Thermotouch 5235W

Wi-Fi Enabled Thermostat

Installation & User Guide

Thermogroup
That little bit extra...

thermotouch
INTELLIGENT HEATING CONTROLS

Introduction

Thank you for buying our Thermotouch 5235W thermostat. We hope you will enjoy the ease of use offered by the touchscreen and intuitively designed interface. You can program the thermostat any way you want with the options provided under Heating Schedule and User Settings.

The thermostat will switch on your heating system at predetermined times each day of the week. You can set individual temperatures for up to six seperate periods, called events, for each day of the week. Lowering the temperature when your home is unoccupied will reduce your energy costs without reducing comfort.

The thermostat comes with a preset heating schedule suitable for most homes. Unless you change the settings, the thermostat will operate according to this preset heating schedule.

The thermostat features an adaptive function that automatically changes heating start times to ensure that the required temperature has been reached at the beginning of any specific event. After a few days, the adaptive function will have learned how much earlier the heating must be switched on.

The resistive touchscreen only requires a soft tap with your fingertip to register the touch.

In this manual, the touch areas on the screen will be referred to as buttons.
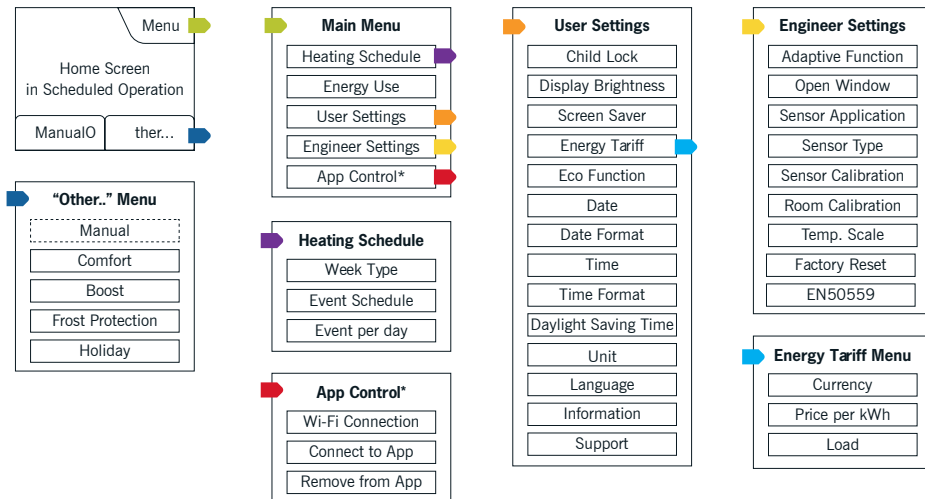
This Wi-Fi Thermotouch Thermostat offers remote control of your Underfloor Heating through the SWATT® (Smart Wi-Fi and Touch Thermostat) app, which can be downloaded from both Google Play and the App Store.

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Menu Overview

Menu Overview

Menu

Home Screen in Scheduled Operation

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- Currency
- Price per kWh
- Load

What's in the box?

Check you have got everything:
- 5235W Thermostat
- Mounting Plate
- Fixing Bracket
- 3m Sensor Probe
- 2m Sensor Conduit
- Fixing Screws

You will also need:
- Electrical Screwdriver
- Wire Strippers
- Electrical Test Meter

Before you start

Your thermostat should be:
• Installed 1.2 - 1.5m up from the floor
• On an internal wall
• Outside any wet zones (IP21)
• Installed on an RCD protected circuit
• Away from drafts or heat influencers
• Installed so that the floor sensor probe can be laid in a heated area of the floor
• Installed by an electrician, in line with current electrical regulations and relevant local standards

Installing your thermostat

1. Switch off main power

You will be installing your thermostat as part of a high voltage mains electrical circuit. To ensure your safety and to protect the thermostat, switch off the mains power before you start the installation.

ON ON ON ON ON

OFF

Fuse Box

!

