

# SmartOne Installer Guide

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# Introduction

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The SmartOne controller from Central Heating New Zealand is one of the most advanced solutions available for managing hydronic central heating and cooling systems. Its extensive range of features and configuration options allows it to support a wide variety of applications. However, this flexibility means that careful attention is required during setup to ensure all settings are correctly tailored to your system.

This guide provides detailed, step-by-step instructions to help you through the configuration process. It should be used in conjunction with the **Quick Start Manual** supplied with SmartOne thermostats.

# Applications

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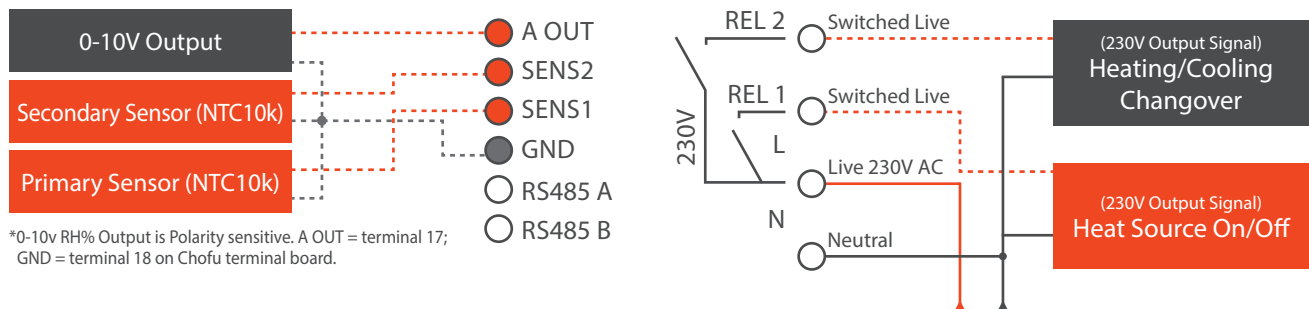
The SmartOne thermostat is engineered to control hydronic heating and cooling systems. Thanks to its versatile settings and wiring options, it can be configured to manage a wide range of applications, including:

- Underfloor Heating and Cooling
- Radiant Wall & Ceiling Heating and Cooling
- Radiator Heating
- Fan Coil Heating and Cooling
- Pool Heating
- Hot Water Cylinder Heating

This guide provides recommended wiring configurations and settings for each of these control modes.

# Wiring

The SmartOne thermostat has 4 control inputs and 2 control outputs as per the diagram and list below:



## Inputs

- **SENS2:** Where multiple remote probes are required in the Sensor Selection option of remote air and remote floor probe the remote air probe should be wired to the SENS2 input. This input can also be used to remotely change the operating mode of the controller, see the Master & Sub section below.
- **SENS1:** Where only a single remote sensor is required this sensor should be connected to the SENS1 input.
- **RS485:** For a wired MODBUS connection to the thermostat.

## Outputs

- **A OUT:** This output will provide a 0-10V output corresponding to the measured humidity level when in thermostat mode or the required fan speed when in fan coil mode.
- **REL1:** The REL1 contact will be energised with a 230V output whenever the thermostat has a call for operation. Max draw on the relay is 5A.
- **REL2:** The REL2 contact will be energised with a 230V output whenever the thermostat is set to cooling mode. Max draw on the relay is 5A.

Variations of the wiring for some of the control options are included below, the wiring for these controllers will also be included in generic and project specific wiring diagrams.


# Quick Start Manual

Each SmartOne thermostat is supplied with a Quick Start Manual, this is also available on our website. Follow the instructions in the manual for basic setup procedures.



## Wi-Fi Connection & Software Updates

A Wi-Fi connection to the SmartOne thermostat is not mandatory for correct operation but is required for connection to the Smartphone application and to receive software updates.

To connect the SmartOne to the local Wi-Fi network - Power up the SmartOne thermostat and follow the prompts through to the menu. Press the  symbol in the upper right hand corner of the screen for Network → Wi-Fi → Scan Network → Select network (2.4GHz only) → Enter correct password → Confirm. Now the thermostat is connected to the Wi-Fi it will update to the latest software version, this may not happen immediately. If required a manual software update can be forced.

To download the app search for Smart365 in the App store:



Once the App is installed create or login to an account and pair each controller to the main account by following the steps in the Quick Start manual included with the thermostat.

Software updates will occur a few times a year and include bug fixes, new features, and other improvements. When a thermostat completes a software update it will reboot the device, this can take 5-20 minutes depending on the size of the update. It is important that the power supply is not interrupted/removed during an update as this could damage the device

All outputs will be dropped off during the update but correct functioning should return shortly after the thermostat has restarted.

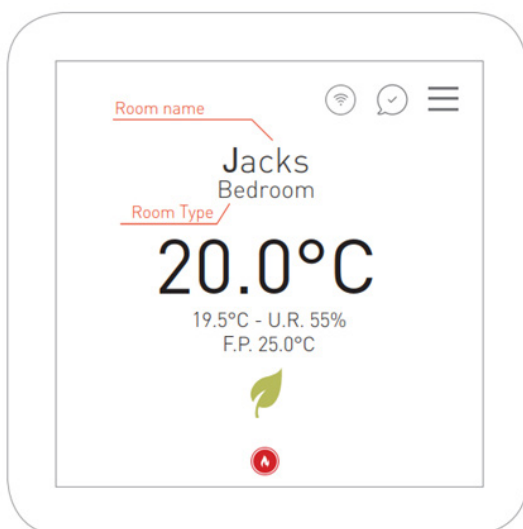
For troubleshooting Wi-Fi connections issues see the Troubleshooting chapter later in this guide.

