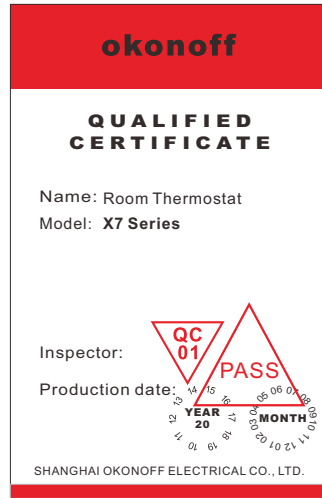


okonoff

X7-WiFi Series

Room Heating Thermostat

Installation Manual



okonoff
SHANGHAI OKONOFF ELECTRICAL CO., LTD
Http://www.okonoff.com
E-mail:okonoff@okonoff.com



KNF-X7-20170911

I . Product Summary :

X7-Wifi series floor heating thermostat could connect to Wifi. User could use mobile phone to check and adjust the temperature at home. It fulfills remote controlling of your home floor heating system.

II . Technical Parameter:

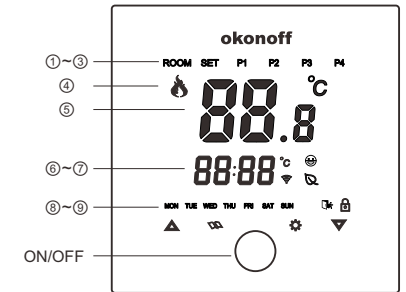
- Working Voltage: 220VAC±10%, 50Hz
- Temperature Controlling Range: 5~45°C
- Current Load:
 - Electric Heating ≤16A(Resistive Load)
 - Water Heating ≤3A(Resistive Load)
- Power Consumption: < 1W
- Temperature-Sensing Element: NTC
- Button: Capacitive touch screen buttons/Mechanical button
- Temperature Controlling Precision: 0/-1°C
- Storage Environment: Temperature: -25~ 60°C
- Relative Humidity: RH< 93% (no dewing)
- Working Environment: -10~ 50°C
- Surface Material: Flame Retardant PC
- External Dimension: 86.7mm(W) ×86.7mm(H) ×13mm(T)
- Installation: 86 Type Installation Box

III. Main Function and Characteristic

- ▶ Adopt capacitive touch screen buttons skill, gently touching buttons will realize the function running.
- ▶ Adopt LED displaying module, high brightness, and long life.
- ▶ Integrated design, easy installation, and high reliability.
- ▶ Week programming, four periods for setting the time and temperature.

- ▶ Use mobile phone to control remotely.
- ▶ Use mobile phone APP to operate.

IV. Function Operation and Display Explanation



- ① Room temperature symbol
- ② Setting symbol
- ③ Time period
- ④ Heating symbol
- ⑤ Room temperature area
- ⑥ Clock area and temperature setting area
- ⑦ Wifi symbol
- ⑧ Week area
- ⑨ Key lock

■ Power on and Power off

In working mode short press **ON/OFF** key to switch the state of power on or off.

■ Set Temperature

In working mode, press "▲" or "▼" to enter setting temperature mode. Then press "▲" to raise the setting temperature, press "▼" to reduce the setting temperature, adjust step is 1°C. Long press "▲" or "▼" to rapidly adjust setting temperature.

Remark: In auto-running mode, modifying the setting temperature is only effective for the current Period. When entering the period next time, it will be running according to the original temperature setting program.

■ Key lock

Long press "▲" and "▼" to switch the state of Key lock. When it's locked, the "🔒" appears. Any key will be invalid.

■ Switch working mode

In working mode, short press "🔑" key to switch to comfortable mode (🌞), save mode (🔒) or leave home mode (🏠). The comfortable mode includes manual or auto mode. Save and leave home modes work as the temperature which are set in F8 and F9 of advanced mode.

■ Manual and automatic mode switch

In comfortable mode, long press "⚙️" key, switch manual and automatic mode.

Manual mode: Only running according to one temperature setting, no time program displayed (P1~P4).