CAUTION
Must be installed
on an RCD circuit
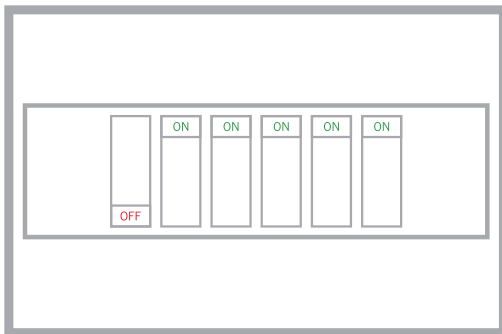
Installing your thermostat

2. Installation Location
At this stage it its likely that an RCD protected electric underfloor heating system has been installed and a standard electrical plate is already in place.
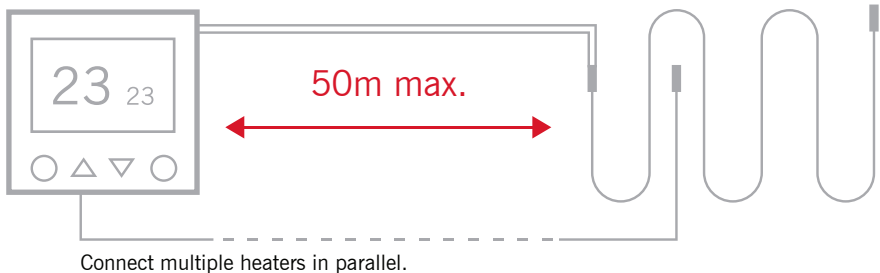
The underfloor heating cold tail should be pulled up through the back plate, and the sensor probe installed (in the conduit provided) within the wall cavity or pre chased channel in a solid wall.

Installing your thermostat

3. Maximum Distance

Your thermostat can be installed up to 50m away from the underfloor heating system it is controlling, provided that the floor sensor is used to control the temperature.

Underfloor heating cold tails and floor sensor probes can be extended up to 50m.
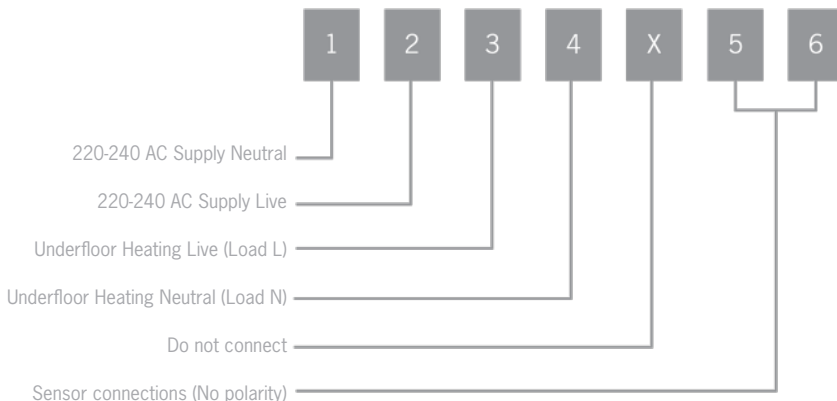

Connect multiple heaters in parallel.

Installing your thermostat

4. Wiring Diagram

Connect the thermostat to the Underfloor Heating cold tail, power supply and floor temperature sensor.

The floor temperature sensor is not polarity sensitive.

| 1 | 2 | 3 | 4 | X | 5 | 6 |

220-240 AC Supply Neutral — 1

220-240 AC Supply Live — 2

Underfloor Heating Live (Load L) — 3

Underfloor Heating Neutral (Load N) — 4

Do not connect — X

Sensor connections (No polarity) — 5, 6

Installing your thermostat

5. Fix Mounting Plate
Fix your thermostat in position onto the electrical plate in either the vertical or horizontal position.

Installing your thermostat

6. Fix Mounting Plate Continued

To allow for the screen to be clipped into position, ensure the screen is switched off using the switch on the side of the unit.
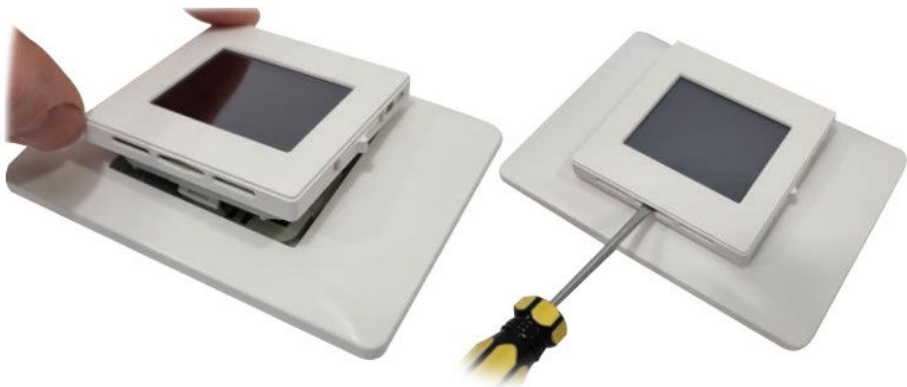
Installing your thermostat