# Device Naming

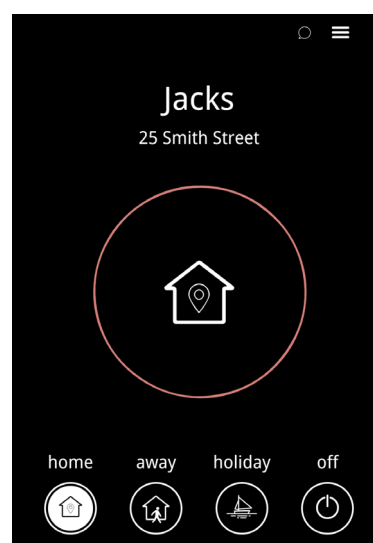
The naming of the device is set in 3 locations and this will impact the naming displayed on the screen of the device and in the app, using this naming the location of each device in the app can be easily identified:

- **Device Location:** This name is set under Menu → Settings → System Location. It is recommended that this name is set to the name of the property, i.e. '25 Smith Street'.
- **Device Name:** This name is set under Menu → Preferences → Room Settings → Name. This name will appear on the screen and can be used to identify the room the device is installed into. For example 'Jacks', 'Media', etc. If it is not required to identify this room from the room Type (see below) or you would prefer a simplified look, delete the default "Smartstat" name and enter a space (spacebar) and press the tick.
- **Room Type:** This name is set under Menu → Preferences → Room Settings → Type. For this setting the room type is selected from a list of typical room types (Living Room, Bedroom, etc), this sets a typical schedule and set points for that room type to begin with. You can further customise these schedules to suit your use. This room name appears on the device and in the app.

Once set the controllers display and app will display these names as per the examples below:



Device Display

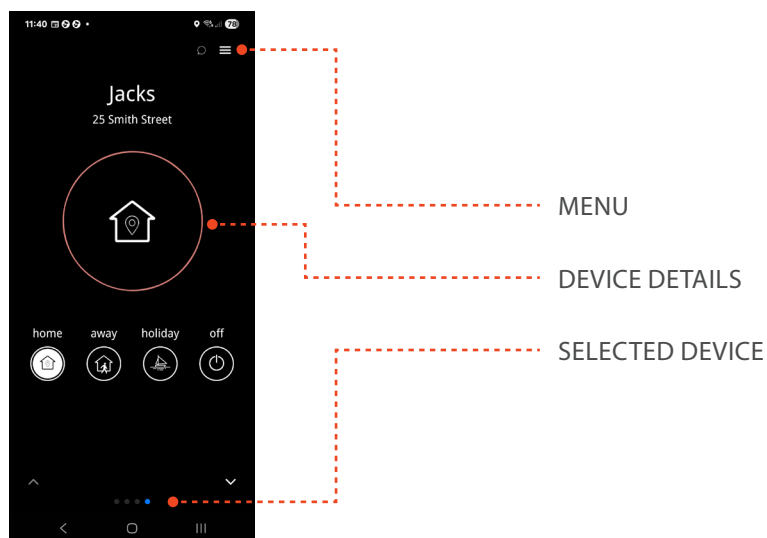


App Display

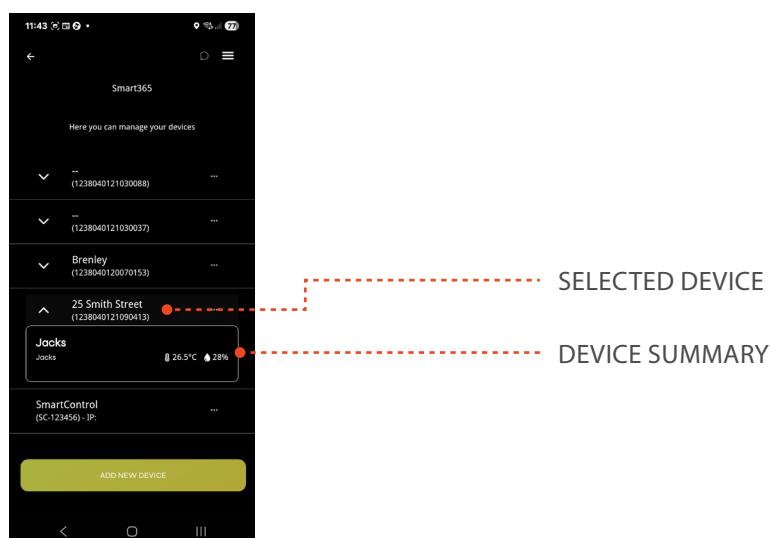
# Device List

When viewing devices on the app multiple devices can be viewed in two ways:

- **Main View:** In this view each connected device fills the screen with an indicator on the bottom of the screen to show which of the available devices is being viewed:



- **Device List:** By navigating to the Smart 365 option in the menu all connected devices can be viewed in a list, selecting any device in this list will display a summary of this device:



# Remote Probes

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The SmartOne thermostat can have up to two remote probes connected at any time, and the need for this will be dependent on the system type.

