

Touch Screen Heating Thermostat Manual

Product Summary

This new design heating thermostat aims at market demand, it has large LCD display. Easy operation, complete functions. It can be control motorised ball valve, motorised valve, thermal valve, solenoid valve, heater, electric heating film, electric heating carbon crystal. Can also be used for underfloor heating.

Technical Data

- ❖ Power Supply: 24VDC, 50/60HZ
- ❖ Accuracy: $\pm 0.5^{\circ}\text{C}$
- ❖ Set-point Temperature Range: $5^{\circ}\text{C} - 60^{\circ}\text{C}$
- ❖ Limit Temperature Range: $5-99^{\circ}\text{C}$
- ❖ Consumption: $<0.3\text{W}$
- ❖ Temperature Sensor: NTC
- ❖ Size: $86*86*17\text{mm}$ (H*W*D)

Features

- ❖ Large LCD touch screen with blue backlight display and double temperature display mode
- ❖ Time display (minutes, hours, weeks)
- ❖ 6 period programmable controlling temperature setting
- ❖ Internal and external temperature sensor for choice
- ❖ Room temperature display precision is 0.5, inner precision is 0.1
- ❖ Setting temperature meet user's demand of room temperature
- ❖ Memory function when power failure, protect your setting from power failure
- ❖ Room temperature automatically calibration function

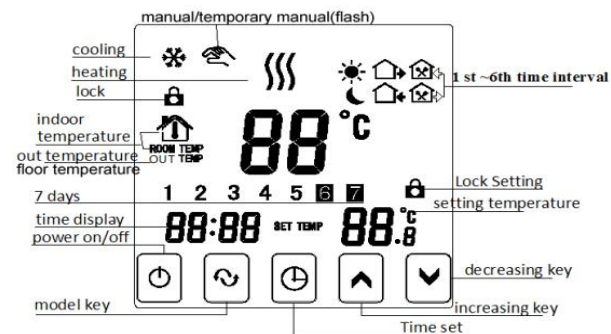
Button description

NO.	signal	Description
1		on / off
2		Mode key: switch over auto/manual time interval control and temporary manual, long press enter into time interval setting function
3		Time setting: hours, minutes, weeks setting.
4		Higher temperature setting, in Advanced Settings press for parameter increased, in time setting press for time increased
5		Lower temperature setting, in Advanced Settings press for parameter decreased, in time setting press for time decreased

Function and display

- “” manual control (temporary manual control when flashing, auto control when no this sign display);
- “” it is heating; “” open anti-freezing function;
- “” get up in morning, the first time interval; “” go out in morning, the second time interval;
- “” back home at noon, the third time interval; “” go out at noon, the fourth time interval;
- “” back home at night, the fifth time interval; “” sleep at night, the sixth time interval;

Operation diagram



Setting the time and programming settings

1) Setting the time

Press , to set the current minute, hour & week, press or to adjust the current time.

2) Automatic time and temperature programming

Press and hold , the screen will display **Loop**, then press and the screen will now display **12345** (one for each weekday) meaning all programming set will be for just the weekdays. Press again and the screen will now display **123456** (one for each weekday plus Saturday.) Pressing again will let you program the whole week from Monday to Sunday (**1234567**.)

Now, when the display shows the days you would like to schedule, press to begin programming and then use the arrows to adjust your settings. All settings will save automatically.

When is displayed on the screen, the thermostat is in **manual mode** and not **automatic mode** meaning the temperature it works to will only change as you alter it and not change based on the time. By manually adjusting the time while in **automatic mode**, you can enter a temporary manual mode where will flash on screen and the thermostat will now work to your new temperature until the next time slot is reached.

3) Change the timings for your programmed settings

After holding to enter programming, choosing your weekly schedule and pressing it once more to see the first time slot, press to alter when it starts and stops, this can be done for all time slots.

The below table shows all default times and temperatures.

Programming the timings

Period		Icon	Default Period Time	Default Period Temperature
Working Day	1		06:00	20°C
	2		08:00	15°C
	3		11:30	15°C
	4		12:30	15°C
	5		17:30	22°C
	6		22:00	15°C
Weekend	1		08:00	22°C
	2		23:00	15°C

Note:

- 1, Time slots 3 & 4 both have the same set temperature, so change this if you would like a difference between both time slots.
- 2, If you set a time slot's temperature to be 0°C , the time slot will be void and not activate.

Advanced settings (we recommend these are operated by a technician)

- (1)Touch screen version: when turned off, press and to enter the advanced settings.
- (2)Button version: when turned off, press and to enter the advanced settings.

No.	Symbols	Setting Item	Parameter Setting Function	Factory Default
1	SEN	Sensor control option	0:internal sensor 1:external sensor 2:internal room temperature & external set temperature	0:internal sensor
2	OSV	Limit temperature value of external sensor	5-99℃	42℃
3	dIF	Return difference of limit temperature value of external sensor	1-9℃	2℃
4	SVH	Set upper limit temperature value	5-99℃	35℃
5	SVL	Set lower limit temperature value	5-99℃	5℃
6	AdJ	Display temperature	Measure temperature,check and calibration	0.5℃ precision Calibration
7	FrE	Frost Protection	00:Inactive 01:Active	00: Inactive
8	POn	Power on memory	00:Power on no need memory 01:Power on need memory	00:Power on no need memory
9	FAC	Factory default	08:Placeholder 00:Restore factory default settings	08

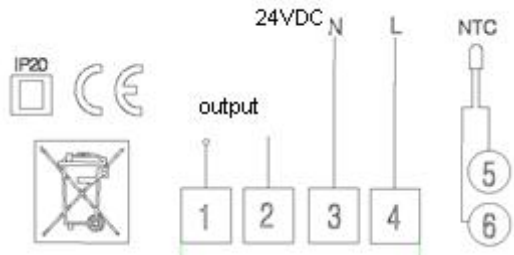
Note: Option 3 is set to 2℃ meaning that with the set temperature (using the external sensor) is 42℃, the thermostat will turn on as the room drops to 40℃ and will turn off as the room reaches 44℃.

Sensor fault

If the wrong kind of temperature sensor has been chose, 'Err' will appear on the screen. The thermostat will not work until this is resolved.

Please select: water heating selects 1.5-2.5mm² rigid line;electric heating select above 2.5mm² rigid line.

Wiring diagram



Installation

Warning: please only wire in strict accordance to the wiring diagram. Letting any debris into the thermostat will cause damage.

1,Open the control panel, using a screwdriver to pry it up at the bottom.	2,Install the rear casing as per the wiring diagram, fasten the back panel to the casing with an M4 screw.	3,Connect it to the front panel.	4,Press the 2 bottom corners, to pop the front back into place.