7. Switching on your system

It is important that all adhesives and grouts are dry and fully cured before you switch on your underfloor heating.

Most adhesives take between 7 to 10 days to cure. Follow manufacturer guidelines.

The temperature of your underfloor heating should be increased gradually to avoid thermal shock in the floor.
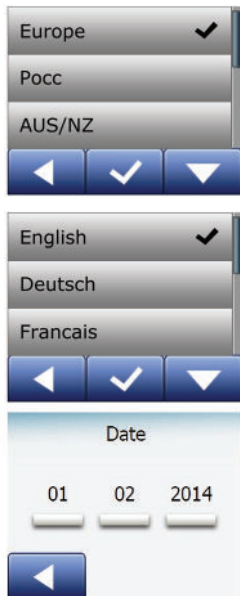Start at 15°C and work up to your desired temperature increasing 2-3°C per day.

Observe any maximum temperature guidelines from your floor manufacturer.

Australian regulation states the heating cannot exceed 28°C.

⚠ !

Wait for
7 - 10 Days
before you
switch on

Startup Wizard 1/2

When the system has been installed and turned on for the first time, or after you have performed a factory reset, you must set the region, Language, Date, Time and Floor Type.
The thermostat will automatically guide you through the process.

1. Region – set the time region in which the thermostat is located.
   Tap the time region you are in.
   Confirm with "✓"

2. Language – set the language to be used on the thermostat display.
   Tap the language you prefer. Confirm with "✓".

3. Date – set the current date.
   Tap the parameter you want to change.
   The selected parameter will enlarge and be underlined in black.
   Use the "Up Arrow" or "Down Arrow" button to set the day, month and year.
   Confirm the date with the "Right Arrow".

Startup Wizard 2/2
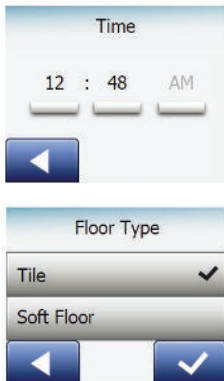
4. Time – set the current time.
   Tap the parameter you want to change.
   The selected parameter will enlarge and be underlined in black.
   Use the "Up Arrow" or "Down Arrow" button to set the hours and minutes.
   Confirm the date with the "Right Arrow".

5. Floor Type – choose between:
   Tile: floors made of tile or stone.
   Soft Floor: wooden or other engineered floors.
   Confirm each setting with "✓".

The thermostat is now ready for use and will control the underfloor heating according to the preset heating schedule. If you want to change the heating schedule, instructions are given in the section titled Heating Schedule.

Details of the preset heating schedule are given in the section titled Factory Settings.

General Operation

The thermostat has an ON/OFF switch on the left side of the thermostat.

Alternatively, the thermostat is intuitively operated via the high-resolution colour touchscreen, which is used to navigate through the menus and to change the settings.

The thermostat is also Wi-Fi enabled meaning you can schedule the heating, turn the heating on and off or boost the heating from an app on your smartphone. This can be done both within your home or remotely provided you have an internet connection.

Accept/Back/Cancel
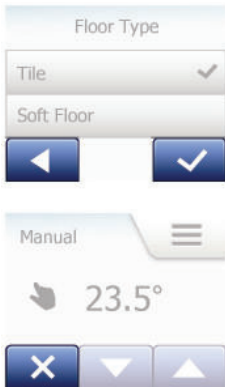
Whenever you change a parameter setting, you must tap the "Accept" button for the thermostat to acknowledge the change. "Accept" is shown on the screen as "✓".

"Back" is shown on the screen as a button marked with an arrow pointing to the left. In this manual, it is also referred to as the "Left Arrow" button. In the various menus and submenus, you will find the "Back" button in the lower left corner of the touchscreen.

