PRO TOUCH iQ

ST SERIES

TOUCH SCREEN THERMOSTAT



SETUP GUIDE

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Getting Started

Your ST Series thermostat is an advanced, touch screen programmable thermostat, meaning you can set when your thermostat turns on and off based on your lifestyle.

With the scheduling function, you are able to choose at what times the heating will turn on during the day (and week) and what temperature the thermostat should reach. The thermostat will then automate this schedule so you don't have to touch it.

The best practice when using this thermostat is to find a low temperature (e.g. 18°C) and turn it up by 1°C each day until the temperature is comfortable. This method also helps to save energy and money.

Please note that this thermostat has an in-built air sensor to detect the ambient temperature of the room. Putting the thermostat behind curtains, blocked by furniture or near appliances that generate heat could cause the thermostat to malfunction.

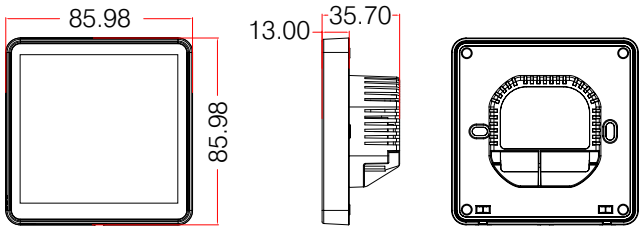
Installation

For best results, make sure your thermostat is:

- Installed between 1.2 - 1.5 metres high
- Not near a direct heat source (as it will affect sensor functionality)
- Not in direct sunlight (to prevent false temperature readings)

Please note the ST Series thermostat is designed to be flush mounted and requires a back box depth of 35mm (minimum) to be sunk into the wall prior to installation.

Thermostat Dimensions



Installation



Loosen bottom fixing screws to remove the front panel of thermostat.

Connect the thermostat according to the wiring instructions.



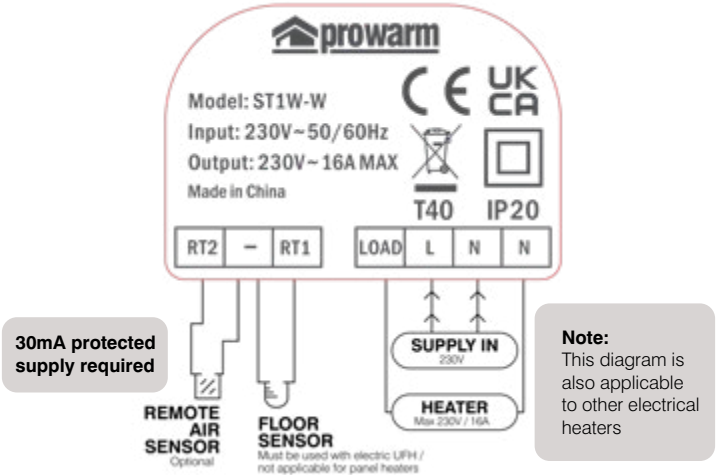
Fix the back panel onto the back box with the provided screws.

Hook the top of the face plate on the back plate (**1**), clip the bottom in (**2**) and tighten up bottom screws.

