

**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 control equipment

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Q8-141119



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**Q8 Series**

**Room Heating Thermostat**

**Installation Manual**

**I . Product summary:**

Q8 Series of thermostat are usually used on electrical floor heating and water floor heating system, to control electrical load and valve control.

**II . Technical Parameter:**

- Working Voltage: 220VAC±10%, 50Hz
- Temperature Controlling Range: 5~45℃
- Output Current: Electrical Heating ≤16A (Resistive Load)  
Water Heating ≤3A (Resistive Load)
- Power Consumption: <1W
- Temperature-sensing Element: NTC
- Button: Capacitive touch screen buttons
- Temperature Controlling Precision: 0/-2℃
- Storage Environment: Temperature: -10~+55℃
- Relative Humidity: RH<85 %, no dewing
- Working Environment Temperature: 0~+50℃
- Surface Material: PC Engineering Plastic
- External Dimension: 86.2 x 86.2 x 9.5 (mm) (HTN)  
86.2 x 86.2 x 10.5 (mm) (VATN)
- Installation: 86 Type Installing Box

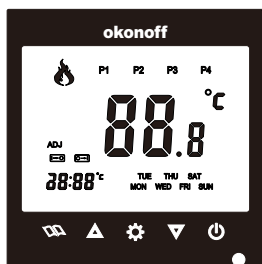
**III . Main functions and characteristics:**

- Adopt capacitive touch screen buttons skill, touch the buttons gently will realize the function.
- Fashion super slim design, import tempered glass panel, large touch screen display, and make the product more refined aesthetics.
- Integrated design, easy installation, high reliability and safety.
- PIR function the backlight light on when people close to the thermostat (Refer to model spec)
- 24 hours timer switch, 1 hour adjusted steps.
- With week programmable function, 4 time periods a day for the settings of time and temperature (Refer to model spec)
- With 485 communication interface (Refer to model spec)

**IV. User Interface Explanation and Manipulation Guide**

HTN Screen Model:

VATN Screen Model:



PIR

	Heating Symbol	P1 P2 P3 P4	Time Period Area
	Timer Power Off		Timer Power On
	Clock Area and Temperature Setting Area	TUE THU SAT MON WED FRI SUN	Week Area

- **Power on/off**  
Long press the "⏻" key to switch working states: Power on/Power off
- **Temperature Setting**  
Under the power-on state, press "△"/"▽" key to enter temperature setting state. short press "△" key to increase the temperature; press "▽" key to decrease the temperature, the adjust step is 1℃, long press "△"/"▽" key to change quickly.  
**Remark:**  
**Under the power on state, modify the temperature only effective for the current period. When enter the period next time, it will be running by original temperature setting program.**
- **Check on external sensor temperature**  
Electrical floor heating products (Q8-E/PE Q8.v-E/PE) chose 0 external sensor mode, short press "⏻" to check on the temperature program.

**■ Key Lock**

Under power on, long press "△"/"▽" for 3 seconds to change the state.

**■ Advanced Mode**

- Under the on state, press "⏻" key to enter the Advanced Mode;
- Press "△"/"▽" key to choose the mode F1 ~F9;
- Press "⚙️" key to enter mode Fx to set the parameters, press "△" or "▽" to adjust the parameters, press "⚙️" key to enter the next parameters setting or back the mode selection state;
- ... ..
- Press "⏻" key, exit the advance mode;

**Remark: If ten seconds without any operation, idiomatically exit to the normal running state!**

Model	Function	Explanation
F1	Regular boot	Regular boot within 24 hours, adjust step is one hour
F2	Regular shutdown	Regular shutdown within 24 hours, adjust step is one hour
F3	Sensor mode selection	Model 1: Internal sensor temperature control (the default) Model 2: External sensor temperature control Model 0: Internal sensor temperature control: External sensors limit temperature (Electrical floor heating is mode 0; water floor heating is mode 1.)
F4	Set the clock and week	Set the week, hour, minutes in turn
F5	High temperature protection	Adjust the temperature range: 40-70℃, the adjust step is 1℃. The default value is 50℃ (Sensor selection mode 0, the function is effective)

Model	Function	Explanation
F6	Low temperature protection	Adjust the temperature range: 2-10℃, the adjust step is 1℃. The default value is 3℃
F7	Internal Sensor measuring temperature correction	Correction temperature range: ±5℃, the adjust step is 0.1℃. Long press both "△" key and "▽" key, then the correction reset.
F8	weekly program setting	Please see item V : weekly program setting
F9	Communication address setting	Range: 1-250 Note: the same communication bus cannot have the same address. Only product with communication function

#### ■ Restore the factory setting

Long press "△" key, restore the factory setting, the system shut down.

