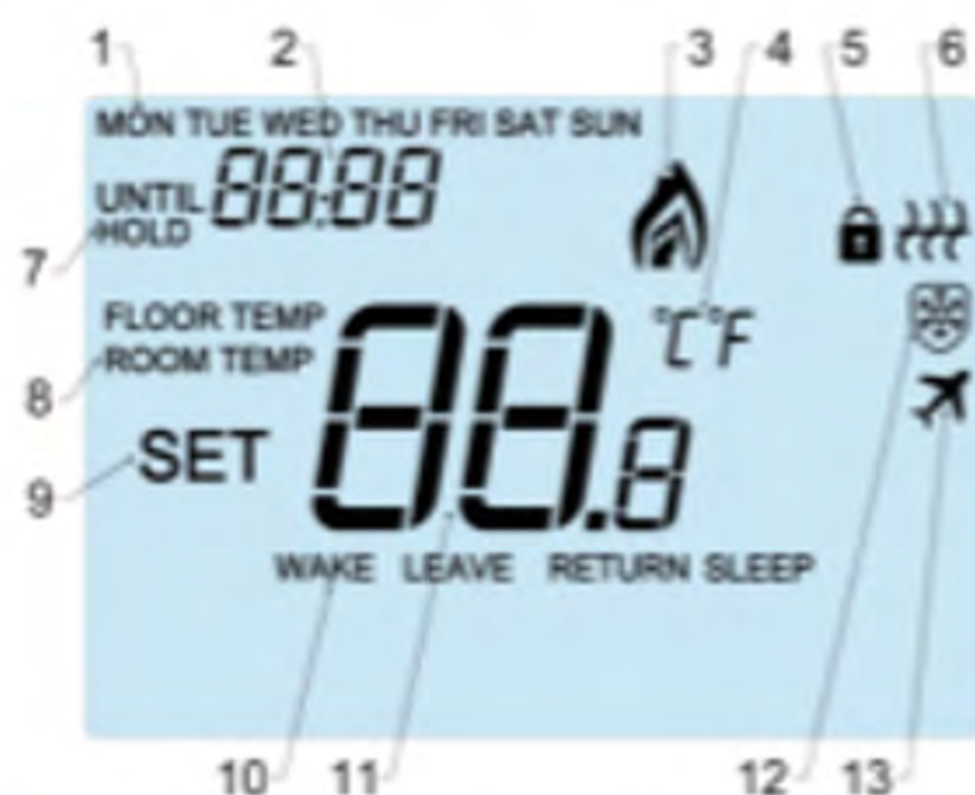


LCD display description



The programmable room thermostat is a device that combines a programmer and a room temperature controller. Programmable function means to program and set the time period to turn on /turn off heater according to your lifestyle. room thermostat work by detect room temperature. When the room temperature drops to the setting temperature, it automatically turns on heater, and once the setting temperature is reached, it is automatically turned off heater.

Room programmable thermostats need to measure free-flowing air temperature, so they cannot be covered by curtains or furniture, close to electrical wires, televisions and lamps etc may prevent the thermostat from working properly.



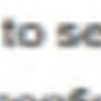
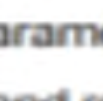
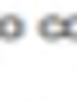
1. Time-week icon: display current week.
2. Time-Hour/Minute: display current time.
3. Heating: it will be displayed when the load is on.
4. Temperature unit : °C or °F.
5. Lock icon: it will be displayed when locked.
6. Floor high temperature protection: This icon will flash when the floor temperature exceeds the limit (item 08 of the advanced options).
7. Timing hold mode: under timing hold mode, UNTIL HOLD icon, hold time and temperature will be displayed.
8. Room/floor temperature: display current sensor mode and corresponding temperature.
9. SET: it will be displayed when setting a function or temperature.
10. Programmable: it will be displayed when setting programming parameters.
11. Current temperature: Current actual temperature.
12. Saving energy / antifreeze protection mode: it will be displayed when thermostat enter saving energy/antifreeze protection mode.
13. Holiday mode: means that thermostat are running holiday mode.

