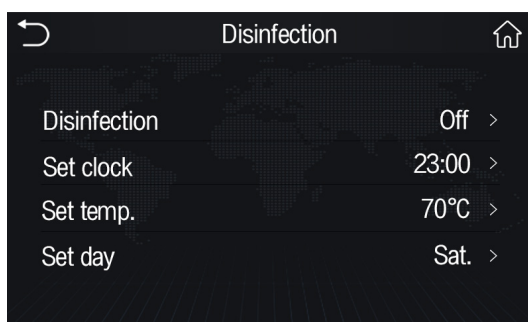


Figure 3-13 Disinfection

Notes:

- This function is unavailable when "Holiday mode" has been activated.
- It can be activated no matter when the control panel is turned on or off, and the "DHW" mode takes the priority.
- When it has been activated, but disinfection conditions are not met, such as in case of the water tank temperature sensor error, this function fails.
- If the disinfection mode does not exit after 10 hours of accumulated operation, or in case of the water tank temperature sensor error, a prompt will pop up at the control panel to remind of disinfection failure.

3.4.9 Holiday mode

This function allows the unit operate in a energy saving manner to maintain a certain temperature inside the room and avoid freezing the pipeline system.

- This function can only be activated when the control panel has been turned on.
- When this function has been activated, the operation mode will automatically be turned to “Heat”, and settings of “Mode”, Start/Stop, “T-out setting”, “T-room setting”, “Disinfection”, and “Timer” will go to be invalid.

3.4.10 Zone control

The zone control function can adjust the mixing water ratio by controlling the opening of the proportional valve to achieve different leaving water temperature.

After the function has been activated, by the button at the right side of the home page, the controller can quickly switch to the temperature setting page for zone control, where you can quickly switch back to “T-out setting” or “T-room setting” by the left button.

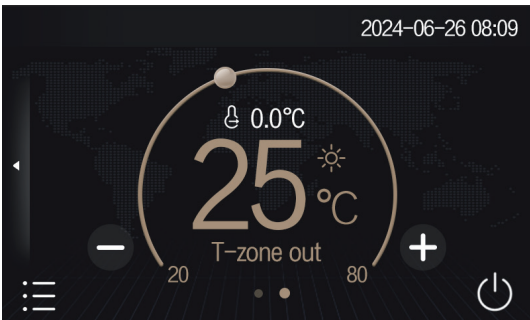


Figure 3-14 Zone Control

- This function is only valid for space heating or cooling. When the operation mode is water heating, it does not work.
- After “Holiday mode” has been activated, it does not work.
- Under the space heating mode,the setting temperature for zone control cannot be higher than “T-out setting”; under the space cooling mode, the setting temperature for zone control cannot be lower than “T-out setting”.

3.4.11 Wi-Fi reset

It is available for units with the Wi-Fi function. This function is used to reset the Wi-Fi configuration and is typically used when the network is first used or replaced. If you do not want to continue using the Wi-Fi function, you can clear the data stored in the device by this function.

Interpretation of the Wi-Fi indicator	
Normally ON	It indicates successful connection.
Normally OFF	It indicates disconnection or connection fault.
ON for 0.5 seconds and OFF for 0.5 seconds	It indicates waiting for connection, Wi-Fi sending out a hotspot.
ON for 2 seconds and OFF or 2 seconds	It indicates that it has been connected and Wi-Fi is connecting to the router.
Flash for 3 seconds and OFF for 3 seconds	It flashes for 0.5 seconds ON and 0.5 seconds OFF in turn. It indicates a Wi-Fi fault. And 5 minutes later, it will turn normally OFF.

3.4.12 Emergency heating

It is only available when other thermal or optional electric heater is configured. When the unit fails to start normally, this function will use either of them for heating.

- It can not be set when the control panel is turned on or “Disinfection”, “Holiday mode”, or “Thermostat” has been activated.
- It can not be set in case of the water tank temperature sensor error, flow switch protection under for heating, or leaving water temperature sensor error for the auxiliary electric heater , and the control panel prompts "The system is faulty!".

- It is only available for the “Heat” or “DHW” mode; otherwise the control panel prompts "Wrong running mode!".

