CM-THERM-CONTROL

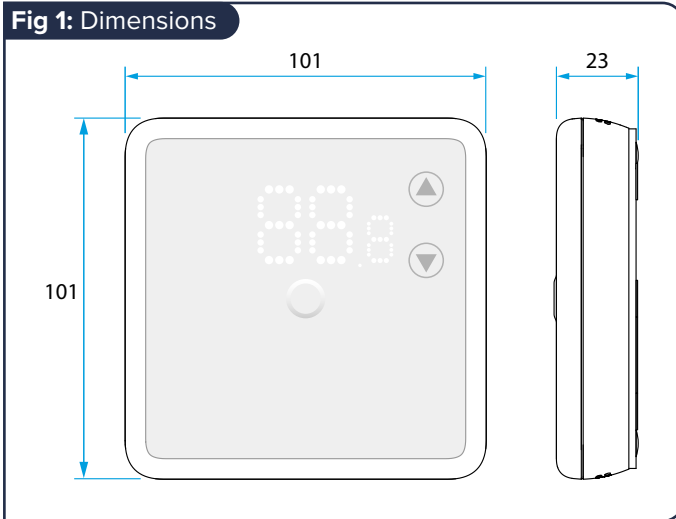## Digital Room Thermostat
Installation and Maintenance Manual

1.0 INTRODUCTION

The CM-THERM-CONTROL digital room thermostat is designed to provide comfort with economy in modern systems. Its large display and simple button interface make it extremely easy to use.

2.0 INSTALLATION

2.1 DIMENSIONS


Fig 1: Dimensions

2.2 POSITIONING

The thermostat is for use in normal domestic environments, and so should be located inside the house or building where the ambient temperature is within the range 0 - 40°C. Avoid locations with high levels of condensing moisture.

As the temperature control element in the cooling system, thermostat **MUST** be located in a position with good air circulation at average room temperature on an inside wall 1.2 - 1.5m from the floor.

Do **NOT** position the thermostat near sources of heat (radiators, hot air vents, TV or lights), near doors or window, or in direct sunlight.

Fig 2: Thermostat Position
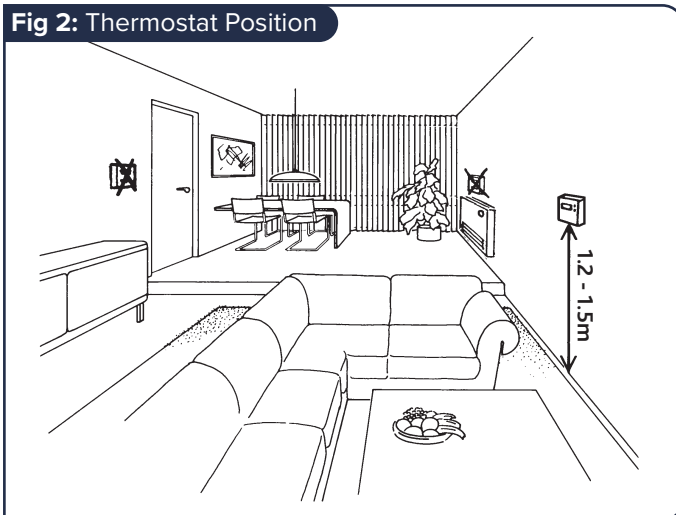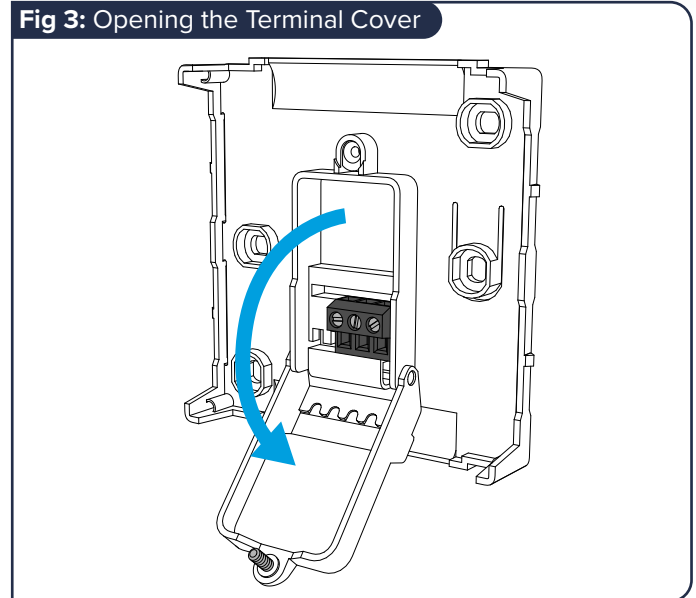
2.3 MOUNTING