Tap the "Left Arrow" button to return to the previous menu.

"Cancel" is shown on the screen as a button marked "X".

Although "Cancel" has the same effect as "Back", it also results in all unsaved settings being discarded.

As soon as you leave the home screen and enter one of the menus, either a "Back" button or a "Cancel" button will be shown.

To return to the home screen, tap Back/Cancel once or multiple times depending on where you are in the menu structure.

Icons 1/2

Icon:	Icon Meaning	Icon:	Icon Meaning	Icon:	Icon Meaning
	Scheduled Operation		Heating Schedule		Date Format
	Manual Mode		Energy Use		Time
	Comfort Mode		User Settings		Time Format
	Boost Mode		Child Lock		Daylight Saving Time
	Frost Protection		Display Brightness		Unit
	Holiday Mode		Screen Saver		Language
	Eco Function		Energy Tariff		Information
	Menu		Date		Support

Icons 2/2

Icon:	Icon Meaning	Icon:	Icon Meaning	Icon:	Icon Meaning
	Engineer Settings		Factory Reset		Server Connection
	Adaptive Function		EN50559		No server Connection
	Open window		Error Message		WiFi Connection
	Sensor Application		Accept		No WiFi Connection
	Sensor Type		Cancel		
	Floor Sensor Calibration		Next change in event/function at the given time		
	Room Sensor Calibration		The time is AM		
	Temperature Scale		The time is PM		

Operating Modes

The thermostat offers seven different modes of temperature control, either from the "Other" menu on the home screen or from the home screen directly:

1. Scheduled Operation
2. Frost Protect
3. Manual
4. Holiday
5. Comfort
6. Eco (this function must be enabled in the "User Settings" menu)
7. Boost
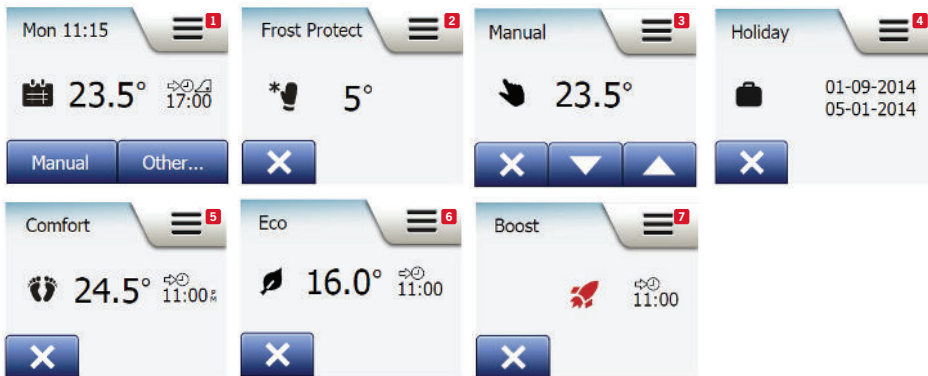
Scheduled Operation

The system will operate in Scheduled Operation unless you choose to override the scheduled events. During Scheduled Operation, the temperature is controlled automatically according to the programmed heating schedule – see "Heating Schedule".

During Scheduled Operation, "Manual" and "Other" modes are accessible from the home screen. If the Eco function is enabled, "Eco" and "Other" modes will be accessible from the home screen. "Manual" will then be found in the "Other" menu.

The function of the buttons and symbols shown on the home screen varies according to the chosen operating mode.

Scheduled Operation home screen:

1. Day and time info.
2. Tap here to access the menus.
3. Icon indicating the current operating mode (Calendar = Scheduled Operation).
4. Current target/setpoint temperature (if shown in red, heating is being provided).
5. Time of next scheduled event change.
6. If shown, the adaptive function is enabled.
7. Tap here to access Manual Override. Alternatively, if Eco Function is enabled, tapping here activates the eco function.
8. Tap here to access alternative operating modes (Comfort, Boost, Frost Protect, Holiday). If "Eco" is enabled, "Manual" will be found here as well.

Manual

Manual allows you to override Scheduled Operation and maintain a specified temperature around the clock.

1. From the Scheduled Operation home screen, tap the "Manual" button to access manual override.
Note: If Eco is enabled, "Manual" will be found in the "Other" menu. You can use "Manual" to override the programmed event schedule. The thermostat will continue to operate in Manual until you return it to Scheduled Operation.

