# Digital Programmable Thermostat HM01PT & HM01TS

## Product Summary

This innovative new design of heating thermostat is aimed at the consumer market. With its large, crystal clear LCD display, the thermostat offers intuitive operation, and complete functionality. It can be used for wall-hung boilers, water heaters, electric valves, etc. It can control motorized ball valves, motorized valves, thermal valves, solenoid valves, heaters, electric heating films and electric heating. It can be used for floor heating.

## Technical Data

❖ Power supply: AC200-240V, 50/60HZ
❖ Load current: 3A (water heating); 16A (electric heating)
❖ Accuracy: ±0.5ºC
❖ Set-point temperature range: 5ºC - 35ºC
❖ Limit temperature range: 5-99℃
❖ Consumption: <0.3W
❖ Temperature sensor: NTC
❖ Size: 86*86*17mm (H*W*D)

## Features

❖ Large LCD touch* screen with backlit display and double temperature display mode (*Touch screen model)
❖ Time display (minutes/hours/weeks)
❖ 6-period programmable temperature control setting
❖ Selectable internal and external temperature sensors
❖ Room temperature display precision to 0.5; inner precision to 0.1
❖ Precise room temperature setting to user preference
❖ Memory function protects your settings in the event of power failure
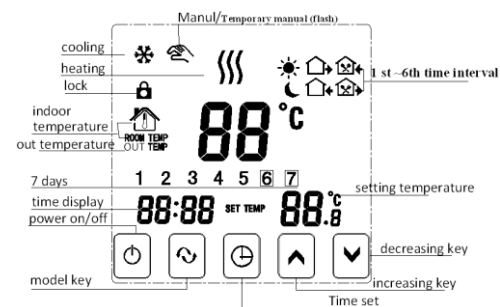❖ Room temperature automatic calibration function

## Button description

| NO. | Button | Description |
|-----|--------|-------------|
| 1 | ⏻ | On / off |
| 2 | ↻ | Mode key: switch between auto/manual time interval control. Allows temporary manual operation and time interval pre-set function |
| 3 | ⏲ | Time setting: minutes/hours/weeks |
| 4 | ∧ | Raise temperature setting, ∧+↻ and ∧+⏲ to increase programmed parameters |
| 5 | ∨ | Lower temperature setting, ∨+↻ and ∨+⏲ to decrease programmed parameters |

## Function and display

" ✋ "manual control (temporary manual control when flashing, auto control when no sign displayed);

" ((( " heating is on;  " ❄ " open anti-freezing function;

" ☀ " morning: first time interval;  " 🏠➜ " leaving the house: second time interval;

" ⊠➜ " lunchtime: third time interval;  " ⊠➜ " afternoon: fourth time interval;

" 🏠➜ " evening: fifth time interval;  " ☽ " night/sleep: sixth time interval;

## Operation diagram



## Time and time interval setting

### 1) Time setting

Press "⏲" to adjust the timer display (minute/hour/week); press "∧"or"∨"to adjust time.

### 2) Time interval and temperature setting

First: select time interval: press "↻" screen until the display shows "LooP" (cycle control); then, press "∧", until the screen displays "12345" (Monday to Friday control mode); press "∧" twice, until the screen displays "123456" (Monday to Saturday control mode); press "∧"3 times, until the screen displays "123456、7" (Monday to Sunday control mode);

Second step: time interval and temperature setting; when screen displays "12345" or "123456" or 123456、7", press "↻"enter time interval/temperature setting; press "⏲", enter time interval time setting; press"∧"or "∨" to adjust. Saves automatically.

### 2) Modify interval time control setting

Press"↻" first, then press "⏲"; switch to the time interval option to modify time intervals.

## Time interval programming

Press menu key "↻", enter time interval setting, then press "⏲" to set.

| Period | | Icon | Default Period Time | Default Period Temperature |
|--------|---|------|---------------------|----------------------------|
| Working Day | 1 | ☀ | 06:00 | 20℃ |
| | 2 | 🏠➜ | 08:00 | 15℃ |
| | 3 | ⊠➜ | 11:30 | 15℃ |
| | 4 | ⊠➜ | 12:30 | 15℃ |
| | 5 | 🏠➜ | 17:30 | 22℃ |
| | 6 | ☽ | 22:00 | 15℃ |
| Weekend | 1 | ☀ | 08:00 | 22℃ |
| | 2 | ☽ | 23:00 | 15℃ |

1) The factory default temperature value for time intervals 3 and 4 are the same as for period 2; please adjust according to your requirements.
2) If the temperature is set to "00", the time interval function is off.