3.5 View

By clicking “View”, go to the “View” page for the information as stated in the table below:

1	Status	Load status
2	Parameter	Temperature
3	Error	Real-time errors and the current error will be in orange.
4	Error log	Historical errors

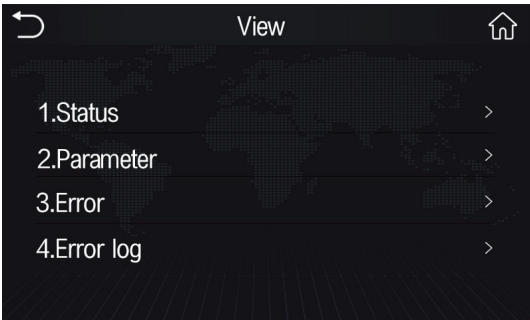


Figure 3-15 View Page

3.5.1 Status

By clicking “Status”, go to the “Status” page for the information as shown below.

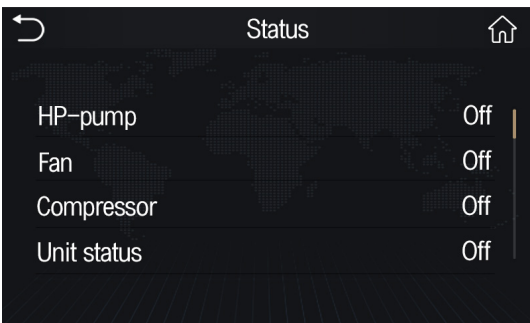


Figure 3-16 Status Page

No.	Item	Options	Remarks
1	HP-pump	On/Off	
2	Fan	On/Off	
3	Compressor	On/Off	
4	Unit status	Off/Cool/Heat/DHW	
5	Tank heater	On/Off	Unavailable when the water tank is not configured.
6	3-way valve 1	On/Off	Unavailable when the 3-way valve is not configured.
7	3-way valve 2	On/Off	
8	Crankc. heater	On/Off	
9	HP-heater 1	On/Off	
10	HP-heater 2	On/Off	
11	Chassis heater	On/Off	
12	Plate heater	On/Off	
13	Defrost	On/Off	
14	Oil return	On/Off	

No.	Item	Options	Remarks
15	Thermostat	Off/Cool/Heat/DHW/Cool+DHW/Heat+DHW	Unavailable when “Thermostat”is “Off”.
16	Other thermal	On/Off	Unavailable when the heat source has not set to “Other thermal”.
17	2-way valve	On/Off	
18	HP-Antifree	On/Off	
19	Solar antifree	On/Off	Displayed when this function has been activated.
20	Gate control	Card in/Card out	Unavailable when this function has been deactivated.
21	4-way valve	On/Off	
22	Disinfection	Off/Running/Done/Fail	Unavailable when the water tank is not configured.
23	Flow switch	On/Off	
24	Tank Pump	On/Off	Unavailable when the water tank is not configured.
25	SG signal	On/Off	Unavailable when the SG function has been deactivated.
26	EVU signal	On/Off	Unavailable when the SG function has been deactivated.
27	SG	On/Off	Unavailable when the SG function has been deactivated.
28	Backup pump	On/Off	
29	Zone pump	On/Off	Displayed when this function has been activated.
30	Reserved pump	On/Off	

3.5.2 Parameter

By clicking “Parameter”, go to the parameter status page as shown in the figure below.

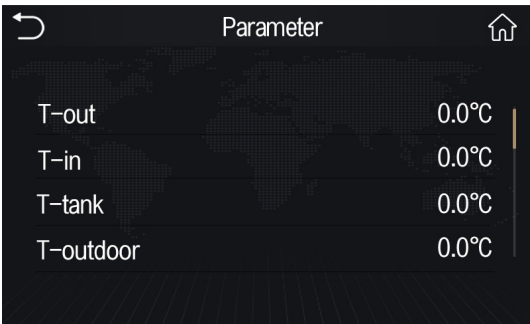


Figure 3-17 Parameter Status Page

No.	Full Name	Displayed Name	Remarks
1	Leaving water temperature of the plate heat exchanger for the heat pump	T-out	
2	Entering water temperature of the plate heat exchanger for the heat pump	T-in	
3	Water tank temperature	T-tank	Unavailable when the water tank is not configured.
4	Leaving water temperature of the electric heater for the heat pump	T-optional out	Unavailable when the heat source is not configured.
5	Ambient temperature	T-outdoor	
6	Defrosting temperature	T-defrost	
7	Suction temperature	T-suction	
8	Discharge temperature	T-discharge	
9	Gas line temperature	T-gas pipe	