Automatic mode: Running according to the program setting. (Please check the details in item V)

■ Restore the factory setting

Long press "▲" key, restore the factory setting. Meanwhile the version no: V1.0 appears. Press **ON/OFF** key to confirm. Press other keys to cancel. Factory default set:

Working mode: Manual mode
Set temperature: 25°C

■ Advanced Mode

- In comfortable mode, short press "⚙️" to enter the selection state of advanced mode.
- Press "▲" or "▼" to choose mode F1~F9.
- Press **ON/OFF** key to enter mode Fx(x equals 1~9) to set the parameters, press "▲" or "▼" to adjust the parameters.
- Press **ON/OFF** key to confirm and return to the previous menu.
- Press "🔑" to return to the previous menu or quit the advanced mode.

Remark: If twenty seconds without any operation, it'll quit to the normal working state automatically!

Mode	Function	Explanation
F1	Set the clock and week	Set the week, hour and minute in turn. It only need to set when there's no Wifi. If connect to Wifi, the time could be corrected automatically when restart the thermostat
F2	Temperature correction	Correction temperature range: 0~6°C the adjust step is 1°C. Default value is 0°C.
F3	Sensor mode selection	Model 1: Internal sensor controls temperature Model 2: External sensor controls temperature Model 0: Internal sensor controls temperature External sensor limit temperature (1: When choose mode 0, long press "▼" to check the external sensor temperature; 2: Water floor heating: default mode 1, Electrical floor heating: default mode 0 which could be set)
F4	High temperature protection	Adjust the temperature range: 40~60°C, the adjust step is 1°C. The default value is 50°C (Sensor selection mode 0, the function is effective)
F5	Low temperature protection	Adjust the temperature range: 3~10°C, the adjust step is 1°C. The default value is 3°C

Model	Function	Explanation
F6	Temperature bandwidth	Adjust the temperature range: 1~3°C, the adjust step is 1°C. The default value is 1°C
F7	Power failure memory	0: No memory-- It's standby when the power is recovery. 1: Memory-- It recovers to the state before the power failure Default value: 1
F8	Save energy set	Adjust the temperature range: 5~45°C, the adjust step is 1°C. The default value is 18°C
F9	Leave home mode	Adjust the temperature range: 5~45°C, the adjust step is 1°C. The default value is 8°C

■ WiFi connect

1. Android APP--Find "okonoff" from Google Play.
2. IOS APP--Find "okonoff" from App Store.
3. Long press "▲" and **ON/OFF** key together until "1" appears. Meanwhile, the "📶" twinkles every 1/4 second. When the number increases to "3", open the APP on mobile phone. Select "+" and import the router's SSID and password. Press Add. When the thermostat connects with router, the number increases to "4". The "📶" twinkles every 0.5 second. When the connection is successful, the number is "5", and "📶" stop twinkling. Import name and confirm. Now the thermostat is bound to this account.

■ APP function

1. The setting temperature could be changed
2. Three optional modes
Comfortable mode: Work as the set temperature
Save mode: Work as the set temperature of save mode
Leave home: Work as the set temperature of leave home
3. Could set timer switch
4. Could create rooms. Could group as rooms.
5. The matching account is main account. It could be shared to other accounts. Other accounts could control rooms but couldn't be shared any more.

V . Weekly program setting: (It will run according to the following setting values of time period program) .

The default value of time period program:

Time period	Start time	Setting temperature(°C)	
		Mon~Fri	Sat~Sun
P1:6:00~8:00	6: 00	15	15
P2:8:00~16:00	8: 00	10	10
P3:16:00~22:00	16: 00	22	22
P4:22:00~next day6:00	22: 00	15	15

In working mode, long press "🔊"key to enter into time period program (The same operation to quit). "MON TUE WED THE FRI "week area and time period program "P1" will twinkle at the same time. Press "🔊" to choose time period: P1/P2/P3/P4

1. Press "▲"/"▼"key to set week:"MON/TUE/WED/

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THU/FRI /SAT/SUN". After finishing the setting, press "ON/OFF" key to confirm and enter into the setting interface. Meanwhile, the time twinkles.