(1) Touch screen version: when internal control temperature and external limit temperature (high temperature protection) are active, in "power on" state, press and hold time key first, then press on/off key to switch and view external temperature (this displays OUT TEMP temperature value); press time key to display room temperature;

## Advanced Setting(suggestion: operated by technician)

(1)In power off state, first press and hold ⏲ , then press ⏻ to enter into advanced setting, save automatically once backlight is out, press ↻ to set next data

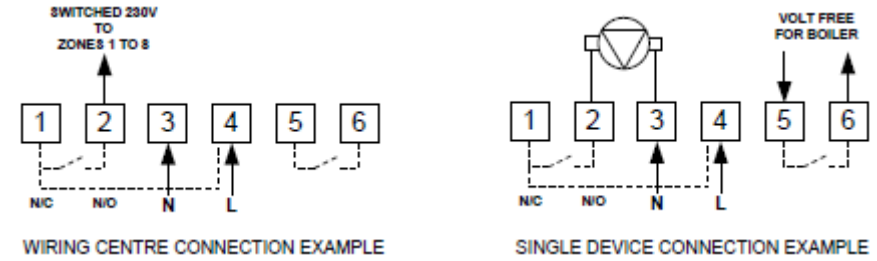| No. | Symbols | Setting Item | Parameter Setting Function | Factory Default |
|---|---|---|---|---|
| 1 | SEN | Sensor control option | 0: internal sensor<br>1: external sensor<br>2: internal control temperature, external limit temperature | 0: internal sensor |
| 2 | OSV | Limit temperature value of external sensor | 5-99°C | 42°C |
| 3 | dIF | Return difference of limit temperature to value of external sensor | 1-9°C | 2°C |
| 4 | SVH | Set upper limit temperature value | 5-99°C | 35°C |
| 5 | SVL | Set lower limit temperature value | 5-99°C | 5°C |
| 6 | AdJ | Measure temperature | Measure temperature, check and calibration | 0.1°C precision Calibration (actual temperature) |
| 7 | FrE | Anti-freezing function (only for water heating) | 00: anti-freeze function close<br>01: anti-freeze function open | 00: anti-freeze function Is off |
| 8 | POn | Power on memory | 00: Power on (memory off)<br>01: Power on (memory on) | 00: Power on (memory off) |
| 9 | ADD | Allow phone app to control thermostat (Wi-Fi version) | 01: Allow<br>02-99: Not allow | 01: Allow |
| 10 | FAC | Factory default | 08: Just display, no other meaning<br>00: Restore factory default(after adjusting to 00, press ↻ | 08 |

**Note:** hysteresis (return temperature) description: the factory default of external sensor limit temperature (OSV) set as 42℃, external sensor limit temperature hysteresis (dIF) set as 2℃,when temperature up to 44℃ stop relay output; when temperature drops to 40℃ relay output again and heating. (Operates when room temperature is lower than setting temperature.)

## Sensor fault (Err)

Select internal or external sensor working mode, correctly. If the incorrect mode is selected, or the sensor is at fault (breakdown), LCD interface will display "**Err**"; temperature controller stops heating until fault is eliminated.