No.	Full Name	Displayed Name	Remarks
10	Liquid line temperature	T-liquid pipe	
11	Discharge pressure	Dis. Pressure	
12	Water pump water flow feedback	Water flow	
13	Real-time COP	Real-time COP	It will be displayed when this function is available.
14	Remote room temperature	T-remote room	Unavailable when the room temperature is not configured.
15	"Compensation mode" temperature target	T-compensation	Displayed when "Compensation mode" has been activated.
16	"Floor heating" temperature target	T-floor heating	Unavailable when the "Floor heating" function has been deactivated.
17	"Floor heating" runtime	Floor heating time	Unavailable when the "Floor heating" function has been deactivated.
18	Partition control Ratio valve output	Zone valve ctrl	Displayed when "Zone control" has been activated.
19	Zone control water outlet temperature	T zone out	Displayed when "Zone control" has been activated.
20	Solar outlet water temperature	T-solar out	Displayed when "Solar setting" has been activated.
21	Low pressure	Low pressure	
22	Compressor runtime	Compressor run time	
23	Indoor unit version	In-board version	
24	Outdoor unit version	Out-board version	

3.5.3 Error Event

By clicking "Error", go to the error page for real-time errors as shown in the figure below.

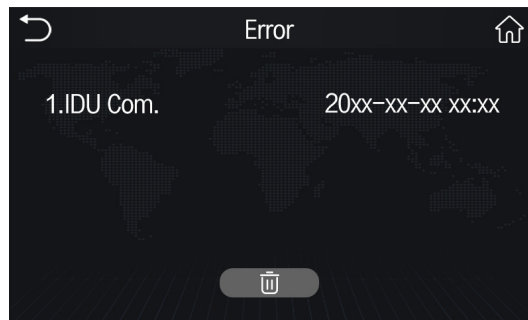


Figure 3-18 Error Page

No.	Full Name	Displayed Name	Error Code
1	Ambient sensor error	Ambient sensor	F4
2	Defrost sensor error	Defrost sensor	d6
3	Discharge sensor error	Discharge sensor	F7
4	Suction sensor error	Suction sensor	F5
5	Fan error	Outdoor fan	EF
6	High pressure sensor error	HI-pre. sens.	Fc
7	High pressure protection	High pressure	E1
8	Low pressure protection	Low pressure	E3
9	High discharge protection	Hi-discharge	E4
10	Capacity DIP setting error	Capacity DIP	c5
11	Communication error between indoor and outdoor units	ODU-IDU Com.	E6
12	Communication error between the outdoor board and the drive board	Drive-main com.	P6
13	Low pressure sensor error	Low-pre. Sens.	dL

No.	Full Name	Displayed Name	Error Code
14	Communication error between the control panel and the indoor board	IDU Com.	E6
15	Leaving water temperature sensor error of the plate heat exchange for the heat pump	Temp-HELW	F9
16	Leaving water temperature sensor error of the auxiliary electric heater for the heat pump	Temp-AHLW	dH
17	Refrigerant liquid line temperature sensor error	Temp RLL	/
18	Entering water temperature sensor error of the plate heat exchange for the heat pump	Temp-HEEW	F1
19	Water tank temperature sensor error	Tank sens.	FE
20	Refrigerant gas line temperature sensor error	Temp RGL	F0
21	Remote room temperature sensor error	T-Remote Air	F3
22	Communication error between indoor and outdoor units	ODU Com.	E6
23	Jumper error	Jumper cap Error	c5
24	Welding protection for the heat pump auxiliary electric heater 1	Auxi. heater 1	EH
25	Welding protection for the heat pump auxiliary electric heater 2	Auxi. heater 2	EH
26	Welding protection for the water tank electric heater	Auxi. -WTH	EH
27	Heat pump flow switch error	HP-Water Switch	Ec
28	4-way valve error	4-way valve	U7
29	DC busbar under-voltage or voltage drop error	DC under-vol.	PL
30	DC busbar over-voltage	DC over-vol.	PH
31	AC current protection (input)	AC curr. pro.	PA
32	IPM error	IPM defective	H5
33	PFC error	PFC defective	Hc
34	Start failure	Start failure	Lc
35	Drive board resetting	Driver reset	P0
36	Compressor over-current	Com. over-cur.	P5
37	Current detection circuit error or current sensor error	Current sen.	Pc
38	Desynchronizing	Desynchronize	H7
39	Radiator or IPM or PFC over-temperature	Overtemp.-mod.	P8
40	Radiator or IPM or PFC temperature sensor error	T-mod. sensor	P7
41	Charging circuit error	Charge circuit	Pu
42	AC input voltage error	AC voltage	PP
43	Floor heating commissioning error	Floor heating unusual	/
44	Leaving water temperature sensor error of the two zone kit	Zone sensor	/
45	Leaving water temperature sensor error of the solar kit	Solar sensor	/