Key Description

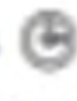
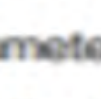
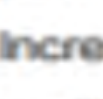
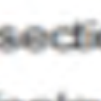
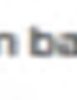
Keys from left to right:

				
Power	Clock	Set	Decrease	Increase

Set time

- In power-on status, press  twice to enter (only display **88:88** and week in the interface).
- Set order: Hour→Minute→Week, press  to select item, press  or  to set parameters.
- After finished, press  to confirm and return back interface.
- Please note: If don't press  to confirm, automatically exit if overtime and invalid.

Programmable

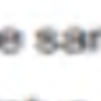
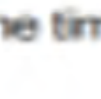
- There is 3 option of programming: 5+2, 7days(can set it by each day), 7days(all days are same), 4 section per day.
- In power-on status, press  to enter 1st section programming of time (show **SET** and **WAKE** at the same time in the interface, the corresponding date is displayed at the day of the week, and the programmed time flashes at the same time).
- There is 4 section period, set order is: working days WAKE time→WAKE temperature→LEAVE time→weekends SLEEP temperature. press  or  to set parameters, increments of 30 minutes by press one time, when "00:00", press  to cancel current section. Then time and temperature location display "-". After press  to confirm and return back interface, otherwise, data setting is unsuccessful.

Programming defaults(5+2):

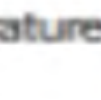
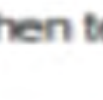
No	WAKE		LEAVE		RETURN		SLEEP	
Monday	8:00	21℃	9:30	16℃	16:30	22℃	23:00	17℃
Tuesday	8:00	21℃	9:30	16℃	16:30	22℃	23:00	17℃
Wednesday	8:00	21℃	9:30	16℃	16:30	22℃	23:00	17℃
Thursday	8:00	21℃	9:30	16℃	16:30	22℃	23:00	17℃
Friday	8:00	21℃	9:30	16℃	16:30	22℃	23:00	17℃
Saturday	8:00	21℃	23:00	16℃	--	--	--	--
Sunday	8:00	21℃	23:00	16℃	--	--	--	--

KeyLock

Thermostat provide keylock function, long press

 and  about 10S at the same time.  will be displayed. Under locked status, long press  and  about 10S at the same time to unlock.

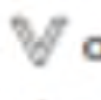
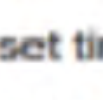
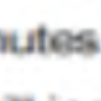
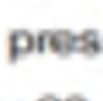
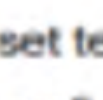
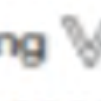
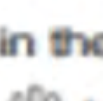
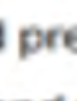
Set temperature

Press  or  to set temperature, when temp

value is flashing, press  to confirm and return back interface. If don't press  to confirm, automatically exit after 5s and invalid.

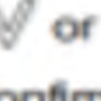
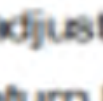
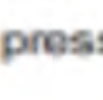
Timing hold mode

In power-on status:

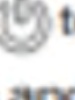
- Press  to set timing hold mode (display **UNTIL HOLD**).
- Press  once to set time, press  again to set temperature, which will be ran in timing hold mode.
- Press  or  to set time, the time increment is 30 minutes, that is, press  or  key once, the time will increase by 30 minutes or decrease by 30 minutes.
- Press  or  to set temperature for timing hold mode, press  to confirm to return back interface. You also can adjust the temperature via pressing  or  in the main interface. At the same, need press  to confirm. **UNTIL HOLD** will be displayed, and the time will run in a countdown manner, after the time is up, return back normal Procedure if want to cancel it, please also do it as above step, and time adjust to 00:00.
- Please note, if don't press  to confirm, then all operation are not available, and auto exit.

Holiday mode

In power-on status, press  triple to enter holiday mode setting (show  on the interface).

Press  or  to adjust holiday days, next press  to confirm and return back interface to show days. Setting temp in holiday mode will be ran as saving energy/ antifreeze protection temperature, you can adjust it via press  or .

