

HH 822-F Thermostat for Floor Heating Instruction Manual

#### **Before Installation**

# A WARNING

Turn off HH 822-F, all electronic source and electrical devices which will be connected before installation and maintenance.

A CAUTION

The installer must be a trained service personnel.

#### Installation Location

The thermostat should be mounted on an inner wall ~1.5m above the floor in a position where it is readily affected by changes of the general room temperature with freely circulating air.

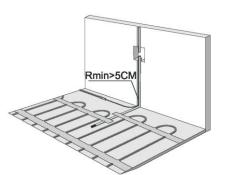
Prevent direct exposure to sunlight, drip or splash.

Do not place the unit at a location where air circulation is low, or where there are great temperature changes (e.g. near door).

Do not place the thermostat near heat generating sources

(e.g. radiators, hot air vents, TV or lights). Sensor Installation

- Use the corrugated pipe(>16mm), place the sensor cable inside the pipe. Bending radius of pipe must be not less than 5cm.
- Plug one end of corrugated pipe via waterproof cork to prevent the water or cement grout penetration, place the corrugated pipe with sensor between the nearest coils of heating cable. It is better to place the end of corrugated pipe with the sensor inside and close to the upper floor layer.
- Place the second end of corrugated pipe near with the connection box for thermostat.

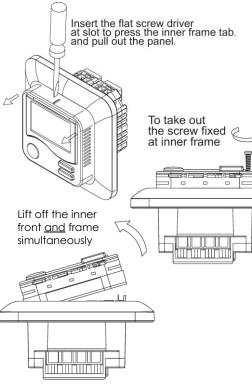


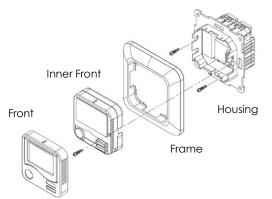
#### Wiring the Terminal

There are 6 wiring terminals at the back of the thermostat which are labeled below. The recommended wire range is AWG 12~14.

Symbols	Description
Ν	230Vac Neutral output
Ν	230Vac Neutral input
L	230Vac Live input
OUT	230Vac Live output
SENSOR	Sensor Cable
SENSOR	Sensor Cable

## Mounting





#### **Basic Key and Operation**

When the unit is powered on, full screen are on and the unit goes to Normal Display Mode.



Hold the icon O button (above Figure) for 3 second – to turn on or off the thermostat.

The following icons meaning:

- floor temperature
- **O** heating ON or OFF status
- 🖼- setting temperature

#### Normal Display Mode

Temperature measurement starts. Floor temperature will be displayed.

- Hold the icon **b** button for 3 second to turn on or off the thermostat.
- Press the icon **Up** or **Down** button enter to setting temperature mode
- If the floor temperature is lower than the setting temperature, the heating is turn on and display discon.
- If the floor temperature is higher than the setting temperature, the

heating is turn off and  ${}^{igside 0}$  icon disappear.

- If the floor temperature is lower than 0°C, the symbol **LO** is displayed.
- If the floor temperature is higher than 50°C, the symbol **HI** is displayed.
- If the floor temperature is display "--", check the sensor cable is disconnected or damaged.

### Setting Temperature Mode

Display the setting temperature on the screen.

- Press the icon Up or Down button to adjust the setting temperature. (default: 25°C)
- If no pressed any key for 10sec, then auto return to normal display.

#### **Adjustable Overheat Protection**

To adjust maximum setting temperature to prevent the overheating occur.

- Press the **Up** or **Down** button on normal display enter to setting temperature mode first.
- Press the Up and Down button both for 3 second, then enter to adjustable overheat mode, flashing the icon .
- Press the icon Up or Down button to adjust the maximum setting temperature (25 - 40°C). (default: 40°C)
- If no pressed any key for 10sec, then auto return to setting temperature mode.

#### Specification

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Temperature Measurement:	0 - 50°C	
Temperature Controllable Range:	5 - 40°C	
Resolution:	0.5 °C	
Operation Voltage:	230Vac +/-15%	
	50/60Hz	
Output Rating:	16A max	
Sense Type:	NTC 10K	
Operating Temperature:	0 - 50°C	
Storage Temperature:	-10 - 55°C	
Classification of control:	Class II	
(Mircro-disconnection on operation)		
Electronic control:	Type 2.B	
Protection:	IP 21	
Sensor cable:	3m	
Terminal:	1-4mm <sup>2</sup> flexible	
	conductor wire	