Wiring Diagrams

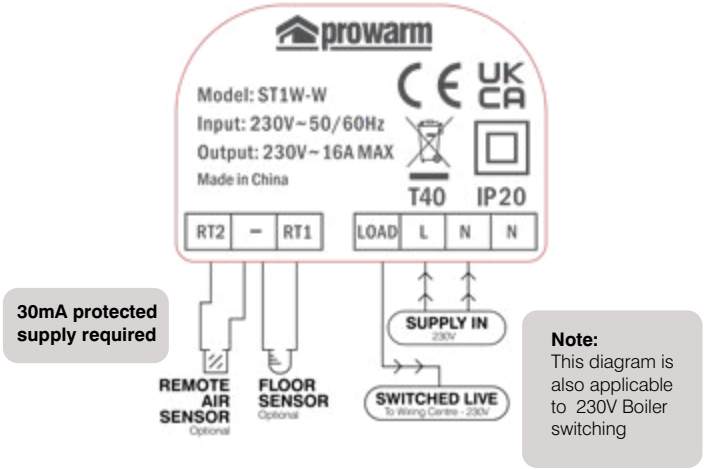
Wiring Diagrams

Electric Underfloor Heating / Electric panel heaters



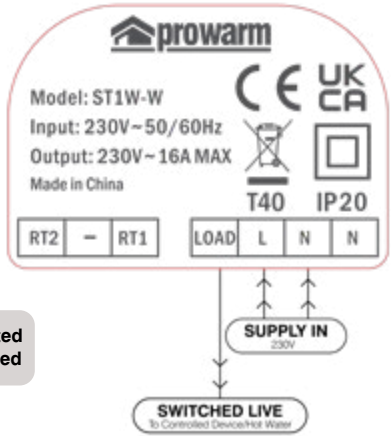
Wiring Diagrams

Water Underfloor Heating / Radiators



Wiring Diagrams

Time Clock



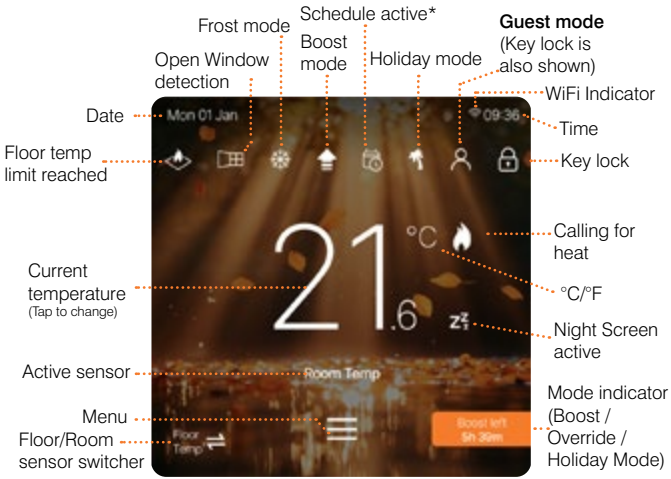
30mA protected supply required

Note:
To control hot water, you must connect via a cylinder stat.

This device can also be used to control an immersion heater.

Thermostat Symbols

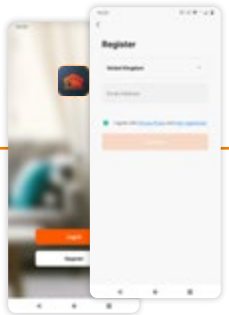
*Manual mode active:



Connect to Prowarm App

Connect to Prowarm App

1



Scan the QR code on the back of this booklet or on the box.

Register and log in with mobile number/email address in the APP.

Attention: Please read and agree 'Privacy Policy and Service agreement' before registration. .

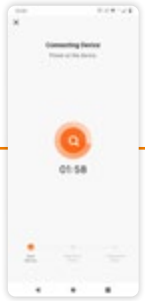
2



Click 'Add Device' or '+' on the top right to add device.

During setup, please allow the app access to location permissions on your phone.

3



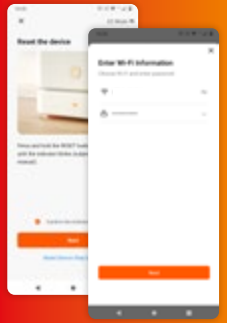
The app will scan and attempt to find your device. Ensure thermostat is in ***Pairing Mode*** and bluetooth is enabled on your phone.

Follow steps on ***page 29*** *to enter the pairing mode settings for the thermostat.*

4



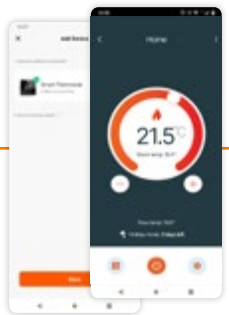
When device is found, press ***Add*** and follow step 5. If device is not found, click 'Thermostat (WiFi)' from the 'Add Manually' list and follow the ***Adding Manually*** step.



Adding Manually

Ensure the app is in Pairing Mode. Ensure wifi symbol is flashing. Once connected, select your WiFi and enter your password.