Fig 3: Opening the Terminal Cover
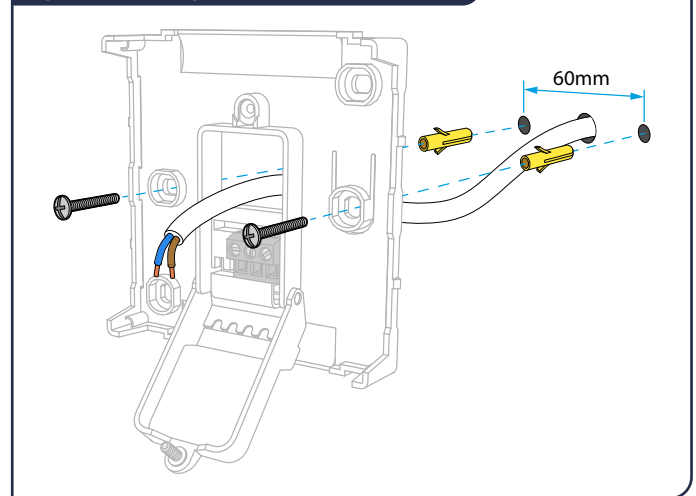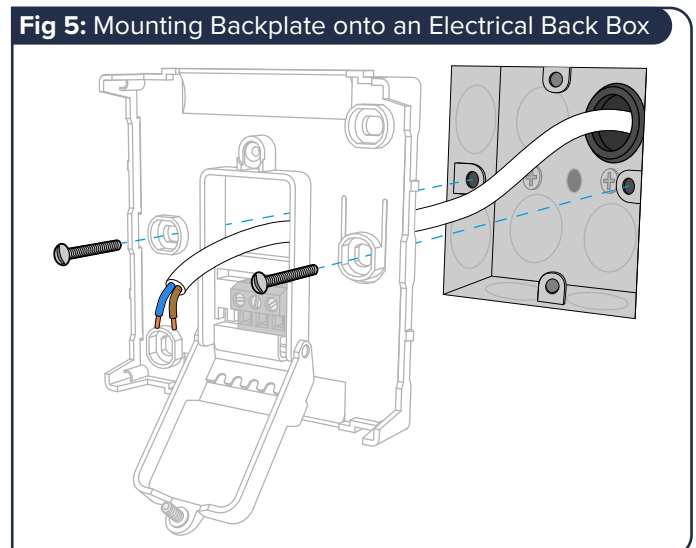

Fig 4: Mounting Backplate onto a Wall

60mm

Fig 5: Mounting Backplate onto an Electrical Back Box

2.4 WIRING

The thermostat is for fixed wiring only and must be installed in accordance with the latest Electrical Regulations.

Ensure the wiring connection to the supply is via a fuse rated at no more than 5A resistive/3A inductive and a switch having contact separation of at least 3mm in all poles. **Not required with MR-ECO-COOL-V.**

Fig 6: Wiring Diagram
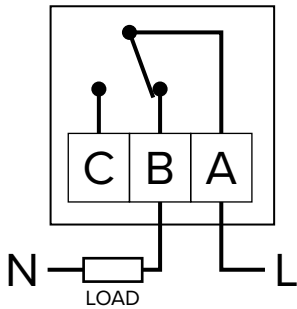
Fig 7: Backplate Wiring Connections
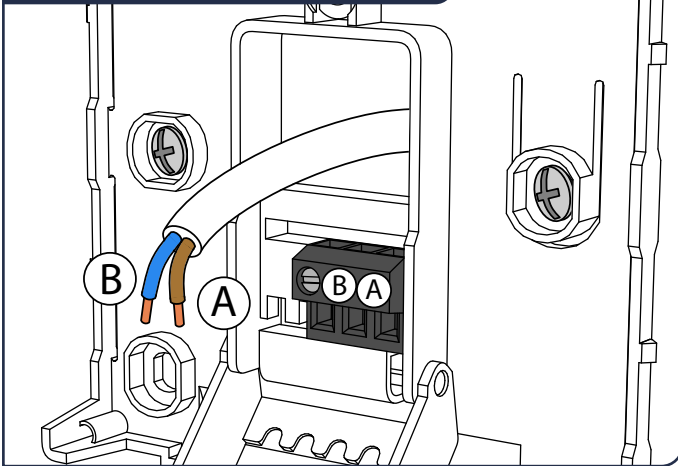
Fig 8: Closing the Terminal Cover

Fig 9: Screw the Terminal Cover Shut

2.5 COMPLETING THE INSTALLATION

Before attaching the thermostat to the backplate, remove the plastic tab between the battery and contact (Fig 10).