All probes used must be **10Kohm @ 25°C NTC**.

Below the recommendations for each probe type are included.

**Remote Floor:** When controlling an underfloor heating/cooling system it is strongly recommended to control these systems on Air & Floor control mode, the floor probe limits the floor to minimum and maximum limits in both heating and cooling and each of these limits is adjustable in the settings.

The supplied remote floor probe is wired to the SENS1 input and should be installed in a conduit with the underfloor system in a location that is representative of the average floor temperature.



**Remote Pipe:** When controlling a radiant wall or radiant ceiling system with the SmartOne thermostat an external probe should be used to monitor the surface temperature of this system to prevent the formation of condensation.

In this situation the Sensor option 'Built-in and dew point sensor' should be selected and the supplied probe should be fitted to a representative ceiling or wall loops return pipe and taped to this pipe with insulating tape and thermal paste to provide a good temperature reference. The dew point sensor should be connected to the SENS1 input.



**Remote Water:** When using the SmartOne thermostat to control the heating of a pool, HWC, or other body of water the controller is set up for 'External Air Sensor' Mode and the supplied probe should be connected to the SENS1 input.

Ensure the probe is installed in a suitable dry probe pocket.



**Remote Air:** A remote air sensor can be used allowing the SmartOne to be installed remotely from the room it is controlling. The remote air sensor needs to be sourced through others but the Automation Components **Flush Mount Thermistors** have been used in previous projects.

If the remote air sensor is needed where a remote floor probe is also being used the air sensor should be connected to the SENS2 input. If the remote air sensor is the only sensor being connected to the SmartOne it should be connected to the SENS1 input.



# Parameters

On the following page a table showing the recommend parameters for each system type is provided:

- Ensure the thermostat back plate is wired as per the provided wiring diagram and cables are adequately inserted and secured into the terminals. When fixing the back plate off to the flush box ensure cables are not being pinched or damaged.
- Please be aware when using a SmartOne thermostat in conjunction with a heat pump, the live on/off and heating/cooling outputs are 230V. An external relay is required to close the low voltage contacts on the heat pump.
- Press the ☰ in the upper right hand corner of the screen and navigate to Settings. Using the passcode **264408** you can enter the **Advance Settings** menu.
- Under **Setup** you can select the type of control the thermostat is going to manage. **Heating Only, Heating and Cooling** or **Cooling Only**. Factory setting is **Heating** and **Cooling**. If the type is changed the thermostat will restart.

Once navigated to the Advanced Settings configure the thermostat with the settings suggested in the table on the following page. Note during this process the thermostat may need to re-boot after changing some settings, once rebooted navigate back to the Advances Settings and complete the set up following the steps above.

Menu	Option	Radiator	Underfloor Heating	Underfloor Heating & Cooling	Radiant Wall/ Ceiling	Fan Coil Heating	Fan Coil Cooling	Fan Coil Heating & Cooling	Pool	HWC
Set Up	Type	Thermostat	Thermostat	Thermostat	Thermostat	Fan Coil	Fan Coil	Fan Coil	Thermostat	Thermostat
	Operating Mode	Heating Only	Heating Only	Heating & Cooling	Heating & Cooling	Heating Only	Cooling Only	Heating & Cooling	Heating Only	Heating Only
	Change Over Contact	*See Master/ Sub Chapter	*See Master/ Sub Chapter	*See Master/ Sub Chapter	*See Master/ Sub Chapter	*See Master/ Sub Chapter	*See Master/ Sub Chapter	*See Master/ Sub Chapter	*See Master/ Sub Chapter	N/A
Parameters > Temperature	Switching Type	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off
	Switching Differential	B = 1°C HP = 0.5°C	B = 1°C HP = 0.5°C	B = 1°C HP = 0.5°C	B = 1°C HP = 0.5°C	B = 1°C HP = 0.5°C	B = 1°C HP = 0.5°C	B = 1°C HP = 0.5°C	B = 1°C HP = 0.5°C	1.5°C
	Sensor Selection	Built-In	Built-In & Floor Sensor	Built-In & Floor Sensor	Built-In & Dew Point Sensor	N/A	N/A	N/A	External Air Sensor Only	External Air Sensor Only
	Floor Temp > Min (Heating)	N/A	20-25°C	20-25°C	N/A	N/A	N/A	N/A	N/A	N/A
	Floor Temp > Max (Heating)	N/A	27-32°C	27-32°C	N/A	N/A	N/A	N/A	N/A	N/A
	Floor Temp > Min (Cooling)	N/A	N/A	15°C	N/A	N/A	N/A	N/A	N/A	N/A
	Floor Temp > Max (Cooling)	N/A	N/A	25°C	N/A	N/A	N/A	N/A	N/A	N/A
	Dew Point Temp > Dew Point Check	N/A	N/A	Enabled	Enabled	N/A	N/A	N/A	N/A	N/A
	Set Point > Min	10°C	10°C	10°C	10°C	10°C	10°C	10°C	10°C	10°C
	Set Point > Max	35°C	35°C	35°C	35°C	35°C	35°C	35°C	40°C	*See HWC Thermostat Chapter
Optimum Start/Stop	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	

— 'B' = Boiler Powered System, 'HP' = Heat Pump Powered System

# Rebooting Device

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Following setting up the SmartOne thermostat for a system it is recommended to reboot the device:

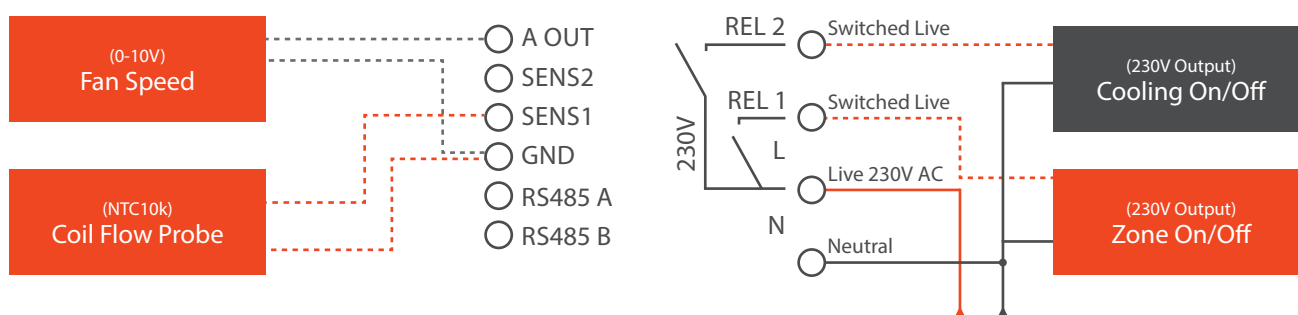
- Select the menu ☰ and navigate to Preferences.
- Select Reboot and confirm by selecting Yes.
- The device will reboot after a few minutes.

# Fan Coil

The following instructions can be used for setting up the SmartOne thermostat for the control of a fan coil.

To set the thermostat into fan coil set the thermostat up with the settings included in the parameter table earlier in this document.

## Wiring Diagram (Backplate)



- The REL 1 or Zone on/off output is a 230V output, this may require a relay to switch the heat source/zone on/off.
- The REL 2 or cooling on/off output is a 230V output, this may require a relay to switch the cooling on/off.

## Fan Coil Settings

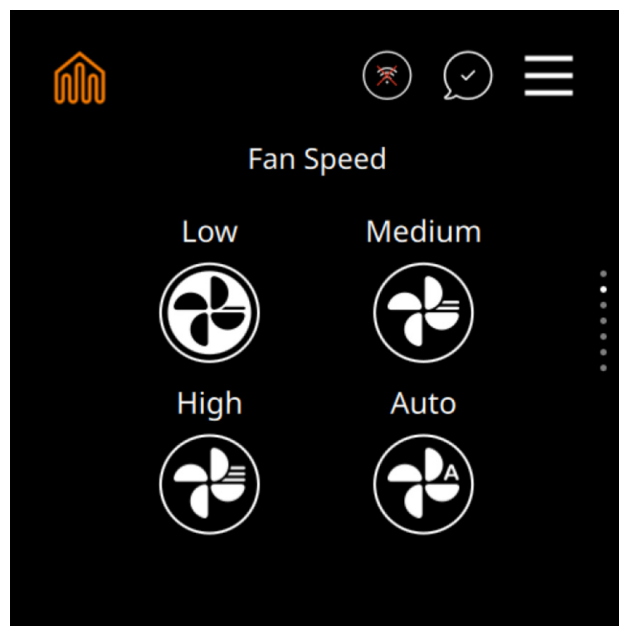
1. Parameters: in the parameters menu the following settings can be made:

- Automatic parameters: these settings allow the automatic fan speed control settings to be adjusted;**
  - Min Fan Speed:** In automatic mode this is the minimum output voltage that will be provided to the fan coil – for most fan coils this should be set to 3.0V
  - Max Fan Speed:** In automatic mode this is the maximum output voltage that will be provided to the fan coil – for most fan coils this should be set to 10.0V
  - Min Fan Speed Hysteresis:** This is the difference from set point at which the minimum fan speed will apply – for most fan coils this should be set to 1.0°C
  - Max Fan Speed Hysteresis:** This is the difference from set point at which the maximum fan speed will apply – for most fan coils this should be set to 3.0°C
- Manual Parameters: These settings are used to set the fan speed output voltages for the 3 manual fan speed options:**
  - Volt Low:** This is the voltage output that the controller will provide to the fan coil in the Low fan speed mode and the Const Fan speed – for most fan coils this should be set to 3.0V
  - Volt Mid:** This is the voltage output that the controller will provide to the fan coil in the Mid fan speed mode– for most fan coils this should be set to 6.5V