Please note, holiday don't start until 00:00 next day, for example, if you set holiday Mode and days is two, then thermostat will run normal procedure at 00:00 next monday. If want to cancel it, please also do it as above step, but days adjust to 00.

Please note, if don't press  to confirm, then all operation are not available, and auto exit.

Saving energy mode/antifreeze protection mode

In power-on status:

- Press  to select saving energy mode (show  on the interface). Under saving energy mode, will be on heating only when room temp is lower than Setting temp of saving energy mode, meanwhile show  in the interface. If want to cancel it, press  again to return back normal

mode.

In shutdown status, if 04 item parameter is 01 at advance option, then room temp is lower than setting temp of saving energy /antifreeze protection, will be shown; when more 2 °C than setting temp of saving energy /antifreeze protection. will be disappeared.

Turn on /off load

When  is displayed, means turn on load, if not disappear, then turn off load, but thermostat keep working. If want to turn off thermostat, please long press  about 3s. The screen and load will be turn off completely. If want to turn on thermostat, then press  again.

Advance options

The following settings are optional, but don't recommended for adjustment in most cases.

- Function 1—Saving energy /antifreeze protection setting temperature: it allows to set the temperature value of saving energy/antifreeze protection, when it is lower than this value, the corresponding function will be turned on.
- Function 2—Temperature unit: it allow to select °C or °F.
- Function 3—Start/stop working temp different: it allow to adjust the temperature different which thermostat will be turn on /turn off, default is 1 °C. for example, when setting temperature is 23 °C, then thermostat will turn on load at 22 °C, and turn off load at 23 °C; if value is 2 °C, then thermostat will turn on load at 21 °C, and turn off load at 23 °C.
- Function 4—Antifreeze function: in shutdown status, it allow to set whether the thermostat is maintained at the freeze protection temperature when thermostat was turn off. And open it as default.
- Function 5—Load output delay: In order to prevent load to switch frequently, you can open this function. Setting range is 00-15min, default is 00, means that have not delay.
- Function 6— Set temperature range: if value is 0, then default range is 5~35 °C; if not 0, Then will be based on the current set temperature, and the setting range is plus or minus this value. For example, current set temperature is 25 °C, and this item value is 05, then setting temperature range is 20~30 °C, if current set temperature is 20 °C, and value is 03, then setting temperature range is 17~23 °C.
- Function 7— Sensor type: it allow you to select sensor type which you needed. Select room/ floor sensor, or choose both. When you select inner & external double sensor, floor sensor to limit floor heater temperature, to avoid overheating.
- Function 8—High temperature protection: When the floor temperature sensor is set to active in function 7, The floor temperature limit value between 25~45 °C can be set to prevent the floor temperature from overheating. When the floor temperature is overheated, will display in the screen.
- Function 9—Optimal start-up time: it allow to start the heating system as late as possible to avoid unnecessary heating while ensuring that the room is warm and comfortable during the programmed. The thermostat uses the rate of change to calculate how long it takes the heating system to raise the room temperature by 1 °C (For example, if the rate of change is 20, the thermostat calculates that it takes 20 minutes to heat up to 1 °C) and turns on the heating system accordingly.
- Function 10—Rate of change: The time required for a temperature rise of 1 °C is used for the optimal start-up time function.
- Function 11—Programmable type: thermostat provide 3 type programmable .
 - 5+2 days: there is 4 programmable section for working days, 4 programmable section for weekend.
 - 7 day independent programming: 4 section can be programmed per day.
 - 7 day same programming: 4 section can be programmed for week.
- Function 12—Force manual mode: when open this function, will closed program mode holiday mode, timing hold mode and time display, just allow manual to adjust temperature.

Adjust advanced options settings

In shutdown status, long press  about 3s to enter, short press  or  to select item, and press  or  to adjust Parameter.