By clicking  , a prompt will pop up to confirm if to detect the error again.

3.5.4 Error Log

By click “Error Log”, go to the error record page as shown in the figure below.

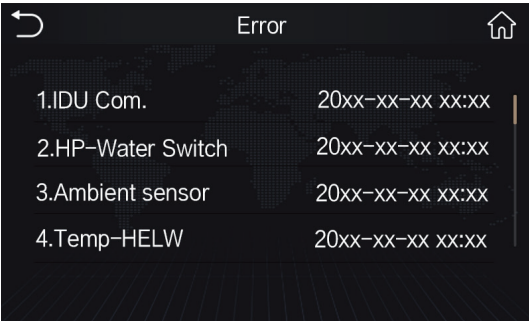


Figure 3-19 Error Log

Notes:

- The error log can record 20 pieces of information, and each includes the error name and occurrence time;
- When the number of error logs reaches 20, the latest fault record will overwrite the earliest.

3.5.5 Power Consumption

For some units that support check on power consumption, it can be viewed as shown in the figure below. When the amount of data is large, it takes time to load the data, and the corresponding prompt will pop up to remind you to try again later.



Figure 3-20 Power Consumption

After entering the “Power consumption” page, you can view real-time data.

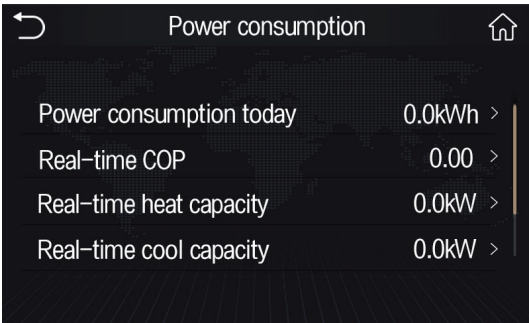
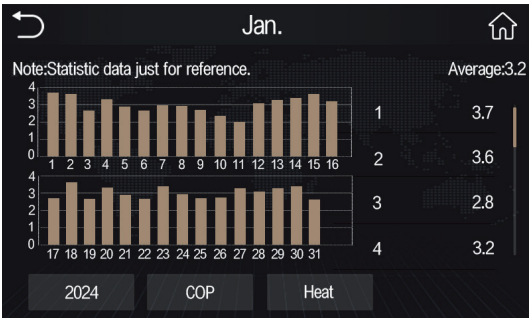
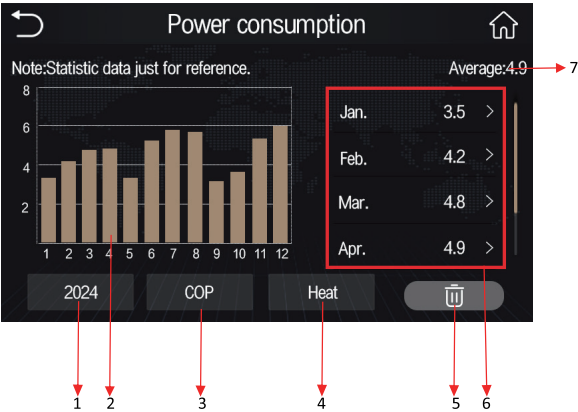


Figure 3-21 Real-time Power Consumption

Click each option to view historical data.