- iii. **Volt High:** This is the voltage output that the controller will provide to the fan coil in the High fan speed mode – for most fan coils this should be set to 10.0V
  - c. **Temp. Driven parameters: these are the set points for preventing the fan operation before the heated or cooled water has reached the coil inlet;**
    - i. **Heating Threshold:** This is the minimum water temperature that will be required for the fan to be started in heating most – for most fan coils this should be set to 30°C.
    - ii. **Cooling Threshold:** This is the maximum water temperature that will be required for the fan to be started in cooling most – for most fan coils this should be set to 20°C.
  - d. **Minimum Off Delay:** This is the minimum off time for the fan coil to stop the fan cycling on and off as settings are changed or due to sudden changes in the room temperature – for most fan coils this should be set to 1 minute.
2. **Constant Fan:** Turn this on if it is desired for the fan to never switch off but to drop back to the minimum fan speed when there is not active heating or cooling demand. This function is useful for fan coils located in sleeping areas where the fan coil switching off and on would be more disturbing than the fan remaining on permanently.
  3. **Temp-Driven:** Turn this on when a probe located on the fan coil flow pipe has been wired into the SENS1 and GND contacts. This will prevent fan operation until the coil flow temperature has reached the Temp. Driven set points. This function is useful to stop the fan operating until the heated or chilled water has reached the fan coil. Note: if Constant Fan is enabled the fan will continue to run at the min fan speed until the Temp. Driven set points are reached.
  4. **Other Settings:** All other settings for Temperature and Humidity should be set up as per the table included earlier in this guide.

# Using the Thermostat

In Fan Coil mode the SmartOne thermostat retains very similar functionality to the standard product, the main difference is the inclusion of a Fan Speed screen below the main screen for the user to select the fan speed:



4 fan speed options are available to be selected as described below:

- **Low:** When heating or cooling is required the fan will run at the low fan speed irrespective of the distance to set point.
- **Medium:** When heating or cooling is required the fan will run at the medium fan speed irrespective of the distance to set point.
- **High:** When heating or cooling is required the fan will run at the high fan speed irrespective of the distance to set point.
- **Auto:** When heating or cooling is required the fan speed will be varied up and down depending on the distance to set point.

## Note;

- If const fan is enabled the fan will run at the low fan speed when there is no heating or cooling required and irrespective of the fan speed selected.

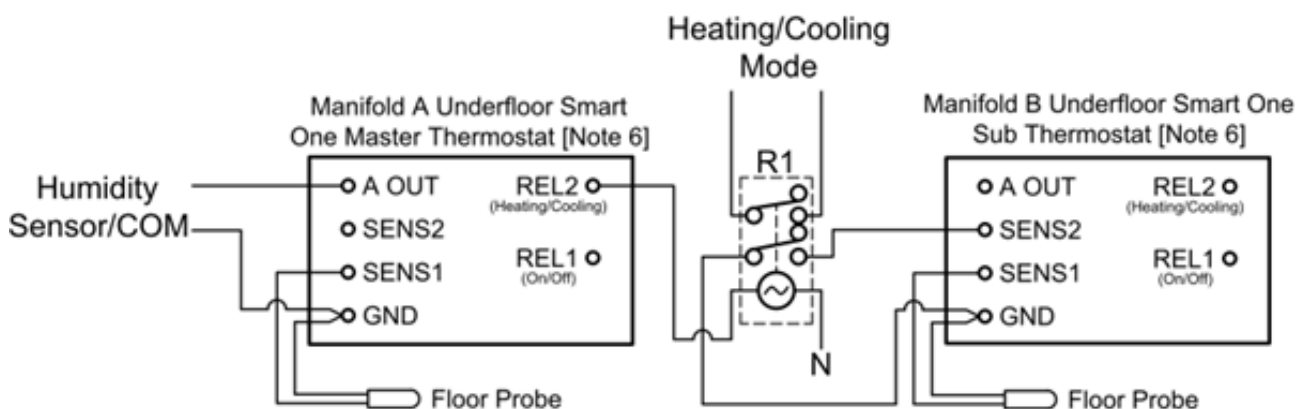
# Master & Sub Thermostats

The SmartOne thermostats are able to control both heating and cooling systems, the changeover from heating to cooling mode or vice 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 thermostats (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.

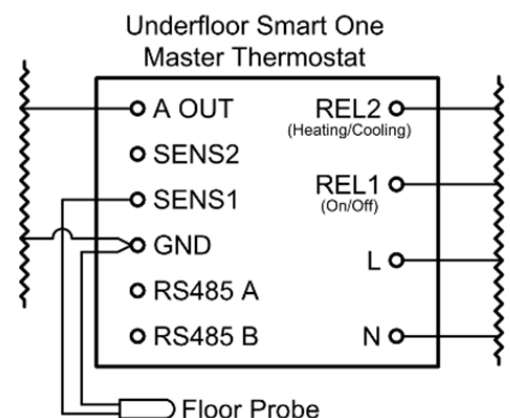
In the wiring diagrams where this function is used the master thermostats cooling signal (REL2), sends a 230V signal to a relay. The relay energizes, closes, and forwards the signal to the volt-free Sub-thermostats (SENS2), instructing them to also change to cooling mode as directed by the Master thermostat. 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, refer to the equipment layout and locate the symbol "TM." Then inspect the wiring at the back of the unit — the master thermostat must have both "REL2" and "A OUT" wired. Use the image on the right as a guide.



## Master Thermostat Set Up Instructions

Follow these steps to set up the master thermostat:

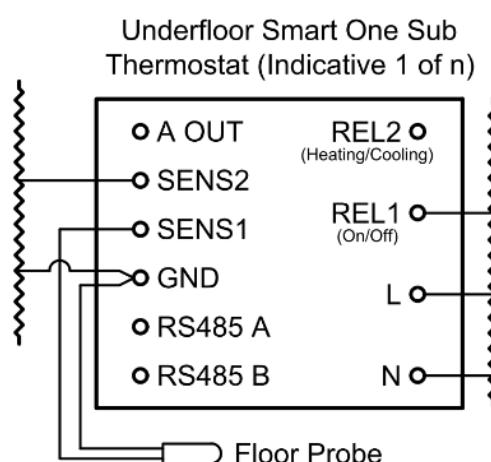
1. Navigate to the Settings menu and select Advanced Settings.
2. Enter the advanced settings password: **264408**.
3. Select Set up.
4. Open Change-Over Contact and ensure the selected mode is set to Disabled.
5. Press the checkmark in the top right corner to save the settings.