Advanced options parameter table

Function	Describe	Setting	Default
01	Saving energy / antifreeze protection setting temperature	7~17°C	12°C
02	Temperature unit	00: °C 01: °F	0
03	Startstop working temp different	01~03°C	01°C
04	Antifreeze function in shutdown status	00: Disable 01: Enable	01
05	Load output delay	00~15 min	00 (closed delay function)
06	Set temperature range	00~10°C	00°C
07	Sensor type	00: inner sensor 01: external sensor 02: double sensor	00
08	High temperature protection	25~45°C	27°C
09	Optimal start-up time	0~3 hour	0
10	Rate of change	The time required for a temperature rise of 1°C	20
11	Programmable type	00: 5+2 01: 7 day independent programming 02: 7 day same programming	0
12	Force manual mode	00: Force manual mode 01: default mode	01

Temperature calibration function

In shutdown status, long press  and  at the same time about 10s to enter, screen will display current temperature, press  or  to adjust, next press  to confirm.

Please note, if don't press  to confirm, then all operation are not available, and auto exit.

Reset

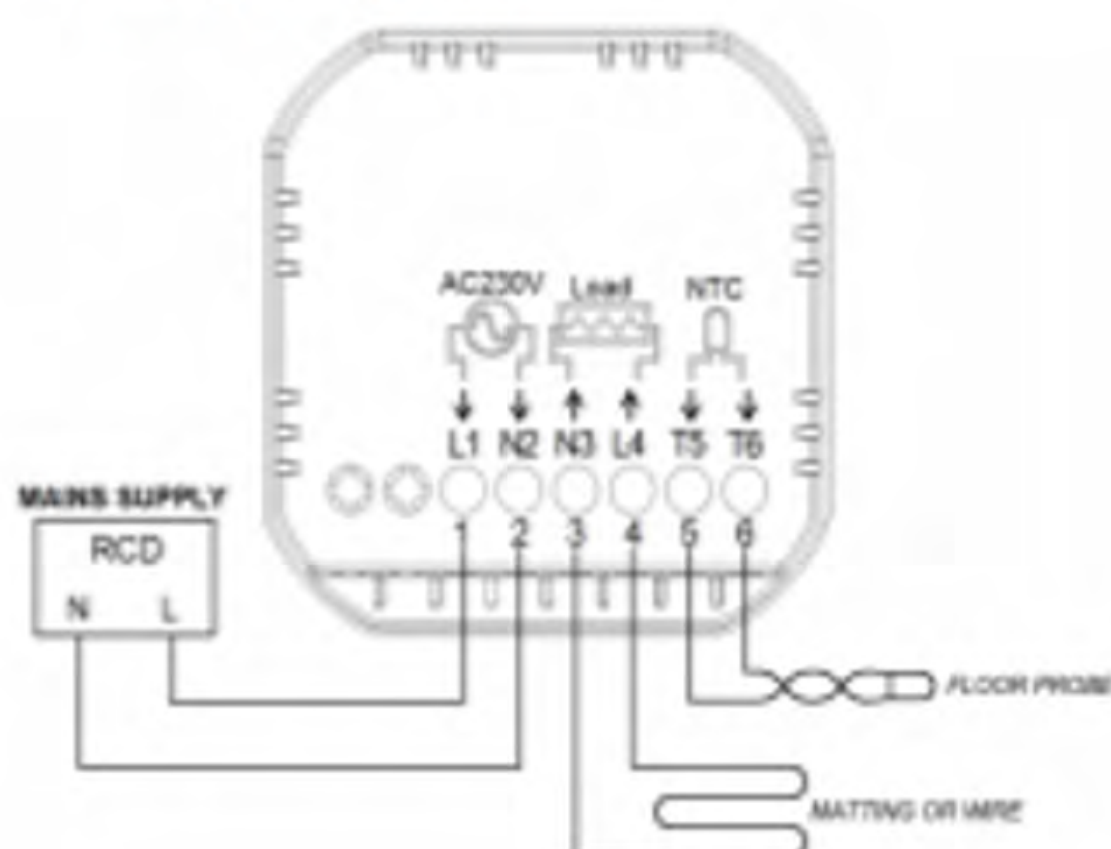
In shutdown status, long press  and  at the same time about 10s. All parameters will be restored to factory default values. Meanwhile whole icon will display about 2s on the screen.

Error code

E1=inner sensor error

E2=external sensor error

Wiring diagram



Installation instruction