5



Once connected, the 'Added successfully' screen will appear and you now have access to the thermostat through the app.

Trouble connecting?
Ensure your WiFi is connected to the '2.4Ghz band. If this doesn't help, use 'AP Mode' on the next page.

Set the Time & Date

Setting the Time

When connecting to WiFi, the date and time set automatically

Note: default clock is 24 hour. To change see page 17.

1. Tap ≡.
2. Tap **Time & Date**.
3. Tap **Set Time.**
4. Set hours using the arrow keys and press **Next** >.
5. Set minutes using the arrow keys and press ✓ to confirm. Once confirmed, you will return to the previous menu.

Setting the Date

1. Tap **Set Date**.
2. Set day using the arrow keys and press **Next** >.
3. Set month using the arrow keys and press **Next** >.
4. Set year using the arrow keys and press ✓ to confirm.

Once confirmed, you will return to the previous menu.

12/24 hour clock

Tap**12/24 hour clock**.

Select desired clock setting, 12 or 24 hour clock and tap ✓ to confirm, or tap ↩ to go back.

Tap ↩ to return to home menu.

Schedule

Setting up a schedule

1. Tap ≡.
2. Tap **Schedule**.

The schedules allow you to automate your heating habits 7 days a week. On first use, choose a schedule pattern:

1. MTWTF+SS (Weekdays & Weekends)
2. MTWTF+S+S (Weekdays, Saturdays & Sundays)
3. M+T+W+T+F+S+S (Separate schedule every day)
4. MTWTFSS (All days the same)

*Note: Once picked, if you wish to change, press **Schedule Settings**.*

Modes 1-4 will show a Schedule mode icon on the home screen.

5. Manual Mode (Operate the temperature manually from the home screen with touch dial). The Manual mode icon will be visible on the home screen .

Schedule

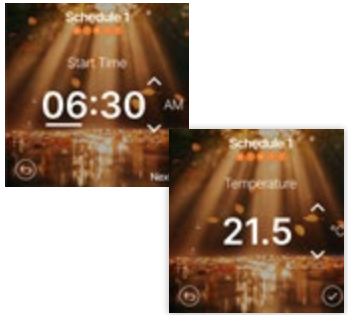
Editing a schedule



1. Tap one of the day groups.



2. Tap a schedule block to edit the time & temperature (6 in total). If you don't need the full amount of schedules, set unused blocks to OFF.



3. Change the times and temperatures with ∧ & ∨. Time changes in intervals of 1 hour and/or 1 minute.

If there's a time that the heating should be off, choose **OFF** on the temperautre screen (press and hold ∨).

Tip: For off-peak periods, it may be more efficient to turn your heating down instead of turning it off.



4. Once you're happy with your schedule blocks, tap ⟲ and move onto the next day group. The set times saves automatically on exit.

Note: the start and end times of each schedule block will always match up to create a 24/7 schedule.

Boost

Using Boost allows you to temporarily override the target temperature of a schedule to a warmer temperature. The duration can be customised.

1. Tap ≡.
2. Tap **Boost**.
3. Tap **Turn On**.
4. Use the digital dial to set the desired temperature and tap ✓.
5. Use ∧ & ∨ to change the hours. Time increases in 30 minute intervals, displayed as ".5" (e.g. 10.5 = 10 hours & 30 minutes).

Once confirmed, you will return to the home screen.

The Boost icon will then be visible on the home page. The duration of the boost is visible in the bottom right corner, tapping this will allow ammendments or cancellation (🗑) of the mode.

Override

Whilst the thermostat has a schedule active, you can tempararily adjust the temperature which will remain in effect until the next schedule time or until cancelled.

Tap the temperature, set the override time and tap ✓ to confirm. To cancel, press the orange tab and tap turn off, or tap ≡.

Energy Monitor

When using an electric heating source, you can keep track of your energy usage from the thermostat. When using a water heating source, you can view the running time from the thermostat.

