

SmartOne Master & Sub Thermostat Commissioning Guide

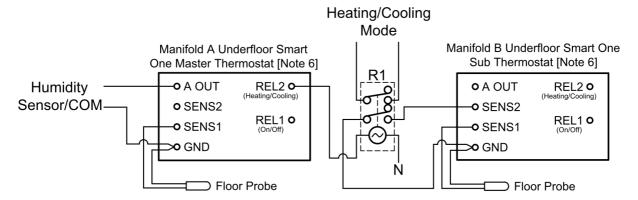
Overview

The SmartOne thermostats are able to control both heating and cooling systems, the changeover from heating to cooling mode or visa versa needs to be manually selected by the user and typically this needs to be done on every thermostat in the home – ensuring that all thermostats are always in the same mode.

An alternative to this is to use the Change-Over Contact mode allowing an external switch to change the operating mode of any thermostat set with this function enabled. To utilise this function Central Heating New Zealand have adapted our wiring diagrams to show Master and Sub thermostats that now allow a single thermostat (Master) to be used to control the operating mode of all other thermostat (Sub) installed in the home.

The temperature and state of each thermostat still needs to be set independently but whether the thermostats are operating in heating or cooling is now centrally set to simplify the process to change the operating mode of the entire system.

In the wiring diagrams where this function is used the master thermostats cooling signal (REL2), sends a 230V signal to a relay. The relay energizes, closes, and forwards the signal to the volt-free Sub-thermostats (SENS2), instructing them to also change to cooling mode as directed by the Master thermostat. Refer to the image below, with the diagram simplified for clarity.





Master Thermostat

Each system has only one master thermostat, which can be installed in any location within the house. However, it is most commonly placed in the living area or a centrally accessible space unless specified otherwise by the homeowner.

To identify the master thermostat, inspect the wiring at the back of the unit. The master thermostat must have both "REL2" and "A OUT" wired. Refer to the image on the right for guidance.

Underfloor Smart One Master Thermostat O A OUT REL2 O o SENS2 REL1 0 O SENS1 O GND LO o RS485 A o RS485 B N O ⊃ Floor Probe

Master Thermostat Setup Instructions

Follow these steps to set up the master thermostat:

- 1. Navigate to the **Settings** menu and select **Advanced Settings**.
- 2. Enter the advanced settings password: 264408.
- 3. Select Setup.
- 4. Open **Change-Over Contact** and ensure the selected mode is set to **Disabled**.
- 5. Press the **checkmark** in the top right corner to save the settings.

Sub Thermostats

The number of sub-thermostats depends on the number of zones in the house. To identify a sub-thermostat, inspect the wiring at the back of the unit:

- SENS2 must be wired to normally open relay (Relay normally located at wiring centre).
- A OUT and REL2 must NOT be wired or connected.

Ensure the wiring matches these requirements before proceeding with system configuration. Refer to the image on the right for guidance.

Underfloor Smart One Sub Thermostat (Indicative 1 of n) o A OUT REL2 o O SENS2 REL1 C O SENS1 O GND o RS485 A o RS485 B N C → Floor Probe

Sub Thermostat Setup Instructions

Follow these steps to set up the master thermostat:

- 1. Navigate to the **Settings** menu and select **Advanced Settings**.
- 2. Enter the advanced settings password: 264408.
- Select Setup.
 Open Change-Over Contact and ensure the selected mode is set to Enabled.
- 5. Press the **checkmark** in the top right corner to save the settings.