No.	Name	Monthly	Daily
1	Year	Select the expected year, which can be this year, last year, or the year before last.	
2	Data Histogram	Data-Month histogram	Data-Day histogram
3	Data type	Select the type of data, which can be total power consumption, single-mode power consumption, total heating (cooling) capacity, average COP, and CO2 emissions.	
4	Mode	The corresponding mode should be selected for the single-mode power consumption, total heating (cooling) capacity, and average COP.	
5	Delete	By clicking the delete icon and then clicking "√" at the prompt box , data will be deleted. Note: this operation is to delete all recorded data in the past three years and cannot be recovered. Please do it careful.	/
6	Data value	You can slide this area to view the monthly value of the whole year. By clicking the expected month, you can enter the daily report of this month.	You can slide this area to view the daily value of the whole month.
7	Total/Average	When the data type is power consumption, Heating (cooling) capacity, CO2 emission, it indicates the annual total. When the data type is COP, it indicates the annual average.	When the data type is power consumption, Heating (cooling) capacity, CO2 emission, it indicates the monthly total. When the data type is COP, it indicates the monthly average.

Note: the data is obtained by calculation, and there is some deviation with the actual, which is for reference only. Data is stored only on the control panel other than the server, and it can only be deleted by the display panel. If you do not need this function, please contact the service provider.

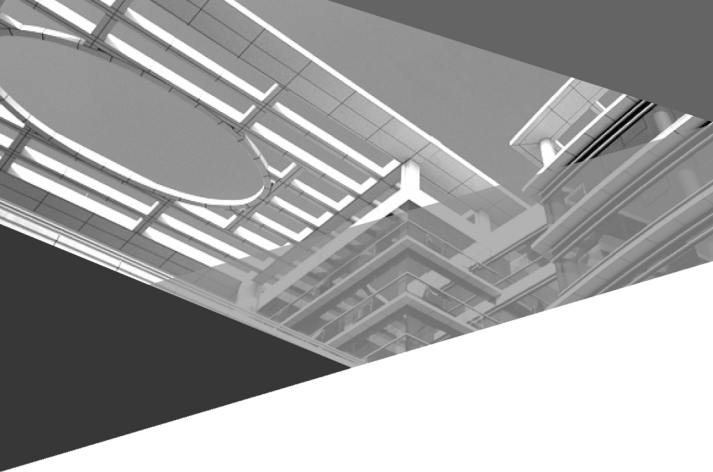
3.6 General Setting

At the menu page, by touching "General", the control panel will go to the setting page, as shown in the figure below, where it is able to set "System time", "Reset", "On/off memory", and "Sound".



Figure 3-14 System Setting Page

No.	Item	Range	Default	Remarks
1	Child lock	On/Off	Off	When this function is "On" and there is no key operation within 10 seconds at the homepage, key operation will automatically be locked. In this case, the child lock icon will be displayed. Short press of any key will be invalid and the child lock icon will flash. Pressing and holding the Menu key for 5 seconds will temporarily unlock it. If there is no key operation within 10 seconds at the home page, it will be locked again.
2	System time	/	/	It is used to set the system clock, which is the basis for the timer function. The time at the upper right corner will be synchronized only after the system time is set for the first time.
3	Reset	/	/	It is used to reset all user-oriented parameters and can be set when the control panel is turned off.
4	On/off memory	On/Off	On	It is used to memorize the status before power failure and restore it upon power recovery.
5	Daylight saving time	On/Off	Off	When this function is "On", the system clock will get " Advance/delay duration " later at the " Conversion time " in the early morning of the last Sunday in March of each year, and will get " Advance/delay duration " earlier at the " Convention time " in the early morning on the last Sunday of October.
		Advance/delay duration: 0.5h/1h/1.5h/2h/2.5h/3h	1h	
		Convention time: 00:00/01:00/02:00/03:00	02:00	
6	Celsius(°C)/ Fahrenheit(°F)	°C/°F	°C	When "°C/°F" is selected, all temperatures on the controller are displayed in Celsius or Fahrenheit.
7	Sound	On/	On	It is used to make sound effect for touch operation.
8	Version	/	/	It is used to check the program and protocol versions.



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