1. Tap ≡.
2. Tap **Energy Monitor**.
3. Choose either **Electric** or **Water** based on your heating system.

Electric

If using electric heating, tap **Electric**. Then tap **Energy Costs**. Input your cost of electric per Kilowatt hour using the keypad and press **Confirm** ✓. *You can find this from your electricity provider, either directly, from their app or from a smart meter if equipped with one.* This will return you to the previous menu.

Once done, tap **System Power** and enter the total wattage of the electric heaters controlled from this thermostat. *You can find this from the supplier of your heater. If using a ProWarm™ electric underfloor heating system, you can find this from your installation certificate or phone us if unsure on **01268 567019**.* This will return you to the previous menu.

Once the electric data is inputted, your **Energy Monitor** will appear. This will display the energy usage per Kw/h in intervals of 24 hours at the top. It also shows energy use over time & cost over time in bar graphs. These can be viewed in intervals of 30 mins, 12 hours, 24 hours, 7 days, 15 days & 30 days to give you an accurate breakdown of your heating costs and energy use. Please bear in mind this will take a few days to gather the most accurate data from your schedule.

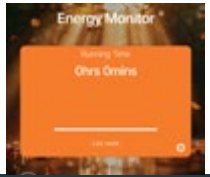
Water

If using water heating, select **Water** with ✓. Then select **Energy Usage** with ✓. This will display the running time in intervals of 30 mins, 12 hours, 24 hours, 7 days, 15 days & 30 days to give you an accurate breakdown of heating usage.

Energy Usage

You can see an hourly overview (electric) and current running time (water) from the Energy Monitor screen.







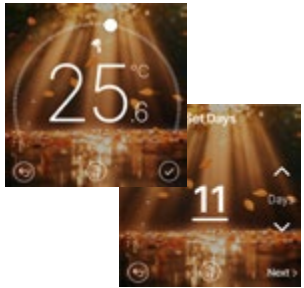
Holiday Mode

Holiday mode leaves your heating running on a reduced temperature for a specified duration whilst your home is empty to stop it getting too cold.

1. Tap ≡.
2. Tap **Holiday Mode**.
3. Tap **Turn On**.
4. Use the digital dial to set the desired temperature and tap ✓.
5. Use ∧ & ∨ to choose the amount of days.

Once confirmed, you will return to the home screen.

The Holiday Mode icon will then be visible on the home page. The duration of the holiday is visible in the bottom right corner, tapping this will allow ammendments or cancellation (🗑) of the mode.



Settings

To access the settings menu:

1. Tap ≡.
2. Tap Settings.

Setup

Setup includes all the options when the thermostat is first installed. It is recommended an installer carries this out first before the thermostat is used to heat the room. Within the setup menu, you will find System type, Sensors, °C / °F options and Night Screen. To leave these menus or to go back one screen, tap ↩.

System Type

Choose what system type is right for the use of this thermostat. The thermostat will then change the sensor type and where applicable a max floor temperature limit.

Electric Underfloor Heating	Electric underfloor heating systems such as Sticky Mats, Loose Cables, Foil Mats etc.
Water Underfloor Heating	For all water-based underfloor heating systems.
Radiator	For conventional radiators.
Wall Panel Heating	For wall mounted heaters such as electric heaters, electric radiators, skirting board heating etc.
Hot Water/Time Clock (Refer to page 35 for a more detailed guide on this)	Converts the thermostat into a Time clock for multiple uses. Normally used to turn hot water tank on and off but can be used as a time clock/switch for other appliances. (read manufacturer's guide before installing this way).

Settings > Setup

Floor Type (Underfloor heating only)

If using electric or water underfloor heating, choose the floor covering that is used with your system.

Tiles	Sensor changed to Air & Floor. Floor temp limit of 30°C.
Wood / Laminate	Sensor changed to Air & Floor. Floor temp limit of 27°C.
LVT / Vinyl	Sensor changed to Air & Floor. Floor temp limit of 27°C.
Carpet	Sensor changed to Air & Floor. Floor temp limit of 30°C.
Other *Unsure? Call Prowarm on 01268 567019*	Manually set sensor type and floor temp limit in the advanced settings menu. Go to Settings > Advanced Settings. Calibrate your sensors and set floor temp limit based on the floor.