## 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.



## Sub Thermostat Set-Up Instructions

Follow these steps to set up the master thermostat:

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

## Heating or Cooling Only

Thermostats set up for Heating only or Cooling only will also be controlled by this Change-Over switch, when outside of their set operating mode operation will be prevented, for example a Sub thermostat set to heating only will not be able to call for demand when the Master thermostat is in cooling mode and a large power symbol (⚡) will be displayed on the screen.

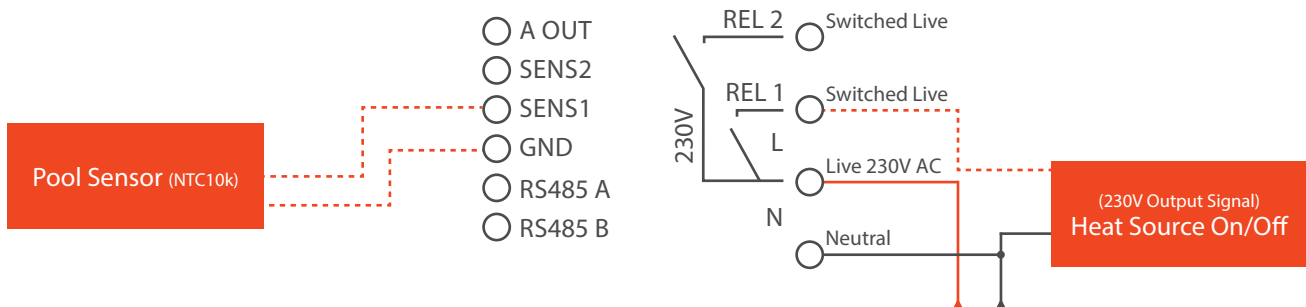
**Note:** This functionality is only suitable for thermostats that are not using external air and floor sensor mode.


# Pool Thermostat

The SmartOne thermostat has a wide range of possible uses and can easily be set up to control the heating of a spa or swimming pool. The instructions below provide the steps required to set up a SmartOne thermostat for this application:

1. Ensure the thermostat back plate is wired as per the below wiring diagram and cables are adequately inserted and secured into the terminals. When fixing the back plate off to the flush box ensure cables are not being pinched or damaged.

## Wiring Diagram (Backplate)



- a. Note that the heat source on output is a 230V supply, this may need to be run via a relay to switch on/off the heat source.
  - b. The output from the SmartOne to the heating demand should be run via the filtration timer to ensure the pool heating is only active while the pool filtration system is operating, this may require the inclusion of a relay.
2. Press the  in the upper right hand corner of the screen and navigate to Settings. Using the passcode **264408** you can enter the Advance Settings menu. Set the settings for this thermostat as provided in the table included earlier in this document under the POOL column.
  3. To make it clear what this thermostat is controlling we recommend changing the thermostat naming as per the following steps:
    - a. Preferences → Room Setting → Name – change to a suitable name, i.e. Swimming or Spa
    - b. Preferences → Room Setting → Type - set to Pool.
  4. The set point of the pool can then be controlled on an automatic schedule or a manual schedule to suit the needs of the user. Even if you intend to use the thermostat in manual control mode, we would recommend setting the automatic program with a suitable temperature and time schedule in case the controller is accidentally reverted to this.

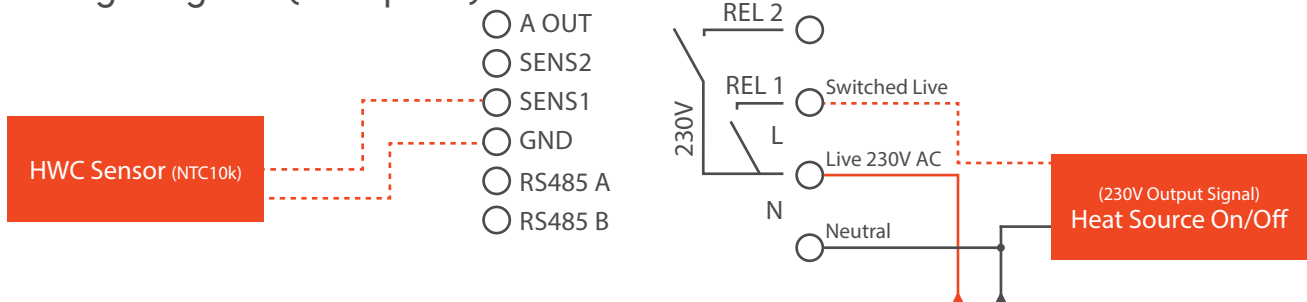
# HWC Thermostat


## Set-Up Instructions

The SmartOne thermostat has a wide range of possible uses and can easily be set up to control the heating of a hot water cylinder or storage tank. The instructions below provide the steps required to set up a SmartOne thermostat for this application:

1. Ensure the thermostat back plate is wired as per the below wiring diagram and cables are adequately inserted and secured into the terminals. When fixing the back plate off to the flush box ensure cables are not being pinched or damaged.

