










No.	Symbols	Setting Item	Parameter Setting Function	Factory Default
1	SEN	Sensor control option (NTC)	0: internal sensor 1: external sensor 2: internal control temperature, external limit temperature	0: internal sensor. ("Err" is displayed if selected wrongly, or NTC is faulty. Heating stops until corrected)
2	OSV	Temperature limit of external sensor	5-99 °C	42 °C
3	dIF	Return difference of temperature limit value of external sensor	1-9 °C	2 °C
4	SVH	Set upper temperature limit value	5-99 °C	35 °C
5	SVL	Set lower limit temperature value	5-99 °C	5 °C
6	AdJ	Synchronize display temperature reading	-5 °C to + 5 °C	0.5 °C
7	FrE	Anti-freezing function (only for water heating)	00: anti-freezing function closed 01: anti-freezing function open	00: anti-freezing function shut down
8	POn	Power on memory	00: Power on memory not needed 01: Power on memory memory	00: Power on memory not needed
9	ADD	Allow phone app to control thermostat (wifi version)	01: Allow 02-99: Not allow	01: Allow
10	FAC	Factory default	08: Using current user settings. 00: Restore factory default (set to 00 and press )	08

Note: The temperature limit of the external sensor is factory set at 42 °C (OSV). The return difference of this temperature is factory set at 2 °C (dIF). When the temperature reaches 44 °C, the thermostat will switch the heating output off. When the temperature drops down to 40 °C, the thermostat will switch the heating output back on.







FACTORY SETTINGS

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


















NTC SENSOR (READING EXTERNAL TEMPERATURE)

- 1) Press and hold  and then press . The **OUT TEMP** will now be displayed. This is the temperature which is being read by the external sensor (NTC sensor).
- 2) Press  to return to the **ROOM TEMP** (internal sensor) display reading.

ACCESS ADVANCED SETTINGS

Press  to turn the display screen off. Press and hold  then press  to enter into advanced settings. The first symbol **sen** will be displayed. Use  and  to alter settings and press  to move to next symbol. Settings are saved when the backlight goes off.

TIME AND TIME INTERVAL SETTING

- 1) **Time setting** Press time key  to enter time setting mode. Each press of  will switch between Hour, Minute & Day (Days being 1234567), use  or  to adjust settings.
- 2) **Time Period & Temperature Programming**
Setting the temperature to 00°C will make the time period inactive.
 - 1) Press and hold  until the screen displays LooP (cycle control). Then press  or  to select either "12345" (Mon to Fri), 123456 (Mon to Sat) or 123456 7 (Mon to Sun). Selecting 12345 will set all of the weekday time periods the same, and then allow weekends to be set differently.
 - 2) Press  to enter the 1st time period (symbol  will be displayed), then use  or  to set the desired temperature. Press  to set the required start hour by pressing  and  and press  again to set minutes.
 - 3) Press  to set the finish time of this 1st time period, and repeat as above.
 - 4) Press  to enter the remaining time periods and proceed as before. Settings are automatically saved.

Hetta
SYSTEMS



DIGITAL PROGRAMMABLE HEATING THERMOSTAT MANUAL HMO1TS
USER MANUAL





PRODUCT SUMMARY

User programmable thermostat with large backlit LCD display. 5 day, 5 + 1 day & 5 + 2 day timer options. 6 available time periods per day. Displays room temperature and setting temperature. Option for connecting NTC sensor. Switched 230 volt output for control of wiring centres, boilers and pumps. Memory backup in case of power failure.

TECHNICAL DATA

- Power supply: AC200–240V, 50/60HZ.
- Load current: 3A (water heating).
- Accuracy: $\pm 0.5^{\circ}\text{C}$
- Set-point temperature range: 5°C – 35°C
- Limit temperature range: 5 – 99°C
 - Consumption: $< 0.3\text{W}$
 - Temperature sensor: NTC
 - Size: $86 \times 86 \times 17\text{mm}$ (H*W*D)

DISPLAYS & BUTTONS FIG.1

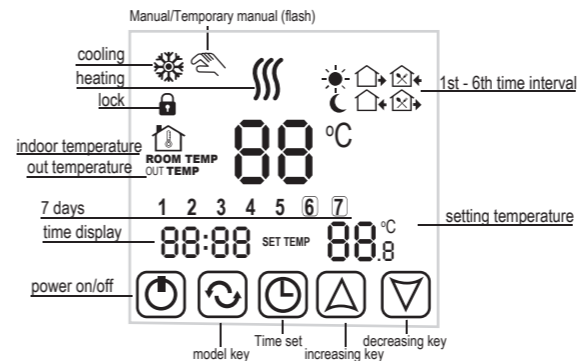
- Large LCD screen with backlight display and double temperature display mode.
 - Time display, Hours, Minutes and Days – (1 to 7).
 - 6 period programmable temperature control settings.
 - Selectable internal and external temperature sensors.
- Room temperature display precision is 0.5, internal precision is 0.1.
 - Precise room temperature setting to meet the user's demand.
- Memory function protects your settings in the event of a power failure.
 - Automatic room temperature calibration function.

BUTTON DESCRIPTION		
NO	KEY	DESCRIPTION
1		On / off
2		Mode key: Press to switch between auto/manual operation. Press and hold to access time period and temperature programming settings.
3		Press to set time: hours, minutes and day. Press and hold for 5 seconds to lock/unlock.
4		Increase temperature, or programming parameters.
5		Decrease temperature, or programming parameters.

FUNCTION AND DISPLAY

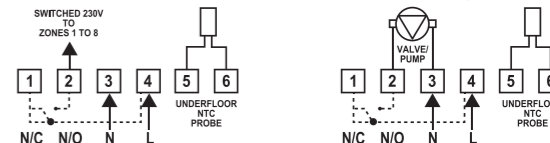
- Manual control (temporary manual control when flashing, auto control when not displayed).
- Heating is ON.
- First (morning) time interval.
- Second (morning) time interval (leaving the house).
- Third (lunch) time interval.
- Fourth (afternoon) time interval.
- Fifth (evening) time interval.
- Anti-freezing function in operation.
- Sixth (night/sleep) time interval.

SCREEN DISPLAY



POWER WIRING DIAGRAM

The N/C- N/O switch is internally wired to provide 230 Volts. Connection 2 provides a switched live output for boiler or wiring centre.



WIRING CENTRE CONNECTION EXAMPLE **VALVE/PUMP CONNECTION EXAMPLE**
 1= Normally Closed 2= Normally Open 3= Neutral Supply 4= Live Supply 5 & 6= Underfloor NTC Probe

WARNING - ISOLATE ELECTRICAL SUPPLY BEFORE CONNECTING, CHECK BOILER INSTRUCTIONS BEFORE CONNECTING
 It is recommended a qualified electrician is consulted, or used for the installation, in accordance with the current IEE Wiring and Building Regulations.

INSTALLATION

1. Remove the main control panel by pushing it up away from the rear mounting plate. If required, carefully disconnect the ribbon cable to allow access for fixing the mounting screws.	2. Connect wiring as required and fix mounting plate to wall pattern, or back box using M3.5 pattern screws, being careful not to overtighten.	3. Reconnect the ribbon cable to the control panel (if disconnected)	4. Position the control panel over the 4 hooks on the mounting plate, press to, and slide down. If tight, adjust hooks by bending out slightly with a small screwdriver.