Sensors

If you want to add/change sensors, you can do this here. Choose between the following options:

Air & Floor	Uses the in-built air sensor and floor probe to read the room temperature and the floor temperature (for underfloor heating).
Air only	For use with any heating system that isn't electric underfloor heating.
Floor only	For underfloor heating only. Must use floor probe provided (No room temperature reading).
Remote Air only	Uses a remote air sensor (not included) to record the temperature of other areas (e.g. bathrooms).
Remote Air & Floor	Uses a remote air sensor and floor sensor (not included) to record the temperature of other areas (e.g. bathrooms).

°C / °F

Use this feature to switch temperature units from Degrees Celcius (°C) to Degrees Farenheit (°F).

Night Screen

This feature stops screen glare at night by reducing the brightness of the display at specified times.

Sleep Time: Sets the time the display will reduce brightness**.**

Wake Time: Sets the time the display will revert back to the brightness already set on the device.

Brightness: Sets the brightness of the display between the **Sleep** & **Wake** time period**.**

This function will not interfere with the screen timeout settings. Between the **Sleep** & **Wake** time periods, the brightness function in Settings > Display will be overruled by Night Screen.

Key Lock

There are 2 types of lock functions on the thermostat. Type 1 is **Full Lock** that locks all thermostat functionality. Create a 4 digit pin to unlock the thermostat. You will be asked to confirm the pin before locking. ***(Note:*** If you forget your pin, call Prowarm technical team for support).

Type 2 is **GUEST MODE.** This allows you to set an upper temperature limit preventing guests from using the system inefficiently. A 4 digit pin is then set to prevent guests from accessing the menu options. ***(Note:*** If you forget your pin, call Prowarm technical team for support).



Display

In display settings, you can change the screen brightness and screen timeout settings. Screen timeout affects the length of time the screen will remain on for when inactive.

Note: The screen brightness will be affected by NIGHT SCREEN, but will revert to the brightness set here when NIGHT SCREEN ends (for more information on Night Screen, go to page 27).

WiFi

The ProWarm app can connect to the thermostat for seamless control of your heating from anywhere. Make sure the Prowarm app is installed

from the QR code on the box or the QR code found in the thermostat WiFi menu under “Download App Info”.

You can also search in your app store for Prowarm .

1. Tap ≡.
2. Tap **Settings**.
3. Tap **WiFi.**
3. Tap **Enter pairing mode** >.

Make sure you’ve entered **Pairing mode** and follow the steps found on page 12 & 13.

Frost Protection

Frost Protection sets a minimum temperature (max 16°C) that turns on the thermostat to avoid pipes freezing in colder temperatures. When frost mode is active, it overrides other modes.

1. Tap ≡.
2. Tap **Settings**.
3. Tap **Frost Protecton**.
4. Tap **Turn On**.
5. Use the digital dial to set the desired temperature and tap ✓.

Once confirmed, you will return to the previous menu. A snowflake symbol will be present on the thermostat (only when minimum temp is reached).

Advanced Settings

These settings change how the thermostat works and should only be changed by a professional, or with help from the ProWarm team if you are not 100% sure what to change.

Air Sensor Calibration

The built in sensor can be adjusted to + or - 3°C if the temperature needs to be adjusted for a more accurate measurement.

Floor Sensor Calibration

The floor sensor can be adjusted to + or - 3°C if the temperature needs to be adjusted for a more accurate measurement.

Remote Air Sensor Calibration

The air sensor can be adjusted to + or - 3°C if the temperature needs to be adjusted for a more accurate measurement.

Floor Protection Temp

When using **Air and Floor temp** or **Remote Air and Floor temp**, a floor temperature limit needs to be set to cut off the heating and protect the floor from overheating. When using an Air and Floor setup, the thermostat

will operate on air temperature but will have a maximum floor temperature cut off.

Output Delay

Setting an output delay can help prevent rapid switching, that may happen if the temperature fluctuates quickly. Set a time delay to allow for a pause before the heating turns on again when the temperature drops.