### Wiring Diagram (Backplate)



2. Note that the heat source on output is a 230V supply, this may need to be run via a relay to switch on/off the heat source.
3. Press the  in the upper right hand corner of the screen and navigate to Settings. Using the passcode **264408** you can enter the Advance Settings menu. Set the settings for this thermostat as provided in the table included earlier in this document under the HWC column.
4. The maximum set point for the thermostat should be determined based on the maximum possible temperature for the appliance heating the tank as per the table below:

Heat Source	Max Set Point <sup>*1</sup>
Gas or Diesel Boiler	65-70°C
High Temperature Heat Pump	60-65°C
Low Temperature Heat Pump	45-55°C

— <sup>\*1</sup>: The heat source flow temperature must be 10°C higher than the maximum HWC set point to allow for sufficient heat transfer across the HWC heat exchanger.

5. To make it clear what this thermostat is controlling we recommend changing the thermostat naming as per the following steps:
  - a. Preferences → Room Setting → Name – change to a suitable name, i.e. HWC or Storage Tank

- b. Preferences → Room Setting → Type - set to the room the tank is installed inside, i.e. hallway, or garage.
6. The set point of the HWC/Storage tank can then be controlled on an automatic schedule or a manual schedule to suit the needs of the user. Even if you intend to use the thermostat in a manual control mode, we would recommend setting the automatic program with a suitable temperature and time schedule in case the controller is accidentally reverted to this.

## Safe Water Temperatures

When using a SmartOne thermostat for controlling the heating of a HWC, the control of safe water temperatures to prevent Legionella bacteria growth is critical.

The water in the tank must be suitably heated and the set point of the SmartOne thermostat or other heating devices in the tank should be able to achieve this, a suitable time allowance for the tank to reach this set point should also be ensured. The guide below provides recommended comfort set points and time minimum time periods for these:

Heat Source	Comfort Set Point	Comfort Time Period <sup>*2</sup>	Recommended Eco & Night Set Point
Gas or Diesel Boiler	65°C	1 Hour	10-30°C
High Temperature Heat Pump	60°C	2 Hours	10-30°C
Low Temperature Heat Pump	50°C	2 Hours <sup>*3</sup>	20-30°C

— <sup>\*2</sup>: The comfort time periods listed above are the minimum single time period recommended that should be set outside of the peak DHW & heating usage period, this is required to ensure the comfort set point can be achieved. To ensure the occupants have sufficient hot water additional time or time slots may be needed for the best user experience.

<sup>\*3</sup>: As a low temperature heat pump is unable to heat the water in the storage tank above 60°C on its own, an electric element located in the bottom of the tank must be installed and controlled through a separate time clock to ensure the hot water is heated above 60°C once a day or once a week, please refer to the [Chofu HP DHW Legionella Protection info sheet](#) on our website for more information.

# Troubleshooting

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The SmartOne thermostat provided by Central Heating New Zealand is packed with functionality including the ability to monitor and control remotely via a Wi-Fi connection. The following guide provides troubleshooting steps to cover the most common issues experienced by customers;

## 1. Screen Frozen or Blank

If the thermostat is found to be unresponsive to touch and/or the screen is blank, follow the trouble shooting steps below:

1. If blank the thermostat may be updating. Allow 15 minutes before proceeding any further. If the screen remains blank proceed to step 2.
2. Confirm that the screen is unresponsive to touch, swipe the screen to confirm that it doesn't light up.
3. Power down the thermostat, by either removing the thermostat face plate from the wall (remove the 2 small screws on the underside and pull the bottom of the controller away from the wall). Or turn off the power supply to the system for a few minutes.
4. When the thermostat has powered back up confirm that it is responsive to touch inputs.
5. Connect the thermostat to the network if not already connected and update to the latest software version.

## 2. Not Connection to the Network

If the thermostat is unable to connect to the homes Wi-Fi network on initial installation, follow the trouble shooting steps below:

1. Forget any saved network connections.
2. Create a hotspot on a mobile phone and connect the thermostat to the hotspot.
3. Update the thermostat to the latest software version.
4. Once the thermostat has updated forget the hotspot network and connect to the homes Wi-Fi network.

If the thermostat has been originally connected to the network but has disconnected and will not reconnect there are two levels of troubleshooting that can be used to resolve this:

**Step 1:** Reboot the device – see instructions for this earlier in this guide.

**Step 2:** Removing the device form the app and re-pairing with the app. To do this follow the instructions below:

1. Before doing anything locate the device serial number from the app or from the Info → Status screen on the device, this will be a 16 digit code.
2. Email the serial number to [aftersales@centralheating.co.nz](mailto:aftersales@centralheating.co.nz) and request the PUK code for this device.
3. Using the smartphone app navigate to menu and select the Smart 365 menu, locate the device that is problematic and using the Actions option select 'Delete'.

4. On the Thermostat navigate to Cloud → Pairing → Start Pairing.
5. Using the phone app pair the device with the app, if prompted to do so enter the 4 digit PUK code provided by the CHNZ aftersales team.

If connection issues continue after the above trouble shooting steps please follow the instructions for reporting issues in the 'Other Problems' section below.