Fig 10: Remove Plastic Tab from the Battery Contact

After wiring is complete, the thermostat is attached to the backplate and clips into place (Fig 11).

Fig 11: Remove Plastic Tab from the Battery Contact

Fig 12: Remove Plastic Tab from the Battery Contact

Temperature Display (°C)

(flashing) Adjustment Prompt Indicator

Low Battery Indicator

Cooling Mode Active

Up Adjustment Arrow

ECO Mode Active

Off Mode

Down Adjustment Arrow
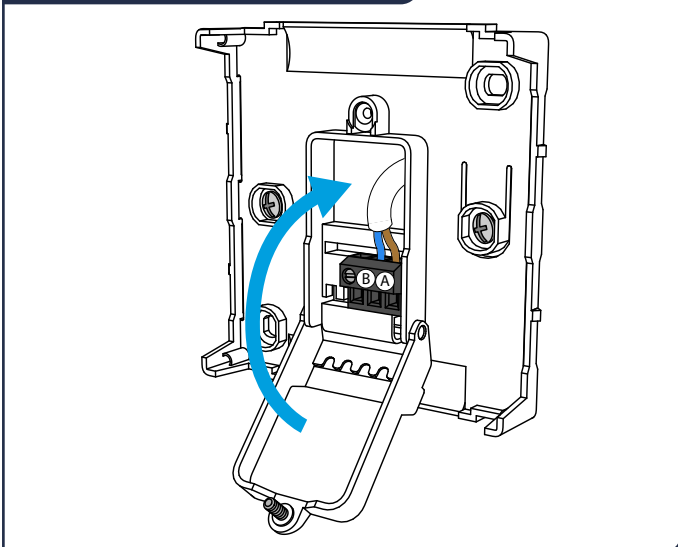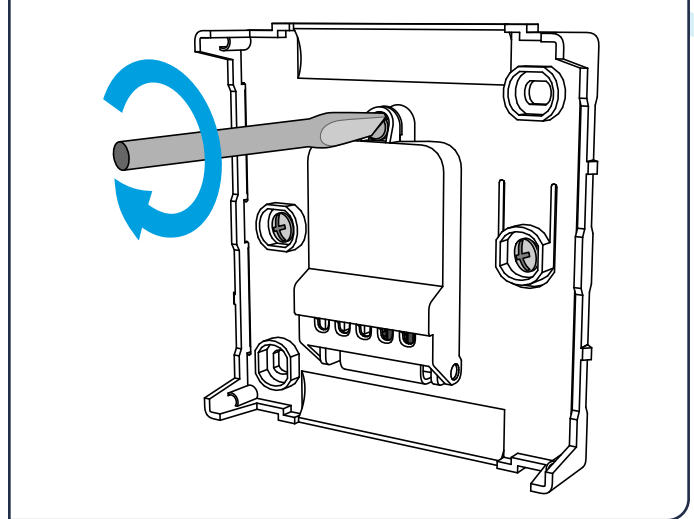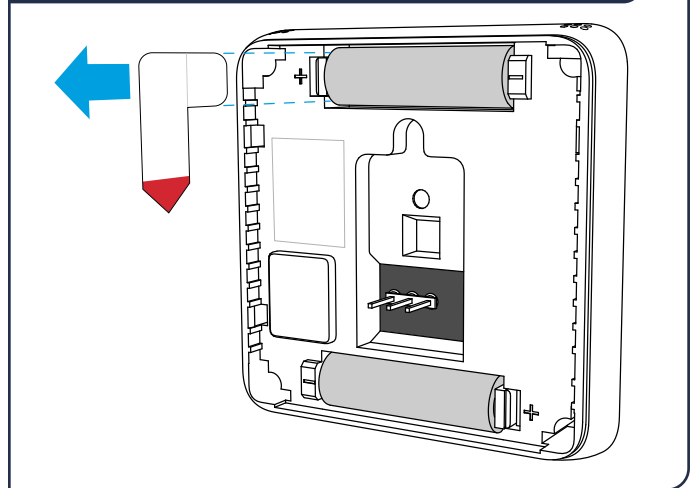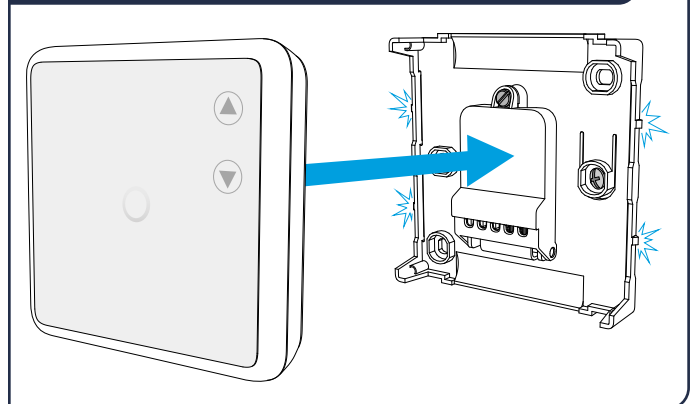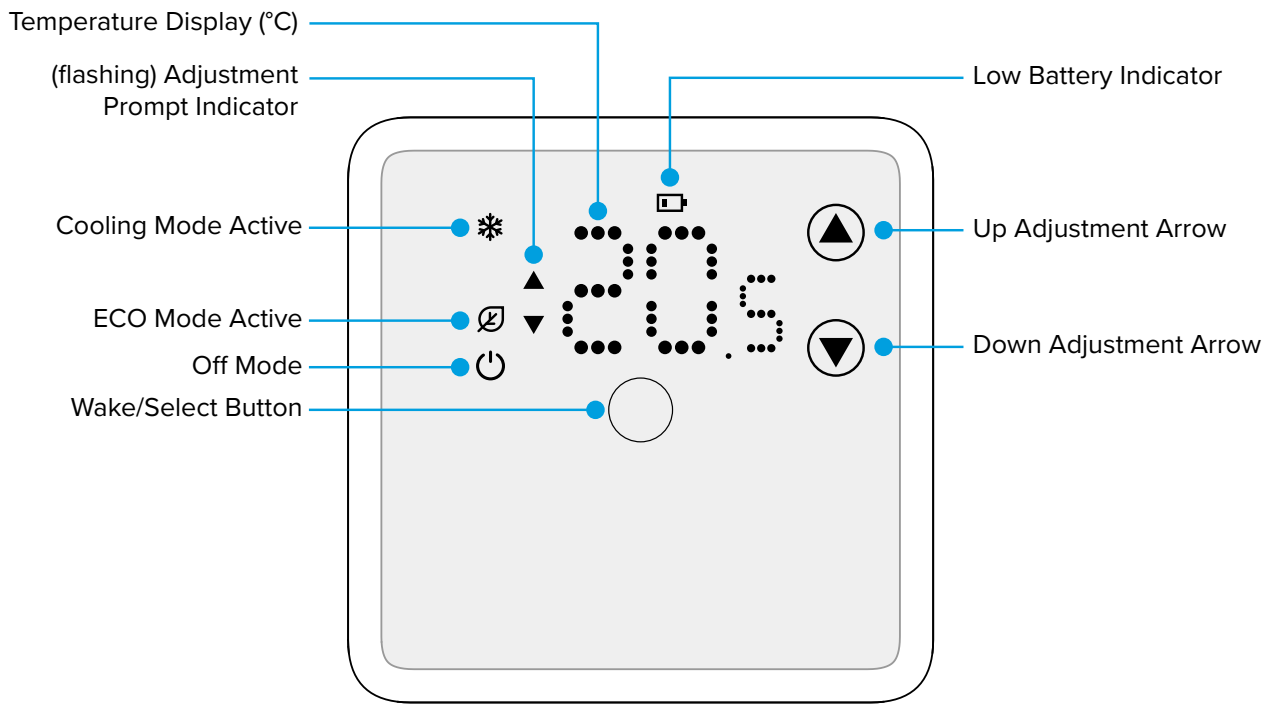
Wake/Select Button

To conserve the battery, the display times out after 4 seconds if nothing has been pressed. Press the Wake/Select button to reactivate.

2.6 DISPLAY (TIME OUT)

The display will normally be off to conserve battery. To reactivate the display press the centre Wake/Select button. The display will appear showing the room temperature. If no buttons are pressed with in 4 seconds the display (only) will time out and turn off. To reactivate the control, press the centre Wake/Select button.