Switching Differential

This determines how accurate the temperature control is. Choose between 0.5°C, 1.0°C, 1.5°C & 2.0°C to determine how far the temperature can differ either side of the target temperature before the thermostat switches on/off.

Open Window Detection

If the thermostat detects a sudden drop in temperature, (e.g. if a window was left open) the thermostat will pause heating for 15 minutes to help save energy. Turn this mode off to constantly heat no matter the conditions.

Learning Mode

The thermostat will learn the scheduling on/off times and will turn on early to reach the desired temperature at the specified time, to create a more stable heat through your schedule. When calling for heat, the flame symbol will be replaced with to show it is heating early. **Note:** it will not turn off early if next temperature in the schedule is lower.

Floor Sensor Type

For retrofitting this thermostat in a different brand of system, the floor probe type can be adjusted to allow the thermostat to accept different types of floor sensors. ***Note:*** *Consult original system's manufacturer to find out the resistance (K Ohms) required.*

Menu Timeout

This setting determines how long the thermostat remains on the Menu or sub-menu screens before automatically returning to the home screen after a period of inactivity. This function is designed to prevent accidental changes, reduce energy consumption, and ensure the thermostat returns to its main display.

Factory Reset

Factory Reset will reset your thermostat back to factory settings, which includes all settings and schedules. Please note this action cannot be undone.

Troubleshooting

Need some more help with your thermostat? Scan the QR Code below to view our installation guides and manuals for extra support. Contact us if you are still unsure for expert help.

Scan here for install guides and manuals

Error Codes

If the thermostat encounters errors with sensors, it will display a number of codes related to the issue for debugging purposes. **Refer to page 26 to ensure your sensor selection is correct.** Failing that, speak to your installer or engineer to check for sensor connection issues.

Still stuck? Call us on 01268 567019

E1: Internal temperature sensor short circuit

E2: Internal temperature sensor open or not connected

E3: Remote Air temperature sensor short circuit

E4: Remote Air temperature sensor open or not connected

E5: Floor temperature sensor short circuit

E6: Floor temperature sensor open or not connected

Hot Water / Time Clock Mode

Refer to page 10 on how to wire up the thermostat in Time Clock Mode.

Time Clock mode changes the functionality of the thermostat to be an on/off switch function. This mode is ideally suited for controlling your hot water tank, but can also be programmed as a smart switch for any household electrical items that require a timer or switch (e.g. outdoor lighting or spa). The thermostat switches to a simplified layout with less menu options.

Pressing the time on the home screen in this mode allows you to manually turn time clock mode on/off. This acts similarly to override in the thermostat mode.

Time & Date *functionality stays the same.*

Schedule *stays the same, except the temperature reading is replaced with* ***"on"*** *and* ***"off"****. Refer to* **pages 17-19** *for instructions on how to set up your schedule.*

Boost *functionality acts as an extension of time, not the temperature.*

All settings stay the same. If you wish to revert back to standard thermostat mode, go to **Settings > Setup > System Type** and choose the system type relevant to your heating system.

Description

This product is an intelligent thermostat with built-in Tuya Wi-Fi + BLE module and based on Tuya Intelligent Cloud Platform, which can be used as an indoor environment temperature control in home and office.

Case material: PC940+ ACRYLIC

Input Voltage: 230VAC

Standby power consumption: <5mA

Working environment: 0ºC ~ +50ºC

Storage environment: -20 ºC ~ +85ºC

Humidity: 0~90% RH (non-condensation)

ESD standard: Contact discharge 4kV, air discharge 8kV



Get the prowarm app and unlock the ***full potential*** of ***smart heating.***

GET IT ON Google Play

Download on the App Store

Get in touch

01268 567 019

sales@prowarm.com

www.prowarm.com

The Underfloor Heating Store
Unit 16, Carnival Park, Carnival Way
Basildon, Essex, SS14 3WN

PTS Dublin
Unit 1, Block K
Ballymount Drive, Ballymount
Dublin, Ireland, D12 YP92

Highbourne Group
Highbourne House
Eldon Way, Crick
NN6 7SL