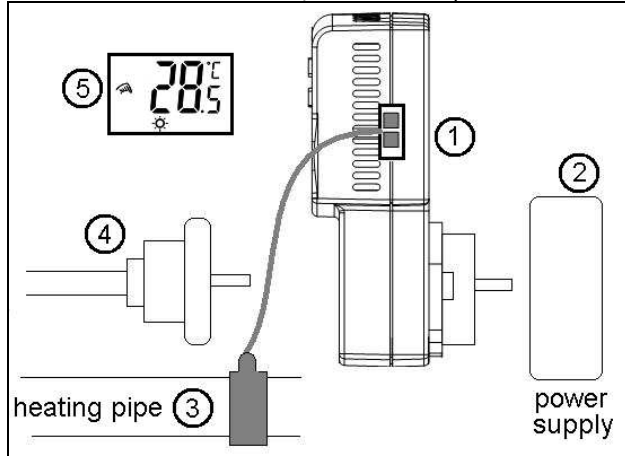


Therma Control with external clip- and bulb sensor

Installation (for pump control)

1. Plug the Clip or bulb sensor into the 2HEAT controller.
2. Put the 2HEAT Controller to the power socket, and press on the MODE button to select COOLING mode.
3. Clip the sensor to the supply heating pipe.
4. Connect the heating pump to the 2HEAT controller.
5. Set the desired on / off switch-temperature.



Temperature Specification

Measuring range: 0-50 °C/32~122°F.

Resolution: 0.5 °C/1 °F.

Accuracy: ±0.5 °C/±1 °F.

Setting range: 5°C~49°C/ 40°F~120°F.

If the temperature is below 0°C / 32°F, display shows "LO".

If temperature exceeds 50°C / 122°F, display shows "HI".

Temperature measurement in every 10 seconds.

Operation Mode

Press mode button to select Cool (pumpcontroller) mode.

Hold mode button 3 seconds to turn the unit off.

OFF mode

Output will be turn off immediately.

LCD only display the off icon.

Cooling / Pumpcontroller mode

When set point is lower than room temperature 0.5 °C/1 °F, cooling output will be turned on and cool icon will flash.

When set point is higher than room temperature 0.5 °C/1 °F, cooling output will be turned off and the cool icon will stop flashing.

When the controller is active, a green LED lights up!

24 hours protection

If there is no output over 24 hours, cooling / pumpcontrol output will be activated for 30 ~ 60 seconds. The timer icon will flash when the protection is running.

Backup memory

EEPROM will save the heating/ cooling, C/F scale and on/off status after key released 15 seconds, all setting will reload to the 2HEAT controller when the thermostat is reset.

Relay protection delay

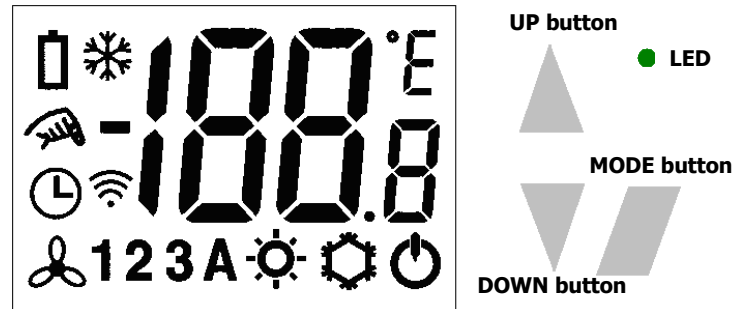
In cooling / pumpcontrol mode, relay must have 60 seconds minimum off delay to avoid relay turn on/off frequently.

