GREE

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Owner's Manual

Original Instructions

Central Air Conditioner Thermostat

Model:
WK-010PW/ WK-010PS

Thank you for choosing commercial 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.
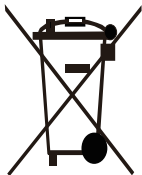
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

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 instruction manual is a universal manual, some functions are only applicable to particular product. All the illustrations and information in the instruction manual are only for reference.

(2) 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.

(3) For personal injury or property loss and damage caused by improper operation such as improper installation and debugging, unnecessary maintenance, violation of related national laws and rules and industrial standard, and violation of this instruction manual, etc., we will bear no liability.

|	Correction disposal of this product
(CE)	This symbol on the product, or in its packaging, indicates that this product may not be treated as household waste. Instead, it should be taken to the appropriate waste collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by the inappropriate waste handling of this product. For more detailed information about the recycling of this product, please contact your local council, your household waste disposal service, or the shop where you purchased the product.

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User Notices

Distinguished users:

Before installing or using this appliance, please read this instruction manual carefully, and install and use according to the process stipulated in the instruction manual.

The following marks should be specially noted:

$\bigcirc$ identifies instructions that must be forbidden.

$\bigoplus$ indicates instructions that must be followed.

1 Thermostat panel and keys
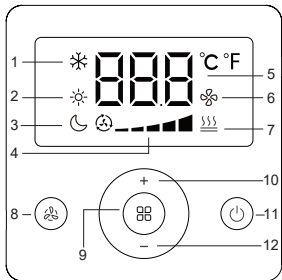
1	Cooling mode	8	SPEED
2	Heating mode	9	MODE
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2 Technical parameters

| Item	Description
Supply voltage	AC85~265V 50/60Hz
Temperature setting	16~35°C
Operation temperature	0~50°C
Humidity	Relative humidity 5~95% (no condensate)
Load current	2A (resistive load); 1A (inductive load)
Connecting terminal	It is recommended to use neutral and live lines of less than 2.0mm^2 in size and 1.0mm^2 wires for other loads.
Outline dimensions	86×86×14.5mm (Width x Height x Thickness)
Protection class	IP30
Installation requirement	An 86x86 unconcealed or concealed standard junction box with more than 40mm interior height and standard 60mm hole spacing

3 Components inside the packing box

Item	Number
Operating manual	1
Installation screws	2
Mounting bracket	1

4 Installation of the thermostat

⃠It should not be fitted in the positions below:

(1) Closed thermal pipelines and flues.

(2) Near cool and hot air pipes and radiators.

(3) Near direct sunlight, airflow and other heating objects (such as a television).

(4) Corners, edges of doors and windows and the front and back of doors.
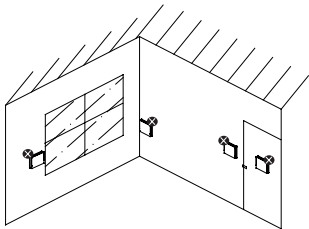
ⓘ*Notice:*

    (a) Hard plastic lines, if used, must be bent at a proper angle.

    (b) Wire in accordance with the wiring diagram.

    (c) Fit the thermostat in accordance with the installation diagram.

    (d) One thermostat can only control one coil unit.

    (e) Do not hurl it or press forcibly its LCD.

    (f) Don't hit and drop it, and protect it from deformation.

    (g) Keep its inside clean against other objects such as water and mud.

    (h) The 86x86 junction box shall be subject to the flame-retardant class.

    (i) No inflammables are placed near the installation locations.

    (j) A fireproof metallic 86x86 junction box is required to be used for fireproof areas.

4.1 Installation position

 As shown in the picture below, the thermostat should be fitted on the position 1.5 meters above the floor.
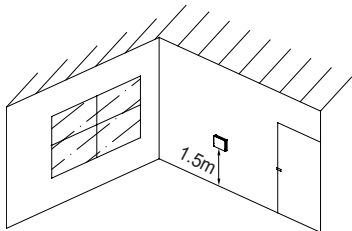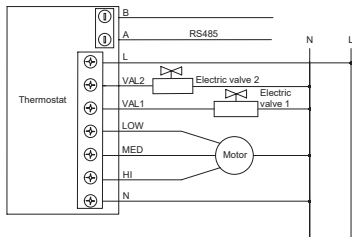

4.2 Installation preparations

(1) Cut off the main power supply.

(2) Label each conductor and wire them according to the wiring diagram.

4.3 Installation procedures

Follow the installation diagram to assemble the components.
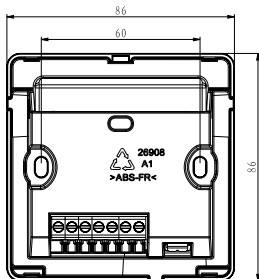

Installation dimension   Wiring diagram

Notes:

WK-010PW: valve 1 is connected with cold/hot water valves and valve 2 floor heating water valves.

