Programmable Thermostat

DIMENSIONS (mm)

51
51
60
87
87
26
16
42

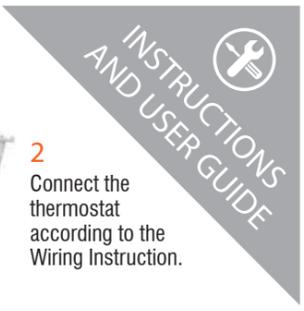## INSTALLATION AND WIRING INSTRUCTIONS

1 Loosen fixing screw located in the bottom of the thermostat to get the front panel.

2 Connect the thermostat according to the Wiring Instruction.
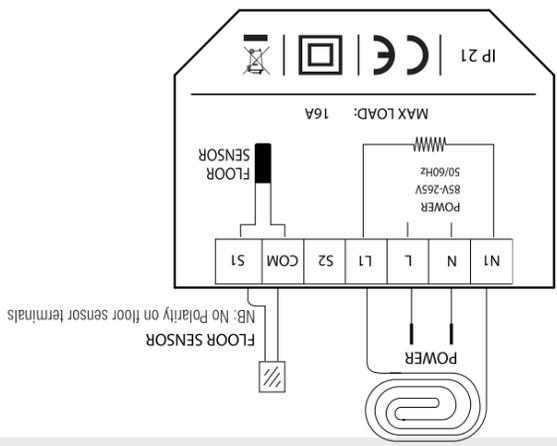
3 Insert the back panel into wall box with provided screws.

4 Align top part of front panel and back panel to fit these two parts. Then fix them with screw.

NOTE: Thermostat should be mounted in a 35mm deep single gang back box

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Ensure power is disconnected when wiring!

Suggestion: Please keep the max load around 90% of 16A to prolong the lifetime.

IP 21 CE

FLOOR SENSOR

MAX LOAD: 16A

POWER
85V-265V
50/60Hz

N1 N L L1 S2 COM S1

NB: No Polarity on floor sensor terminals

FLOOR SENSOR

POWER

THERMOSTAT DESCRIPTION

The Programmable Thermostat is a thermostat used to control your electric floor heating system or water heating system. It will keep your home at comfortable temperature whilst minimizing energy use.

MAIN FUNCTIONS

- ✔ Power consumption monitor
- ✔ Holiday function
- ✔ Time display
- ✔ Hold function
- ✔ Key-lock
- ✔ Open window detection
- ✔ Off time frost protection
- ✔ Floor temperature limitation
- ✔ Optimum start

THERMOSTAT DESCRIPTION

TECHNICAL SPECIFICATION
Supply voltage: 50/60Hz 220-240V AC
Max load: 16A
Standby power: < 2W IP rating: IP21
Max wire diameter: ≤2.5mm²

DISPLAY SYMBOLS

Frost symbol
Key lock indicator
Floor Temp
Room Temp
Set
Flame symbol
Temperature
Program Parameter edit
Holiday Parameter edit
Clock Parameter edit

Day indicator
Period indicator
Holiday left
Hold left
Clock
Degrees Celsius
Fahrenheit
Floor limit symbol
Advanced Setup
Hold parameter edit

Confirm Return Power Up Down

FUNCTION & USER OPERATION

Press ⏻ to turn on/off
Note: When frost protection mode is active, the thermostat will maintain the frost protection temperature when in power 'off' mode.

Set the Time
In normal timed power 'on' mode, Press O and the CLOCK symbol will flash.
Press O again to enter day set.
Press △ or ▽ to set day.
Press O to confirm and enter hour set.
Press △ or ▽ to set hour.
Press O to confirm and enter minute set.
Press △ or ▽ to set minute.
Press O to confirm then press ↩ to revert to normal screen.

Temporarily override temperature
In normal timed power 'on' mode, press △ or ▽ to change the current period temperature setting. The new set temperature will flash for 30 seconds. The thermostat will revert to the normal programmed setting at the start of the next time period.

Key-lock
Setting Key-lock can prevent children and others from switching thermostat parameters. In normal timed power 'on' mode, press ↩ for 3 seconds to lock the thermostat and again for 3 seconds to cancel.

Holiday mode
The thermostat will maintain frost protection temperature until the holiday days ends.
In normal timed power 'on' mode, press O to enter setting.
Press △ or ▽ to select HOLIDAY.
Press O to enter holiday days set.
Press △ or ▽ to set holiday days .
Press O to confirm and return to the normal screen.
Note: In holiday mode, 'HOLIDAY LEFT' and the days remaining will show on display.
Set the holiday days to 0 to cancel holiday mode.

Hold mode
The thermostat will maintain a 'Hold Temperature' permanently until the unit is changed back to smart mode or until Hold Mode is turned off.
1. In normal Power 'on' mode, Press O to enter bottom menu.
2. Press △ or ▽ to move across to HOLD.
3. Press O to enter Hold function settings.
4. Press △ or ▽ to change Hold Mode to 'ON'.
5. Press O to confirm and the temperature will now flash.
6. Press △ or ▽ to change the number to the desired temperature (we recommend between 24-27deg for a comfortable floor temperature).
7. Press O to confirm and the thermostat will revert to the home screen. HOLD should show on the display.
To turn hold mode OFF, repeat steps 1-4, but in step 4 set the hold mode to OFF instead of ON followed by the 'O' to confirm.

Timer setting

Each day of the week has 4 time periods,you should allot a temperature to each time period. Set the temperature above room ambient temperature and the heating will come on until the desired temperature is reached, or, set the temperature low and the heating will not come on during that time period. The default settings are shown in the table below.
In normal timed power 'on' mode, press O to enter setting.