Temperature offset (calibration) and scale setting

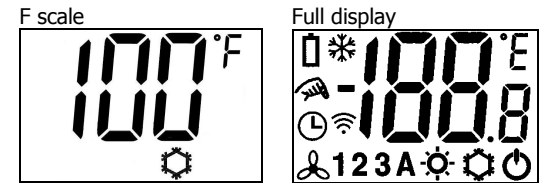
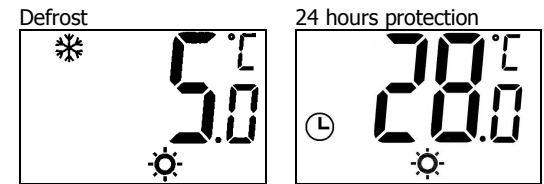
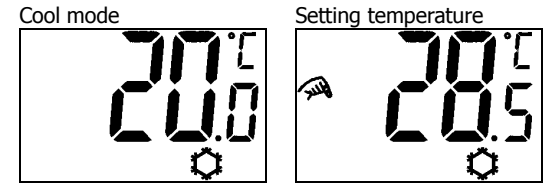
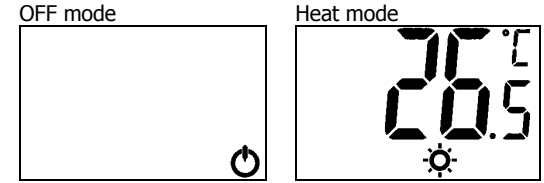
1. Power Off and take the 2HEAT controller out of the wall socket.
2. Press and hold all rubber keys and put the 2HEAT controller into the wall socket.
3. LCD will show F or C.
4. Release all keys.
5. Press up or down to select C scale or F scale.
6. Press Mode key to confirm and it will show offset (calibration) temperature.
7. Press up or down to select the offset temp (calibrated value).
8. Press Mode key to confirm and back to normal operation.

User Interface

1. Rubber buttons
 - Up \wedge & Down \vee to control the set point.
 - Mode button to select OFF, Heat, Cool mode.



2. LCD display



Controller as a pump switch (cooling/pumpcontrol mode);

The 2HEAT Controller can save energy when using it as a pumpswitch. The pump turns on when the desired temperature is reached (normally the pump always running, 24hours a day!). Every 24 hour the pump turns on for at least 30 seconds.

Specification

Model / Type:	2HEAT, Therma Control, TC 100.
Active (visual):	Green LED lights up.
Supply Voltage:	230Vac (+10% / -15%) 50/60Hz.
Relay Contact Voltage:	230 Vac 50/60 Hz.
Relay Contact Current:	16A Max. (resistive).
Sensing Element:	MFP-7 and bulb.
Temperature Accuracy:	+/- 0.5 °C (+/- 1 °F).
Operating Temperature:	-5 ~ 55 °C.
Storage Temperature:	-5 ~ 60 °C.
Operating Humidity:	5-95%RH non-condensing.

2HEAT **Therma Control**

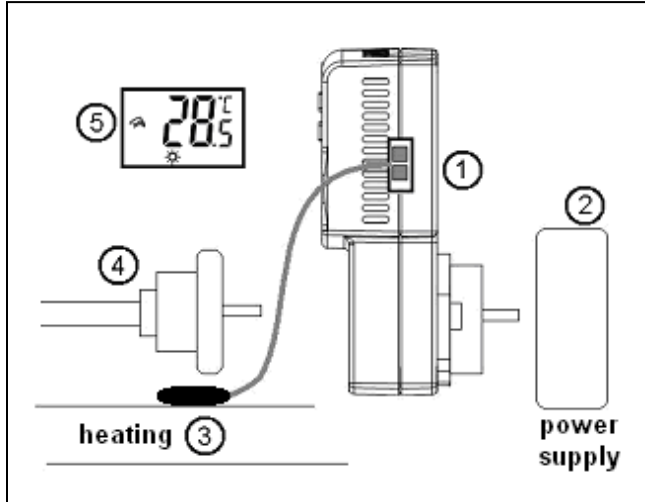
- Controls Your Equipment -



Therma Control with external clip- and bulb sensor

Installation (for heat applications)

1. Plug the Clip or bulb sensor into the 2HEAT controller.
2. Put the 2HEAT Controller to the power socket, and press on the MODE button to select HEATING mode.
3. Mount the sensor close to the supply heating material.
4. Connect the equipment to the 2HEAT controller.
5. Set the desired on / off switch-temperature.



Temperature Specification

Measuring range: 0-50 °C/32~122°F.

Resolution: 0.5 °C/1 °F.

Accuracy: ±0.5 °C/±1 °F.

Setting range: 5°C~49°C/ 40°F~120°F.

If the temperature is below 0°C / 32°F, display shows "LO".

If temperature exceeds 50°C / 122°F, display shows "HI".

Temperature measurement in every 10 seconds.

Operation Mode

Press mode button to Heat mode.

Hold mode button 3 seconds to turn the unit off.

