ENGINEERING TOMORROW



User Guide

TP5001

Programmable Room Thermostat





User Guide

TP5001 Programmable Room Thermostats

LCD Overview

Symbols	Function description
Mon – Sun	Current set day
	Current on/off period
AM IŢIŢI.ŢIŢI PM ŢIŢIŢIŢI	Current set time / parameter number in setup
	Room temperature
	Temperature indication
SET	Set temperature

Symbols	Function description
<u> </u>	Heating active
*	Frost protect active
4	Schedule mode
	Away mode
_	RF Status
Ī	(TP5001RF only)
_	Battery low indicator (TP5001B & TP5001RF only)



2 **Buttons**

Symbols	Function description
பு	Power on/off
(L)	Timer and program
	operation
м	Mode change / option
141	setting
	Temperature / option
< <i>></i>	setting selectors

3 **Power ON/OFF**

Turn the thermostat ON or OFF (standby) by pressing (1).

Setting the Temperature

- Press < or > at any time to change the desired temperature value. **SET** is shown in the display.
- When releasing < or >, the display returns to showing the actual temperature.
- The adjustment step is 0.5 °C.

5 Select Away Mode

- Press **M** to enter Away mode and will be displayed.
- Away mode temperature can be set in parameter settings, P07.
- Press M again to exit Away mode.

Set Date & Time

- Press \bigcirc ; Year digit Flashes. Press < or > buttons to adjust year.
- Press 🖰 again; Month digit flashes. Press < or > buttons to adjust month.
- Press \odot again; Day digit flashes. Press < or > buttons to adjust day of the month.
- Press 🖰 again; Hour digit flashes. Press < or > buttons to adjust hour.
- Press 🖰 again; Minute digit flashes. Press < or > buttons to adjust minute.
- Press Θ to exit, automatic exit after 20 seconds, any changes are retained.



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7 **Frost Protection Temperature**

- You can switch the thermostat OFF (Standby) by alternately pressing (1). In OFF (Standby) mode, the thermostat is set to a Frost Protection temperature setting and will switch On only if the measured temperature falls below this temperature (5 °C by default).
- The frost protect icon and current temperature will be displayed.

8 Advanced Programmable Timer

The Advanced Programmable Timer mode enables the setting of a timer-controlled program for automatic comfort temperature, and an energy-saving lower setback temperature if standard room comfort temperature is not required.

Example below for 5/2 day setup, 4 Temperature settings.

The function consists of 2 programs:

P1 with 4 events in 5 days (Mon. Tue. Wed. Thu. Fri.)

P2 with 4 events in 2 days (Sat. Sun.).

P1: Press (for 3 secs to display Mo. Tu. We. Th. Fr.

P1. Event 1:

- 1. Use < or > to select the start hour.
- 2. Press (5) to accept the setting.
- 3. Use < or > to set the minute.
- 4. Press (4) to accept the setting.
- 5. Use < or > to select the temperature.
- 6. Press (5) to accept the setting.

P1, Event 2-4:

Repeat the Event 1 procedure for programming Event 2-4.

P2: Sa. Su. are now shown in the display.

P2. Event 1:

- 1. Use < or > to select the start hour.
- 2. Press (5) to accept the setting.
- 3. Use < or > to set the minute.
- 4. Press (4) to accept the setting.
- 5. Use < or > to select the temperature.
- 6. Press (5) to accept the setting.

P2, Event 2-4:

Repeat the Event 1 procedure for programming Event 2-4.

If schedule working mode is set to 24hr, only P1 program will be available, see parameter P01. Mo. to Su. will be set together with the same times and temperatures.

The thermostat will continue the 4-event program based on the present time and day.

To set and change the room temperature temporarily:

- 1. Press < or > at any time to change the desired temperature value. **SET** is shown in the display.
- 2. When releasing the < or >, the display returns to showing the actual temperature. This temperature change is only temporary and will be maintained only until the next programmed setting!

A default program provides timer control if the customer does not create own programs:

Days	Event 1		Event 2		Event 3		Event 4	
	Start time	Temp.						
Mo Fr.	6:30	20° C	8:30	15° C	16:30	20° C	22:30	15° C
Sa Su.	7:30	20° C	9:30	15° C	16:30	20° C	22:30	15° C

^{* 24}hr mode default program same as Mo. - Fr. above.

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Set Control Parameters 9

- · Press M button for 6 seconds to enter the parameter setting mode. Press M for parameter selection and set the parameter range via < or >. Complete all adjustments.
- To exit press (), which is available for this purpose (automatic exit after 20 seconds with no operation).

The digits indicate the set value as follows:

No.	Parameter settings	Settings range	Default	
P01	Working mode	01: Manual 02: Schedule timer 5/2 day 03: Schedule timer 24hr	02	
P02	Heat control mode	01: On/off load compensation 02: On/off standard	01	
P03	Heat control start-up mode	01: Normal start control 02: Delayed start control 03: Optimised start control	01	
P04	Temperature limit high	Between low (P05) and 35° C	35° C	
P05	Temperature limit low	Between 5° C and high (P04)	5° C	
P06	Frost protect temperature	Between 5° C and 15° C	5° C	
P07	Away mode temperature	Between low (P05) and high (P04)	18° C	
P08	Timer display	01: 24hr 02: 12hr	24hr	
P09	Service due setup	Installer setting only		
P10	RF Pairing (TP5001RF only)	00: RF pairing mode off 01: RF pairing mode on	00	
P11	Auto daylight saving	01: On 02: Off	01	

Error Messages 10

E1	Sensor failure	
EE	EEPROM failure	
Lo	Measured temperature below 0 °C	
Hi	Measured temperature above 50 °C	
E3	RF Pairing failed	
E4	RF Signal lost	
E6	Real Time Clock (RTC) faliure	

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