## Power wiring diagram

**WARNING – ISOLATE ELECTRICAL SUPPLY BEFORE CONNECTING, CHECK BOILER INSTRUCTIONS BEFORE CONNECTING**



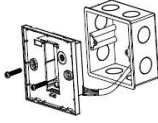WIRING CENTRE CONNECTION EXAMPLE     SINGLE DEVICE CONNECTION EXAMPLE
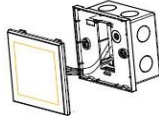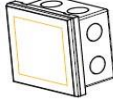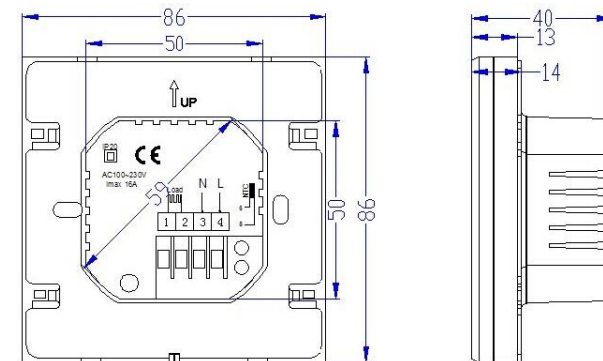
1 = Normally Closed    2 = Normally Open    3 Neutral    4 Live    5&6 Volt Free Switch, not polarity sensitive
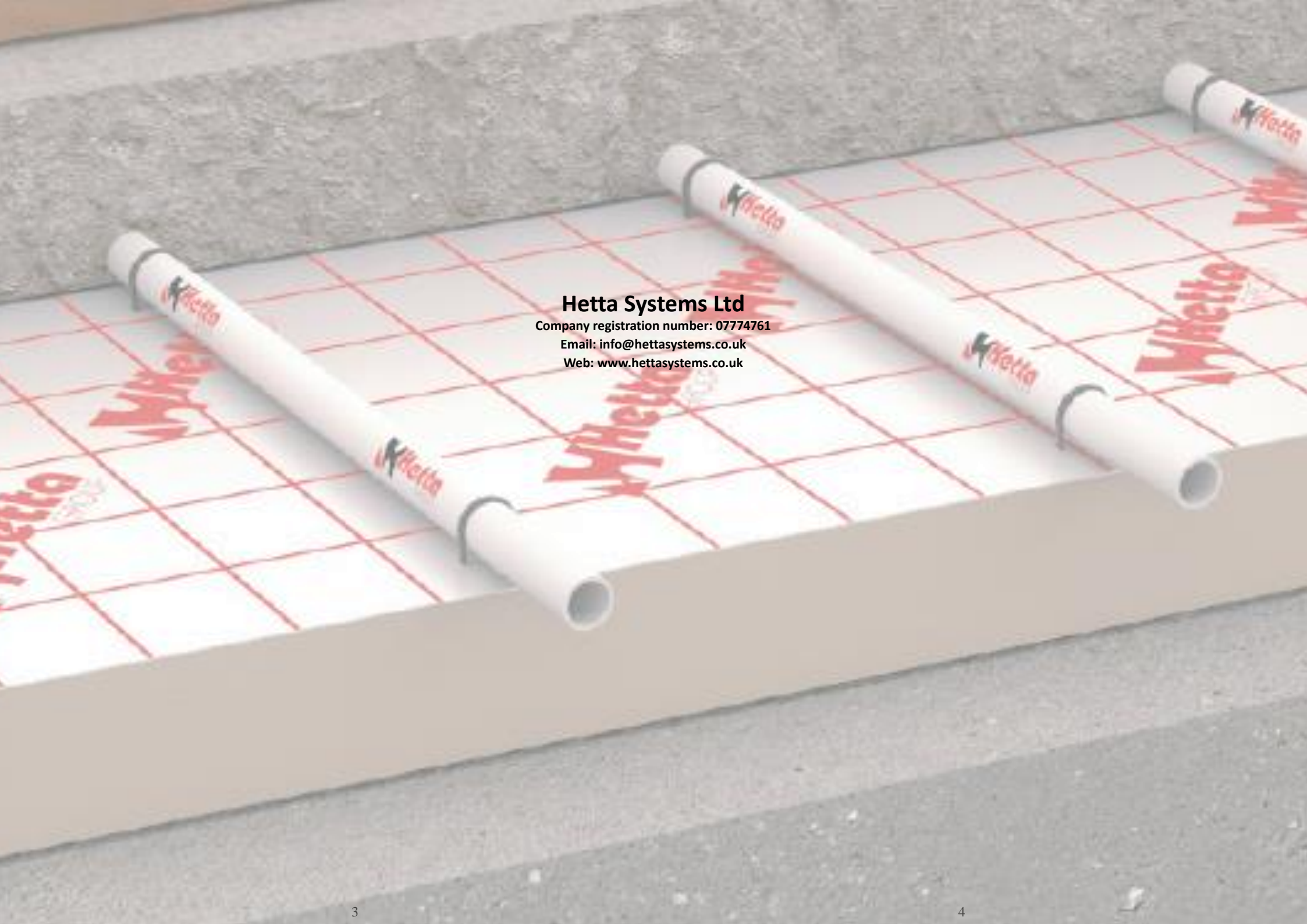
It is recommended that a qualified electrician is consulted or used for the installation of this thermostat and installed in

accordance with the current IEE Wiring and Building Regulations

## Installation

Warning: Wire strictly according to the wiring diagram;    do not allow water, mud or other debris to enter the thermostat, as there can cause    thermostat    damage.



| 1, Open main control panel, with 3.5mm slotted point screwdriver. Along the top or bottom to press the tabs and gently pry open. | 2, Connect back panel and power, wire as per wiring diagram, fasten back panel to cassette with M4 screw | 3, Connect front panel and press to click into back panel. | 4, Hang up with 30° to 2 hooks, press on the 2 bottom corners, stick on the upper shell, Installation finished. |
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