

C16 Programming Heating Thermostat

User Manual

[General]

- Heating Thermostat with weekly programming adopts the latest single-chip computer control technology.
- It has the high reliability and powerful anti-jamming. It can realization energy-saving and comfortable living environment
- The application is the electric heating equipment and Water heating system of electric heating or actuator control. According to the preset temperature, the thermostat will automatically start and stop the controlled object (valve, floor heating, the heating wall, electric heater etc).
- Multiple time modes: 5+2/6+1/7days, the heating equipment supports different temperature setting accordingly with 6 time-modes daily. Users are free to choose manual mode or full automatic mode for different purposes.
- Using flame resistance material, the heating equipment is safe and reliable. Its appearance is stylish and its mirror screen would be very easy to clean.
- The clock would continue to run even if power was cut off and it will not affect the period setting value.
- Keypad locking function is designed to prevent the children from misusing.

[Technical parameters]

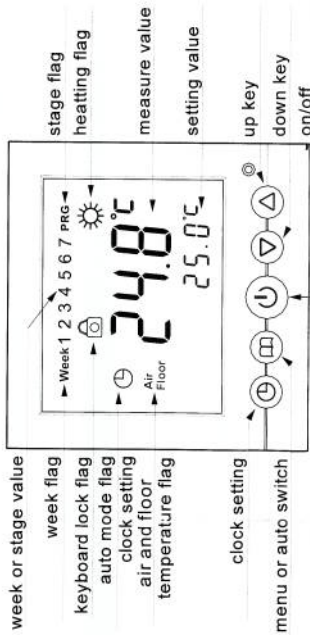
- Power Supply: 85-250VAC 50/60 Hz (24V optional)
- Internal sensor measurement range: 0 - 40℃.
- Setting range: 5 - 35℃ (factory settings: 25℃)
- Inside sensor: NTC B=3380 10k @25degrees Celsius
- Display resolution: 0.1℃ Setting Unit: 0.5℃/step
- The maximum switch power: 3A/16A
- External sensor measurement range: 0 - 99℃.
- Setting range: 5 - 95℃ (factory settings: 50℃)
- Extra sensor: NTC B=3380 10k @25 degrees Celsius
- length=3 meters (optional)

Operation Guide

[On and off]

Press keys you can turn on or turn off the thermostat.

The display would be as the following When turning off.



[Children Lock] Press key for 2 seconds at the same time, the controller keypad would be locked. Screen would show . Press the at the same time for 2 seconds under the locked status, keypad would be unlocked.

[System time]

How to set the system time: Keep pressing for 5 seconds, it will enter into the time setting. The current revisable object will flash and display. Press and choose time you want to revise (week / hour / minute), press or to modify the current setting. If you need to modify the previous parameters, please press key. After the modified minutes you can press to exit the system clock settings.

[Temperature control mode]

According to the sensor setting of thermostat, there are three different control modes, enter the advance function to set. Internal control (IN): Only enable built-in sensor temperature measurement, the temperature control is based on the built-in temperature sensor. It is suitable for the detection of air temperature or the room temperature.

External control (OUT): Only enable external sensor to temperature measurement, the temperature control is based on the external sensor. It is suitable for the detection of the heating body temperature.

Dual temperature control (ALL): Temperature control is based on the built-in temperature sensor and an external

temperature sensor (over-temperature protection). It is suitable for the detection of room temperature and heating body whether over temperature monitoring. If the external sensor is over temperature, thermostat will shuts down the heater.

[Display three kinds of temperature]

The thermostat works for temperature control in mode IN and mode ALL. The main screen shows air temperature or room temperature when AIR icon lit, the vice-monitor would set temperature every 5 seconds and alternatively display current time. When the thermostat is in OUT mode, the FLOOR icon will be lit. The main screen will display floor temperature or external sensor location.

When the temperature is in mode ALL, press and can detect floor temperature or external sensor location, and the FLOOR icon will be lit. The main screen will automatically display air temperature 5 seconds later after the AIR icon lit.

[Automatic / manual switch]

Press you can choose the manual mode or automatic mode.

Manual mode: System will control temperature under the set value without any change.

Automatic mode: System would control temperature according to the preset temperature values in different time. The icon will lit, which means that the system is running under automatic mode. The **week** and **Stage** icon would alternately display every 5 seconds, **1-7** is systematic reuse. When screen shows **WEEK**, 1-7 would display the values of the week. When screen shows **STAGE**, 1-6 would display the current values.

[Setting the periods of time modes]

The periods setting can realize the control of temperature and time under automatic mode. Once setting up, the values could be saved and reused in the thermostat forever. The thermostat can't quit when you set the periods and it will automatically save data and exit when all setting is finished.

The thermostat can save three kinds of schedules (5+2 / 6+1 / 7) in 6 periods; One week for a cycle.

Each data is saved as the start time (hours: minutes) and the temperature values of this period. The end time of the period would be saved as the start time of next period. You can also shut down a certain period according to your needs.

Press the for 5 seconds, you will enter into the period setting interface. The number is blinking in **WEEK** area, it means the mode of your set (5+2 or 6+1 or 7). You can press button to select the object you want to modify (the period start time: hours, minutes and set temperature). Press or to modify the value. If you want to turn off a period, please press until the **OFF** shows.

For example: in the 5+2 mode, the period setting sequence:

Press 5s, the week area will blinking 1-5, Reference on the right image

P1:hr>min>setting value-> P2:hr>min>setting value-> P3:hr>min>setting value->...
> P6:hr>min>setting value The week area will auto change 6-7 and blinking.

P1:hr>min>setting value-> P2:hr>min>setting value-> P3:hr>min>setting value-> ...-> P6:hr>min>setting value

Total setting value is 12 sets (<5>P1-P6,<2>P1-P6), you will setting 12X3 values. If you want skip the setting item you can press . You can use the to back to the previous setting.

The automatic default mode of the machine factory is 5+2 mode. Time specific data see the following table. You can modify when you enter the programming interface:

5+2 mode		ID	P1	P2	P3	P4	P5	P6
Monday to Friday	Start time	06:00	22℃	08:00	11:30	12:30	17:00	22:00
	Set value			15℃	15℃	15℃	22℃	15℃
Saturday to Sunday	Start time	06:00	08:00	11:30	12:30	17:00	22:00	
	Set value	22℃	15℃	15℃	15℃	15℃	22℃	15℃

For example: When the system time is Friday 08:20 under automatic mode, display would show as: **STAGE 2** and the setting temperature value would be 15 degrees.

The thermostat can't quit when you set the periods, it will automatically exit when all setting is finished.

[System setting]

Warning: System setting is used to set some important parameters of the system, that's only for professionals. Do not make any improper modification. The item already been debugged and tested by professionals, there is no need to reset.