2.7 USER INTERFACE

The unit has three buttons to navigate the controls.

A central button to select the function and (▲) and (▼) buttons to adjust the settings.

When the display is off a single press of the centre button will re-activate the display, to show the room temperature (°C). Whilst the room temperature is displayed use the (▲) and (▼) buttons to the adjust the set point to the desired temperature. Within a few seconds of adjusting, the display will flash twice and display the room temperature, before turning off to conserve battery.

2.8 MODES

There are three modes available ❄ On (Cooling Mode activated), 🍃 ECO and ⏻ Off. To select the mode, press the central button twice when the display is off (once if the display is showing the room temperature). The current mode and two arrows will flash ▲▼ on the display. Toggle through the modes using the (▲) and (▼) buttons and press the central button to select.

2.8.1 ❄ ON (COOLING MODE ACTIVATED)

This will monitor the room temperature and automatically operate the cooling module if the room temperature is above the set point. In addition, the ventilation unit will automatically increase its fan speed. Once the set point has been achieved (minimum on time of 1 minute) the cooling module will automatically turn off and the MVHR will return to its previous setting, provided no other switches have been activated.

2.8.2 🍃 ENERGY SAVING ECO FEATURE

ECO Mode allows user to change to a higher set-point, potentially delaying the activation of cooling for a selected period (between 1 and 24 hours).

Example: If the set point is set to 23°C, When ECO mode is activated the set point will automatically increase to 25°C (set point +2°C) for the selected period of time (1-24 Hours).

ACTIVATING ECO MODE:

- Press the central button twice when the display is off.
- Use the (▲) and (▼) buttons toggle through the modes to ECO (🍃 will be displayed),
- Press the central button to select ECO Mode.
- Select the required time (between 1-24 hours) using the (▲) and (▼) buttons
- Confirm setting by pressing the central button once.

The display will flash the increased ECO set point twice (set point +2°C), before displaying the current room temperature and timing out/switching off.

DEACTIVATING ECO MODE:

- Press the central button twice when the display is off
- Using the (▲) and (▼) buttons select either **On** ❄ or **OFF** ⏻ mode.
- Press the central button to select.

If the set point is below the room temperature before ECO mode is activated (i.e cooling module is activated) the unit will run for a minimum of 1 minute regardless of the set point.

2.8.3 ⏻ OFF (COOLING MODE DEACTIVATED)

This will disable the operation of the cooling module but not affect the operation of the ventilation unit.

2.9 MINIMUM ON/OFF TIMES

To protect the cooling module, the control has been programmed to have a minimum On/Off time.

Minimum On: 1 minute
Once the cooling module is activated it will run for a minimum of 1 minute, regardless of the set point.

Minimum Off: 5 minutes
Once the cooling module stops operating it will remain off for a minimum of 5 minutes, regardless of the set point.

2.10 SET POINT (BETWEEN 20- 40°C)

The control is supplied factory preset to a set point of 23°C. This can be adjusted by the user by activating the display by pressing the centre button once. When the indicator two arrows on the left hand side of the display are a flashing (See Fig 12), adjust temperature in 0.5°C increments using the (▲) and (▼) buttons. The whole display will flash twice and then display the room temperature before the display times out.

The control can be adjusted to any set point between 20°C and 40°C to activate cooling mode.

During installation/commissioning, if the room temperature is below 20°C link out contacts A & B to override the thermostat and operate the cooling module.

3.0 MAINTENANCE

The unit does not require routine maintenance. However, for optimum performance, it is advisable to remove any accumulated dust with a low power vacuum cleaner and replace batteries when low battery indicator is displayed.

4.0 WARRANTY

These units come with a 2 year warranty for peace of mind. The warranty starts from the day of delivery and includes parts and labour for the first year, the remaining years covers replacement parts only.

This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled, or not installed, commissioned and maintained in accordance with the details contained in this manual and general good practice.

The product warranty applies to the UK mainland and in accordance with Clause 14 of our Conditions of Sale.

Customers purchasing from outside of the UK should contact Nuaire International Sales office for further details.

5.0 AFTER SALES

For technical assistance or further product information, including spare parts and replacement components, please contact the After Sales Department.

> **Telephone 02920 858 400**
> **aftersales@nuaire.co.uk**

> Technical or commercial considerations may, from time to time, make it necessary to alter the design, performance and dimensions of equipment and the right is reserved to make such changes without prior notice.