



ThermoPlus AS1

Programmable Room Thermostat

Installation Instructions



The ThermoPlus AS1 - Programmable Room Thermostat offers a number of pre-installed heating profiles which are simply set-up by the installer to provide maximum comfort to the user. Once installed, user operations are kept to a minimum by using the +/ - and Warm/Cool buttons on the front of the unit.

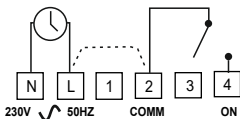
PLEASE NOTE: The ThermoPlus AS1 contains a selection of five pre-set and one adjustable profile options, one of these profiles must be set by the Installer. It is vital that care is taken to ensure a profile is selected that suits the lifestyle of the householder concerned.

INSTALLATION AND CONNECTION OF THE THERMOPLUS AS1 SHOULD ONLY BE CARRIED OUT BY A SUITABLY QUALIFIED PERSON. ALWAYS CONSULT THE SPECIFIC BOILER MANUFACTURERS INSTALLATION INSTRUCTIONS BEFORE COMMENCING THE INSTALLATION.

WARNING : ISOLATE MAINS SUPPLY BEFORE COMMENCING INSTALLATION

Internal and external wiring connections

Internal Wiring Connections



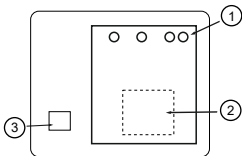
- The ThermoPlus has Voltage Free contacts.

- A link L - 2 is required for mains Voltage applications.

- The ThermoPlus AS1 is mains operated, not battery powered.

Rear View of the ThermoPlus

- 1 - Connector pins
- 2 - Capacity label
- 3 - Production date label

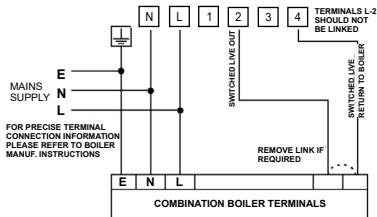


Wiring Diagrams

An example circuit diagram for a typical combination boiler installation is shown below. This diagram is schematic and should be used as a guide only.

Please ensure that all installations comply with the current IET regulations and the boiler manufacturers installation instructions.

For reasons of space and clarity not every connection has been included and the diagram has been simplified, for instance some Earth connections have been omitted.

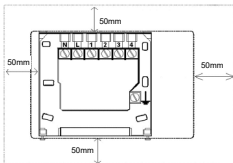


**Typical
combination
boiler
installation**

Fitting the Backplate

Once the Backplate has been removed from the packaging please ensure the ThermoPlus is re-sealed to prevent damage from dust, debris etc.

The Backplate should be fitted with the wiring terminals located at the top and in a position which allows a total clearance of at least 50mm around the thermostat. The ThermoPlus should be mounted on an internal wall approximately 1.5 metres from floor level and should be in a position away from draughts, direct heat and sunlight.



Direct Wall Mounting

Offer the plate to the wall in the position where the ThermoPlus is to be mounted, remembering that the Backplate fits to the left hand end of the thermostat. Mark the fixing positions through the slots in the Backplate, drill and plug the wall, then secure the plate in position. The slots in the Backplate will compensate for any misalignment of the fixings.

Wiring Box Mounting

The Backplate may be fitted directly on to a single gang steel flush wiring box complying with BS4662, using two M3.5 screws. ThermoPlus thermostats are suitable for mounting on a flat surface only, they must not be positioned on a surface mounted wall box or on unearthed metal surfaces.

Electrical Connections

All necessary electrical connections should now be made. Flush wiring can enter from the rear through the aperture in the Backplate. Surface wiring can only enter from beneath the ThermoPlus and must be securely clamped.

The mains supply terminals are intended to be connected to the supply by means of fixed wiring.

The ThermoPlus is mains powered and requires a 3 Amp fused spur. The recommended cable sizes are 1.0mm^2 or 1.5mm^2 .

The ThermoPlus is double insulated and does not require an Earth connection. An Earth connection block is provided on the Backplate for terminating any cable Earth conductors.

Earth continuity must be maintained and all bare Earth conductors must be sleeved. Ensure that no conductors are left protruding outside the central space enclosed by the Backplate.

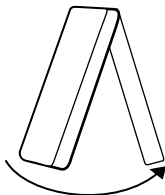
Commissioning the Thermostat

Ensure all dust and debris has been cleared away from the work area before removing the ThermoPlus AS1 from its packaging.



Fitting the Thermostat

- If surface wiring has been used, remove the knockout/insert from the bottom of the thermostat to accommodate it.
- Loosen the two 'captive' retaining screws on the bottom of the Backplate.
- Fit the thermostat to the Backplate, ensure the lugs on the Backplate engage with the slots on the thermostat.
- Swing the bottom of the thermostat into position ensuring that the connection pins on the back of the unit locate into the terminal slots in the backplate.
- Tighten the two 'captive' retaining screws to fix the unit securely.