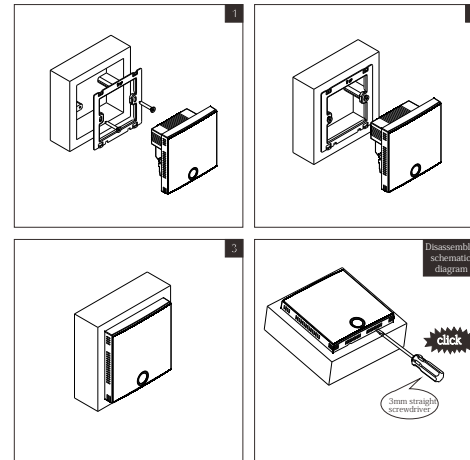
2. Press "▲"/"▼" key to set time. Short press once to add/minus 15 minutes. Please pay attention the time limit: 0:00<P1<P2<P3<P4<24:00; When finish setting, press ON/OFF key to confirm and enter into period temperature setting. The temperature area twinkles.
3. Press "▲"/"▼" key to set the temperature, press once to increase or decrease 1°C, 5°C→6°C→45°C . Press ON/OFF key to confirm and enter the next selected time period
4. Repeat the operations of step 2 and step3, till finish the four time period of working days. When finish setting, enter into the time period setting interface of Saturday.

5. Now "SAT" at week area is twinkling, and the setting method is the same as the step 4. After setting, press ON/OFF key to enter into the Sunday time period "SUN" the setting method is the same as the step 4. After setting, press ON/OFF key to return to the time period program interface.

6. Press "⚙️" to quit. Remark: If twenty seconds without any operation, it'll quit to the normal working state automatically.

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VI. Installation



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VII. Installation explanation

- △ Please do the installing operation after the power is cut off, or it may damage the system units.
- △ Choose the correct installing location (about 1.6m above the floor); do not install the product in places under direct sunshine or high humidity areas.
- △ Height above Sea Level: Not surpass 2000m.
- △ If you install the product in the bathroom, please use professional water-proof cover.
- △ Open the Power Panel and LCD Main Board, and use screws to fasten the cover of the power panel to the pre-placed installing box. Please notice the cover direction.
- △ Follow the wire diagram for the electrical connection.
- △ Please refer to the fig.3, push the thermostat into box, and make sure the thermostat install well.
- △ Finish the installation and connect power supply to test.

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VIII. Temperature Controlling Characteristic:

It will enter into the heating state and display the heating symbol when the temperature is less than the controlling temperature by 2°C. It will stop heating and will not display the heating symbol when the temperature reaches the setting temperature.

Under the model 0, it will stop heating when the temperature of external sensor is higher than the setting protective temperature set in F5.

Under the OFF state, it will begin to heat when the temperature is less than the protective temperature set in F6.

IX. Attention:

1. It should be installed by professional engineer and follow the user manual.
2. Before installation, please make sure if the power voltage is the same with remarks on the products.
3. Please do not install the products to the place where is near to high temperature or bad conditions.
4. Please to choose the right power line with electrical current voltage.
5. If the system abnormal or dead, please try to cut off the power and then give the power again.
6. If the product is damaged owing to wrong line connection and installation, it will beyond our quality warranty.

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X. Product Function Choice

Model	Time period program	Mainframe linked function	External sensor	Current load
X7-Wifi-PE	✓		✓	≤16A(Resistive load)
X7-Wifi-PW	✓			≤3A(Resistive load)
X7-Wifi-PWH	✓	✓		≤3A(Resistive load)

XI. Solutions for Simple Faults

Error code	Fault reason	Solution
Er1	Internal sensor is wrong	Change product
Er2	External sensor is wrong	Change external sensor
Er3	Both internal and external sensor are wrong	Change product

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Warning:



- The symbol means the unit is being installed, it may cause electrical shock hazard during maintaining, so please make sure it is operated by the professional technical worker.
- Make sure the power agrees with controller specified voltage before installation.
- Please read the manual in details before using the product.
- The controller must have a separate power control equipment. If long term do not use controller more than one month please cut off the power supply between the controller and

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