### 3. Heating/Cooling on when it shouldn't be

There are a number of possible reasons that the system could be operating when it is perceived that it shouldn't, check any or all of the below reasons;

1. Heating minimum floor/Cooling maximum floor limit: if the thermostat is controlling an underfloor heating or cooling system the limits for the floor probe temperature range may be forcing operation even though the space is at the desired temperature. This will be identified by both the floor limit symbols (🔥❄️) and the active heating/cooling symbols (🔥❄️) being present on the screen at the same time. Check the floor minimum heating and maximum cooling set points and if necessary adjust these.
2. Optimum Start: If the optimum start function is enabled the controller will start heating or cooling operation ahead of the scheduled next time to try and reach this set point by this scheduled time. This will be identified by the flame or snowflake symbols appearing with a grey fill (🔥❄️) rather than the normal red or blue fill (🔥❄️). If this is not preferred navigate to the optimum start setting and disable this.

### 4. Temperature Reading High

When the thermostat is powered up it is common for the internal air temperature probe to read high.

If the air temperature continues to read high this can be calibrated +/- 3°C. It is recommended to wait at least 24 hours after the last power on of the device to confirm this, then to calibrate the thermostat to the reading of an instant read thermometer.

### 5. Frequent Cycling On/Off

If the heating is noticed to be frequently cycling on and off and the system uses a remote probe (i.e. floor probe) the likely cause is a bad probe connection or a faulty probe:

1. Access the diagnostic menu and check the reading of the probe in this section as this is more representative of the actual reading, frequent fluctuations are not displayed on the main screen.
2. If the probe reading in the diagnostics page is found to be fluctuating remove the thermostat base from the wall to access the wiring.
3. Remove the probe wiring from the thermostat and test the resistance of the probe ensuring a stable resistance of around 10kOHM at 25°C is read. If the probe reading is fluctuation trace the fault and/or replace the probe.
4. If the probe reading is stable actuate the GND and SENS1 and/or SENS2 cable grippers on the base to ensure these are actuating correctly. Insert the probe cables ensuring a strong grip is achieved.

## 6. App Issues

If you are experience issues with the Smartphone application such as crashing, freezing, or features not working - we recommend logging out of and then logging back into the app, or uninstalling and then reinstalling the app.

If the problems occurring are not resolved by this we will need to investigate these further with the developer. In order for these to be investigated we will require the following information;

- **Description of the Problem:** Provide us with details of the problem that is occurring, its frequency, and the ability to reproduce this issue.
- **Device Serial Number:** This can be found printed on the back of the device or by navigating to Info → Status, or from the mobile App.
- **App Version:** This can be found in the 'About' option In the app.
- **Phone Operating System:** Confirm the phone operating system (Android or IOS) and the OS version, to find the version see the instructions below:
  - a. Android: Settings → About phone → Software information / Model number
  - b. iOS: Settings → General → About → Software version / Model name.
- **Phone Brand and Mode:** Provide the details of the brand and model of the phone this issue occurs on.

## 7. Other Problems

If you are experiencing other issues or any of the above issues are persistent please contact our aftersales team and provide the following information:

- **Details of Problem:** Provide us with a description of the issues that are occurring.
- **Device Serial Number:** This can be found printed on the back of the device, Under Info → Status, or from the mobile App.
- **System Description:** Describe the type of system this device is being used to control.

Email this information through to [aftersales@centralheating.co.nz](mailto:aftersales@centralheating.co.nz) and our team will be in touch as soon as possible.

# Factory Reset

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## When this is Needed

Most issues with connectivity and control of the SmartOne thermostat are solved by doing a reboot and a factory reset should be used as a last resort for resolving any of these issues.

If a controller may not have been set up correctly and the installer wants to re-commission the controller to suit the control needs of that system a factory reset may be performed to eliminate the need to check through all parameters. Before doing this ensure you are familiar with the critical settings of this system and record these to replicate these settings after the factory reset, key settings to record and replicate are;

- **Type:** Check if the controller is set to Thermostat or Fan-Coil mode
- **Operating Mode:** Check the current operating mode and that this is suitable for the system.
- **Change Over Contact:** Check if this is enabled.
- **Sensor Selection:** Check the current sensor type selected.
- **Temperature Limits:** Check the minimum and maximum temperatures and if suitable replicate these after the factory reset.

To complete a factory reset follow the steps below:

1. Navigate to the settings menu and select Advanced Settings.
2. Enter the advanced settings password - **264408**.
3. Select Factory reset by holding your finger down until the green bar has filled the screen.
4. Select Yes to confirm that you want to complete a factory reset – the device will now complete the factory reset and then reboot, this process takes a few minutes.
5. When the thermostat reboots the system will be stopped and an alarm will be displayed stating “The system in not running”, to allow the thermostat to operate again navigate back to settings → User.
6. Select Yes to proceed to the next menu then select setup → Start System and yes to confirm.
7. Repair the thermostat to the smartphone app following the instructions earlier in this document or the supplied Quickstart guide.

## Contact

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Email: [aftersales@centralheating.co.nz](mailto:aftersales@centralheating.co.nz)

Phone: 0800 357 1233

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3 Enterprise Avenue, Islington, Christchurch, 8042  
[info@centralheating.co.nz](mailto:info@centralheating.co.nz)  
0800 357 1233