OFF mode

Output will be turn off immediately.

LCD only display the off icon.

Heating mode

When set point is higher than room temperature 0.5 °C/1 °F, heating output will be turned on and the heat icon will flash.

When set point is lower than room temperature 0.5 °C/1 °F, heating output will be turn off and heat icon will stop flash.

When the controller is active, a green LED lights up!

Defrost protection

If heating mode is selected and the room temperature is below 5 °C / 40°F, output will be turned on.

Backup memory

EEPROM will save the heating/ cooling, C/F scale and on/off status after key released 15 seconds, all setting will reload to the 2HEAT controller when the thermostat is reset.

Relay protection delay

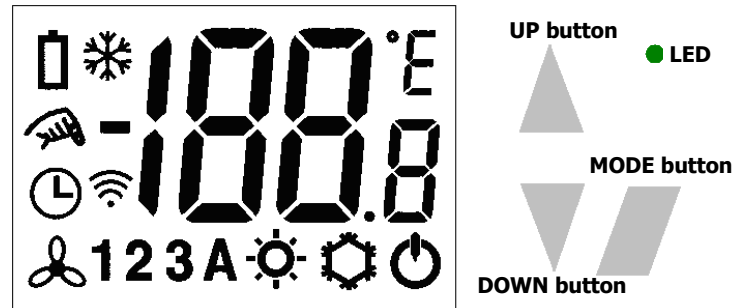
In heating mode, relay must have 10 seconds minimum off delay to avoid relay turn on/off frequently.

Temperature offset (calibration) and scale setting

1. Power Off and take the 2HEAT controller out of the wall socket.
2. Press and hold all rubber keys and put the 2HEAT controller into the wall socket.
3. LCD will show F or C.
4. Release all keys.
5. Press up or down to select C scale or F scale.
6. Press Mode key to confirm and it will show offset (calibration) temperature.
7. Press up or down to select the offset temp (calibrated value).
8. Press Mode key to confirm and back to normal operation.

User Interface

1. Rubber buttons
 - Up \wedge & Down \vee to control the set point.
 - Mode button to select OFF, Heat, Cool mode.



2HEAT **Therma Control**

- Controls Your Equipment -

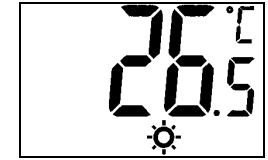


1. LCD display

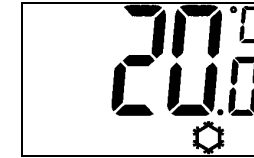
OFF mode



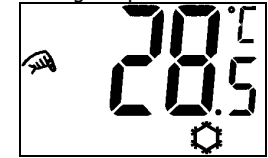
Heat mode



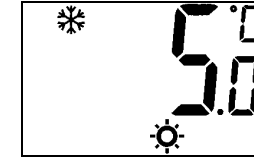
Cool mode



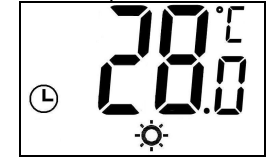
Setting temperature



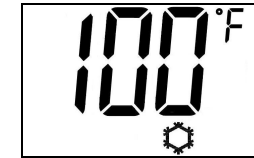
Defrost



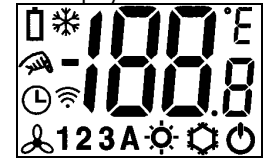
24 hours protection



F scale



Full display



Controller as a heating switch (pumpprotection mode is disabled);

The 2HEAT Controller can be used for several applications in the mode HEAT, like a: terracontroller, heatingmats, air control etc . In this mode normally the bulb sensor is being used.

To use the bulb sensor as a roomsensor just roll the cable up and place it behind the controller.

Specification

Model / Type:	2HEAT, Therma Control, TC 100.
Active (visual):	Green LED lights up.
Supply Voltage:	230Vac (+10% / -15%) 50/60Hz.
Relay Contact Voltage:	230 Vac 50/60 Hz.
Relay Contact Current:	16A Max. (resistive).
Sensing Element:	MFP-7 and bulb.
Temperature Accuracy:	+/- 0.5 °C (+/- 1 °F).
Operating Temperature:	-5 – 55 °C.
Storage Temperature:	-5 ~ 60 °C.
Operating Humidity:	5-95%RH non-condensing.