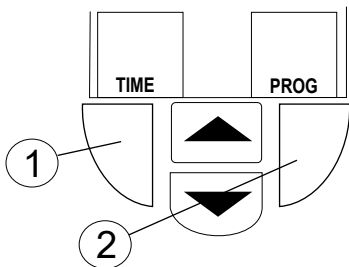
End view of the
thermoplus

Then switch ON the mains supply.

ThermoPlus Programming Mode

Once the ThermoPlus has been installed, please press buttons 1 and 2 Simultaneously to enter the programming mode, this will allow you to;

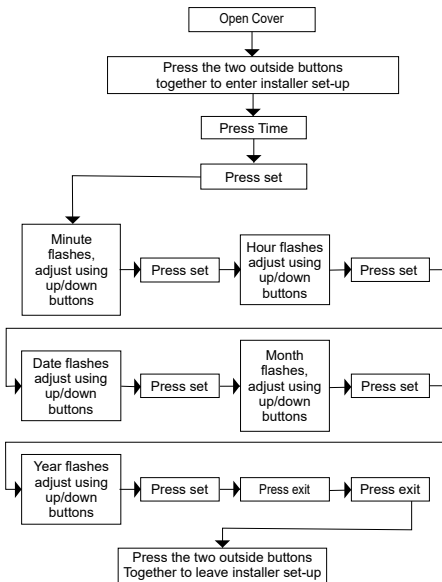
- Check the current time / date / year is correct
- Set a profile suitable for the end user



Upon completion of the instructions above, please ensure that you explain operation of this thermostat to the user and hand over the user guide as supplied.

Time and Date Check

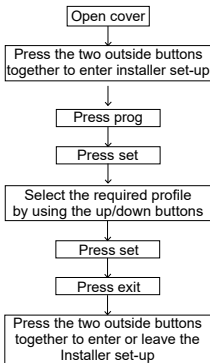
The ThermoPlus thermostat has been pre-set with the current time and date during manufacture. No alteration should be required to the time and date, however if any modification is required please refer to the flowchart below.



Setting User Profiles - One to Five

The ThermoPlus contains a selection of five pre-set profile options, one of these must be set by the Installer. It is vital that care is taken to ensure a profile is selected that suits the lifestyle of the householder concerned. The flow chart below is designed to easily guide you through the process of setting the required profile. Profiles one to five are detailed on page 10 and 11 of the user guide.

PLEASE NOTE: If none of the provided profiles meet the users requirements it is possible to set a user defined profile (No. 6), full details are given on page 12 of the user guide.



Profiles one to five have fixed programmes, they can be reviewed by pressing the set button once the selection process detailed above has been completed. To set a custom profile please refer to the instructions on page 12 of the user guide.

General information

Before handing over the installation to the user, always ensure that the system responds correctly on all control programmes and that other electrically operated equipment and controls are correctly adjusted.

EXPLAIN HOW TO OPERATE THE CONTROLS AND HAND OVER THE USER OPERATING INSTRUCTIONS TO THE USER.

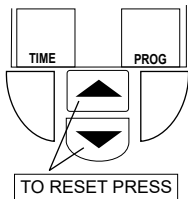
Reset Procedure

Please note; Using this procedure will restore the ThermoPlus to the original factory programme settings, the time setting will also default to **1st January 2005**.

Resetting the ThermoPlus AS1

On the ThermoPlus AS1 press the 'UP' and 'DOWN' arrow buttons together:

- Then release the buttons and the thermostat will return to preset factory settings.



Back-lit Display

The Back-lit display will operate whenever any of the button located under the flap are pressed.

There is an 80 second auto power down mode on the back light from the last button press.

Frost Protection

The Blue button situated under the flap will initiate the frost protection mode when pressed, the word 'STANDBY' will appear on the display, the thermostat has been pre-programmed with a frost protection temperature level of 7°C, this can be adjusted by using the up and down arrow buttons.

Specification ThermoPlus AS1

Electrical

Purpose of Control	Electronic Programmable Thermostat (Independently Mounted)
Supply	230V AC 50Hz. With Lithium battery reserve
Contact Rating	3(1)Amps (230 V AC)
Contact Type	Micro-Interruption
Insulation	Class II
Control Action	1B
Operating Time Limitation	Intermittent
Software Class	Class A
Temperature Control Range	5°C - 30°C (1°C Steps)
Temperature Accuracy at 20°C	± 0.25°C (Wet Central Heating System)
Temperature Differential (Hysteresis)	<0.5°C (At 4°C/hour)
Display	LCD (Backlit)
Clock	24 Hour (1 minute steps)
Switch time Adjustment	15 minute steps
Programme Selection	Auto/Standby
Operating Periods	3
Override	Instant Warm/Cool

Mechanical

Dimensions

120mm x 90mm x 32mm

Case Material

Thermoplastic, flame
retardant

Ball Pressure Test Temperature

75°C

Mounting

Independently wall
mounted wallplate, or onto
a flush single gang wiring
box (to Bs4662)

Environmental

Impulse Voltage Rating

Cat II 2500V

Enclosure Protection

Ip30

Pollution Degree

Degree 2

Operating Temperature Range

0°C to +40°C

Compliance

Design Standards

EN 60730-2-9,
BS EN 60730-1,
BS EN 60730-2-9



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