#### ■ Manual and automatic mode switch

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 see weekly program setting)

#### ■ PIR (Only suitable for VATN Screen Item)

The backlight is off under the working state. When it detects someone closed, backlight is on; when it detects nobody, backlight is off, and the setting parameter will be saved.

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

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The default value of time period program:

Time Period	Start time	Setting Temperature (℃)	
		Mon. to Fri.	Sat. and Sun.
P1: 6: 00~8: 00	6: 00	25	25
P2: 8: 00~16: 00	8: 00	10	10
P3: 16: 00~22: 00	16: 00	25	25
P4: 22: 00~next day 6: 00	22: 00	15	15

Under the model choice state, press "△"/"▽" key to choose "F8", then press "⚙️" key to enter the week setting interface of the time period program and "MON TUE WED THE FRI" week area will begin to twinkle at the same time.

- 1) Press "△"/"▽" key to set week: "MON TUE WED THE FRI/ SAT/ SUN". After finishing the setting, press "⚙️" key to confirm and enter into the setting interface of time period and "P1" at time period area will begin to twinkle at the same time.
- 2) Press "△"/"▽" key to choose time program: P1/P2/P3/P4. After finishing the setting, press "⚙️" key to confirm and enter into the time setting interface of this time period and time will begin to twinkle at the same time.
- 3) Press "△"/"▽" key to set the period of time, short press once to increase or decrease 15 minutes. Please pay attention to the limited time for period: 0:00≤P1<P2<P3<P4<24:00. After finishing the setting, press "⚙️" key to confirm and enter into the temperature setting interface of time period and temperature area will begin to twinkle at the same time.

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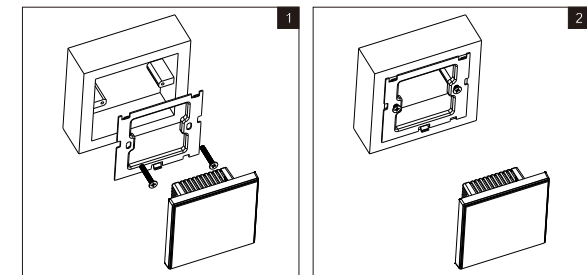
4) Press "△"/"▽" key to set the temperature, press once to increase or decrease 1℃, Min 5℃→ 6℃→ -----→ 45℃ Max. Press "⚙️" key to confirm and enter the next selected time period.

5) Repeat the operations of step 2 and step 3, till finish the four time period of working days (MON TUE WED THU FRI), then enter into the time period setting interface of Saturday.

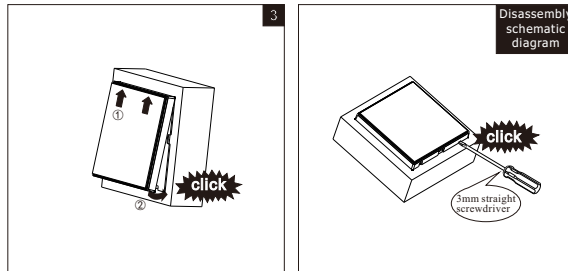
6) Now "SAT" at week area is twinkling, and the setting method is the same as the steps from step 2 to step 5. After finishing the setting, press "⚙️" key to enter into the time period setting of Sunday "SUN", and the setting method is the same as the steps from step 2 to step 5. After finishing the setting, press "⚙️" key to return to the mode choice interface.

**Remark: If ten seconds without any operation, automatic exit to normal running state.**

#### VI. Installation



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#### VII. Installation Explanation

1. Please do the installing operation after the power is cut off, or it may damage the system units.
2. 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.
3. Height above Sea Level: Not surpass 2000m.
4. If you install the product in the bathroom, please use professional water-proof cover.
5. 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.
6. Follow the wire diagram for the electrical connection.
7. Please refer to the fig.3, push the thermostat into box, and make sure the thermostat install well.
8. 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℃. It will stop heating and will not display the heating symbol when the room temperature reaches the setting temperature. Under the model 0, it will stop heating when the temperature of external sensor is more 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 to our quality warranty.

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#### X. Product Function Choice

Model	Display Mode	Time Period Program	External Sensor	PIR	Mainframe Linkage
Q8-E	HTN		✓		
Q8-W	HTN				
Q8-WH	HTN				✓
Q8-PE	HTN	✓	✓		
Q8-PW	HTN	✓			
Q8-PWH	HTN	✓			✓
Q8.v-E	VATN		✓	✓	
Q8.v-W	VATN			✓	
Q8.v-WH	VATN			✓	✓
Q8.v-PE	VATN	✓	✓	✓	
Q8.v-PW	VATN	✓		✓	
Q8.v-PWH	VATN	✓		✓	✓

Note: Q8-S-\_/ Q8.v-S- \_with RS485 communication function.

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