WK-010PS: valve 1 is connected with cold water valves and valve 2 hot water valves (or other hot source loads).

a. Take out screws and a mounting bracket inside the packing box. Install wires through the bottom of the bracket. Fix the junction box to the bracket with screws.
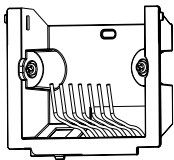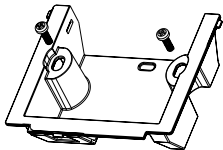
b. Install wires according to the diagram below.
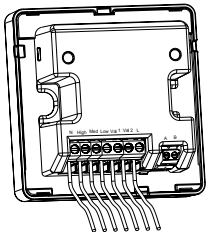
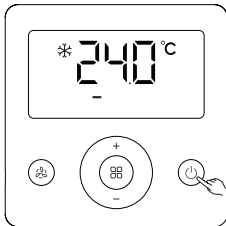c. Place the thermostat to clasps of the mounting bracket and press them by proper force.
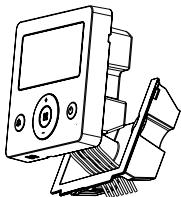
5 Thermostat operations

5.1 ON/OFF

Press ⏻ (ON/OFF) to start or stop the unit. If it is on, the screen provides the operation mode, temperature and fan speed, among which only temperature appears if it is off.
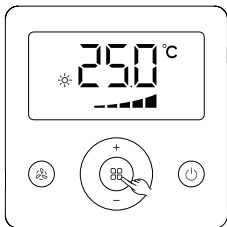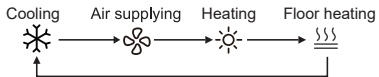
5.2 Mode setting

WK-010PW:

Press ⊞ (MODE) to switch between four modes after a start of the unit.

Switch sequence:

Cooling → Air supplying → Heating → Floor heating
✳ ⎯⎯→ ⅋ ⎯⎯→ ☼ ⎯⎯→ ⌇⌇⌇
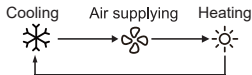
WK-010PS:

Press 🔲 (MODE) to switch between three modes after a start of the unit.
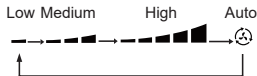Switch sequence:

5.3 Fan speed

Press 🌀 (SPEED) to switch between four speeds of the fan after starting the unit.

Switch sequence:

5.4 Temperature setting

(1) During the operation of the unit, press **+** (UP) or **−** (DOWN) to raise or lower the temperatures.

(2) When the temperature unit is Celsius, one press of the UP key or the DOWN key causes a $0.5^{\circ}C$ increase or decrease within $16^{\circ}C \sim 35^{\circ}C$.

(3) When the temperature unit is Fahrenheit, one press of the UP key or the DOWN key causes a $1^{\circ}F$ increase or decrease within $61^{\circ}F \sim 95^{\circ}F$.

(4) The temperature displayed by default is the setpoint. See the indoor ambient temperature by temperature search function. (If the indoor ambient temperature is lower than $-9^{\circ}C$, you will find it to be $-9^{\circ}C$.

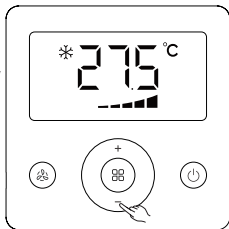Set the temperature as shown in the pictures below.
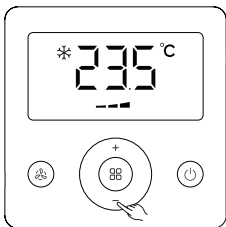
Celsius
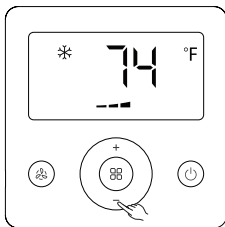
Fahrenheit

5.5 Indoor ambient temperature search

After a start or stop of the unit, keep pressing **−** for 5s to see the indoor ambient temperature. And then press any key to exit. If there is no any key press within 20s, the screen will return to displaying the setpoint.

5.6 Sleep function

As shown in the picture, during the operation of the unit, keep pressing 🔲 (MODE) for 5s to enable or disable the function. When it is enabled, the homepage displays the symbol ☾.

Notice:

(a) In the cooling mode, using the sleep function, the set temperature will rise 1°C after operating in 1 hour and another 1°C in another 1 hour. The set temperature will rise 2°C at most and be steady at 28°C with the function automatically disabled.

(b) In the heating mode, using the sleep function, the set temperature will drop 1°C after operating in 1 hour and another 1°C in another 1 hour. The set temperature will drop 2°C at most and be steady at 16°C with the function automatically disabled.

(c) The fan automatically runs at the low speed.