Press △ or ▽ to select EDIT.
Press △ or ▽ to select the day to be set.
Press △ or ▽ to select the period to be set.
Press △ or ▽ to select start time hour.
Press △ or ▽ to select start time minute.
Press △ or ▽ to select temperature.

Press O to enter day selection.
Press O to enter period selection.
Press O to enter start time set.
Press O to enter minute set.
Press O to enter temperature set.
Press O to confirm and move on to next time period.
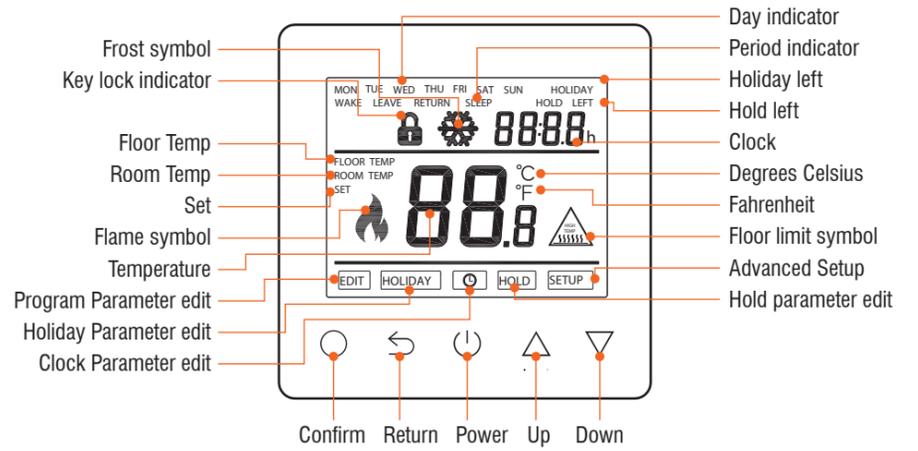Press ↩ to revert to normal screen.

Period parameter table (Default)

Day	Wake	Leave	Return	Sleep
Mon - Fri	07:00 22℃	08:30 19℃	17:00 22℃	22:00 19℃
Sat - Sun	08:00 22℃	08:30 22℃	17:00 22℃	22:00 19℃

No.	Name	Default value	Ranges
1	Room temperature calibration	0℃	- 5℃ -- 5℃
2	Floor temperature calibration	0℃	- 5℃ -- 5℃
3	Frost protection mode	ON	OFF/ON
4	Frost protection temperature	5℃	5℃ -- 15℃
5	Sensor selection	01: Floor sensor	00: Built-in sensor 01: Floor sensor 02: Both sensors
6	Floor temperature limit(both sensors)	30℃	20℃ -- 50℃
7	Temperature unit	00: ℃	00: ℃ 01: ℉
8	Output delay	00: 00s	00: 00 s 01: 30 s 02: 60 s 03: 90 s
9	Switching Differential	01: 1.0℃	00: 0.5℃ 01: 1.0 ℃ 02: 2.0 ℃ 03: 3.0 ℃
10	Reverse output	00: OFF	01: ON 00: OFF
11	Schedule	00: 7	00: 7 01: 5+1+1
12	Adaptive function	00:OFF	00: OFF 01: ON
13	Reset	00: No	00: No 1: YES

ADVANCED SETTING

1. Room temp calibration: Calibrate the temp detected by room sensor.
2. Floor temp calibration: Calibrate the temp detected by floor sensor.
3-4. Frost Protection Mode: Frost protection allows the thermostat to turn on if the temperature drops below 5 degrees even when it is not programmed to. ⊠ displays when you turn off the thermostat.
5. Sensor selection:
00 Room sensor: Run by room sensor.
01 Floor sensor: Run by floor sensor.
02 Both sensors: Run by room sensor with floor temp limit.
6. Floor temp limit: If you choose both sensors, floor limit must be set to protect floor.
7. Temp unit: ℃ and ℉ can be selected.
8. Output delay: This option help you avoid inadvertent operation on heating.
9. Switching Differential: The number of degrees the temperature has to change before the unit switches on/off. The default is 1 degree so if the temperature is set to 21 degrees the thermostat will switch on at 20.5 degrees and off at 21.5 degrees. 0.5 degrees either side of 21.
10.Reverse output: This function is designed to operate cooling systems. The unit will click on when the room is too hot and click off when the room has cooled down.
11. Schedule: Select a weekly schedule for the Edit. There are 2 options:
7: each day from Mon to Sun can be set individually.
5+1+1: 5 days from Mon to Fri have the same events, Sat and Sun can be set individually.
12. Adaptive function: After several days of installation and use, Adaptive function ensures that the required temp has already been reached when the next event begins.
13. Reset: All parameters are restored to default values.

ADVANCED SETTING (Please refer to table above)

Caution: These are normally set by technicians during initial installation.
In normal timed power 'on' mode, press O to enter setting.
Press △ or ▽ to select SETUP.
Press O to enter advanced setting. Each parameter can be accessed by pressing O and adjust the values as required using the arrow keys. (The default values are recommended and changing these may adversely affect the way the thermostat works). Press ↩ to revert to normal screen.

Open window detection

This function only works when room sensor or both sensors is selected. The thermostat with this function will shut off automatically for 15 min when the window opens, as it can detect that the room temp plummets..

TROUBLESHOOTING

Fault Codes
E1 = Built-in sensor short-circuit or disconnected.
E2 = Floor sensor short-circuit or disconnected.
Note: Should a sensor fault display, please contact us for assistance.