(d) The sleep function is not available in the air supply and floor heating modes.
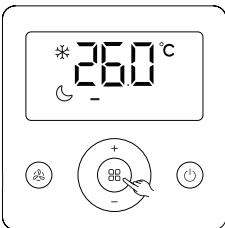
5.7 Parameter setting

After a stop of the unit, you can set the parameters below.

Parameter list:

S.N	Name	Description
1	Temperature unit setting	°F: Fahrenheit; °C: Celsius (by default)
2	Fan operation at temperature set points	00: the fan works as to the set speed (by default) 01: the fan works at the low speed 02: the fan stops
3	Temperature calibration	Adjustable range: -5°C~ +5°C (a precision of 0.5°C, 0°C by default)

Below are instructions for setting the parameters.

(1) Temperature unit setting

Celsius (°C) or Fahrenheit (°F) is available. After a stop of the unit, press ⏻ (ON/OFF) for 5s to allow a switch of Celsius (°C) and Fahrenheit (°F).
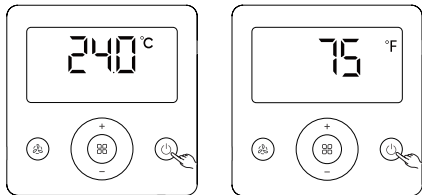

(2) Fan operation at temperature set points

The fan is able to run at the set speed, low speed or stop working. As shown in the picture, after a stop of the unit, keep pressing ⚙ for 5s to go to the fan operation setting page. **+** (UP) or **−** (DOWN) is provided to allow a switch of "00", "01" and "02", adjusting the fan operation. Keep pressing ⚙ for 5s to save all the settings and the current page exits. The screen goes back to the page after you stopped the unit. If there is no any key press within 20s, the fan operation setting page will exit, not saving any data you set.
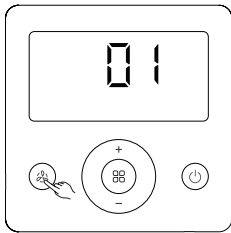
(3) Temperature calibration

The ambient temperature could be calibrated between -5°C and +5°C with a precision of 0.5°C. As shown in the picture, after a stop of the unit, keep pressing **+** for 5s to go to the temperature calibration page. **+** (UP) or **−** (DOWN) is provided to allow a 0.5°C increase or decrease within -5°C~ +5°C. Keep pressing **+** for 5s to save all the settings. The current page exits. The screen goes back to the page after you stopped the unit. If there is no any key press within 20s, the current page will exit, not saving any data you set.
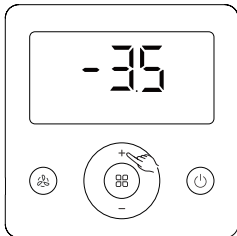
Note: the function is only available for Celsius degrees.

5.8 Modbus address setting

The Modbus monitoring system is capable of controlling up to 255 thermostats at the same time. Communication between the thermostat and the Modbus monitoring system is transmitted at 9,600bps by default. The default address is 1 and you can set the address between 1~255. You need to set different addresses to avoid conflict recognition.
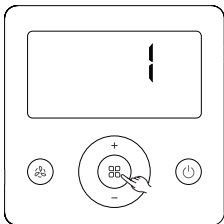
After a stop of the unit, keep pressing 🔡 for 5s to go to the Modbus address setting page. **+** (UP) or **−** (DOWN) is provided to adjust the address number. Press 🔡 for 5s to save all the settings and the current page exits. The screen goes back to the page after you stopped the unit. If there is no any key press within 20s, the current page will exit, not saving any data you set.

5.9 Power failure memory

It can be available for turn-on and turn-off the unit, modes, temperatures, fan speeds, temperature units, fan operation at the set points, temperature calibration and Modbus address. Sleep function cannot be memorised but a change to the communication baud rate can.

6 Ambient temperature sensor failure

If the ambient temperature sensor fails to work, the screen will not display the ambient temperature or the set temperature but "F5". In this case, the unit continues to work at 24°C, an ambient temperature. The user is allowed to adjust the set temperature.
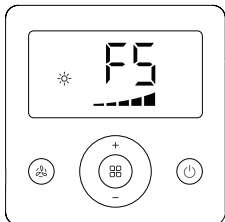
No.	Code	Description
1	F5	Indoor ambient temperature sensor failure

7 Failure handling

The product maintenance is performed by qualified technicians only.

Status	Maintenance approaches
Start-up or display failure	1. Check if L/N wires work well and wiring is safe. 2. Check if the pins connecting the main control panel and power supply board work well. 3. Check if ON/OFF key is effective. 4. Try to replace the main control panel first. If it does not work, replace the power panel.
Blown fuses	1. Check if wiring is correct. 2. Replace the power panel.
Abnormal output with a normal display	Check if the pins connecting the main control panel and power supply board work well. If that happens, try to replace the main control panel first. If it does not work, replace the power panel.

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