2. Use the "Up Arrow" or "Down Arrow" button to select the required temperature. Then simply leave the thermostat as it is.

While in Manual Override, an "X" button is shown in the lower left corner of the home screen. Press this button to return the thermostat to Scheduled Operation. The function of the buttons and symbols shown on the home screen varies according to the chosen operating mode.

Manual home screen:
1. Indication of Manual Override.
2. Tap here to access the menus.
3. Icon indicating the current operating mode (Hand = Manual).
4. Current target/setpoint temperature
   (if shown in red, heating is being provided).
5. Tap here to return to Scheduled Operation.
6. Tap here to decrease the target/setpoint temperature.
7. Tap here to increase the target/setpoint temperature.

Comfort 1/2

You can use Comfort mode on special occasions when you want to override an event during Scheduled operation, e.g. for a party or when you want to stay up late. You can manually set a comfort temperature, which the thermostat will maintain for a chosen period of time (from 1 to 23 hours) before returning to Scheduled Operation.

1. From the Scheduled Operation home screen, tap the "Other" button to access the alternative operating modes.
2. Choose "Comfort".
3. Tap "✓" to confirm that you wish to override the programmed heating schedule.
4. Use the "Up Arrow" or "Down Arrow" button to select the required temperature. Confirm with "✓".
5. Use the "Up Arrow" or "Down Arrow" button to set the required duration of Comfort mode. Confirm with "✓".
The thermostat automatically enters the Comfort mode home screen.

While in comfort mode an "X" button is shown on the home screen. Press this button to return the thermostat to Scheduled Operation.

Comfort 2/2

Comfort home screen:

1. Indication of Comfort mode.
2. Tap here to access the menus.
3. Icon indicating the current operating mode (Feet = Comfort).
4. Current target/setpoint temperature (if shown in red, heating is being provided).
5. The time at which the thermostat will return to Scheduled Operation.
6. Tap here to quit Comfort mode and return to Scheduled Operation.
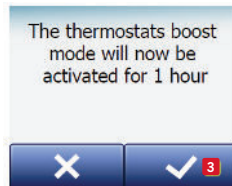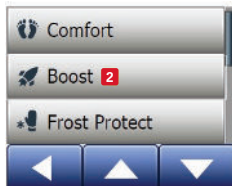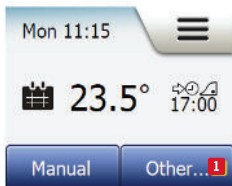
Boost

Boost mode is accessible from the "Other" menu. In Boost mode, the underfloor heating is constantly activated for one hour. After one hour, the thermostat returns to Scheduled Operation.

1. From the Scheduled Operation home screen, tap the "Other" button to access the alternative operating modes.
2. Choose "Boost".
3. Confirm that you wish the thermostat to activate Boost mode by tapping " ✓". The thermostat automatically enters the Boost home screen.

While in Boost mode, an "X" button is shown on the home screen. Press this button to return the thermostat to Scheduled Operation.

Boost home screen:

4. Indication of Boost mode.
5. Tap here to access the menus.
6. Icon indicating the current operating mode (Red Rocket = Boost).
7. The time at which the thermostat will return to Scheduled Operation.
8. Tap here to quit Boost mode and return to Scheduled Operation.

Frost Protection

Frost Protection mode is used when heating is not needed but the temperature must be kept above freezing point until changed manually.

1. Tap the "Other" button on the home screen.
2. Tap the "Frost Protect" button.
   A confirmation screen will then be displayed briefly before the thermostat automatically enters the Frost Protect home screen.
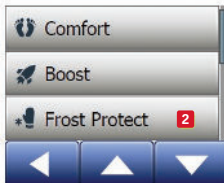
While in Frost Protection mode an ice crystal and glove are displayed on the home screen together with the target/setpoint temperature (5.0°C).

Frost Protection home screen:
3. Indication of Frost Protection mode.
4. Tap here to access the menus.
5. Icon indicating the current operating mode (Ice Crystal and Glove = Frost Protection).
6. Fixed target/setpoint temperature
7. (if shown in red, heating is being provided).
8. Tap here to return to Scheduled Operation.
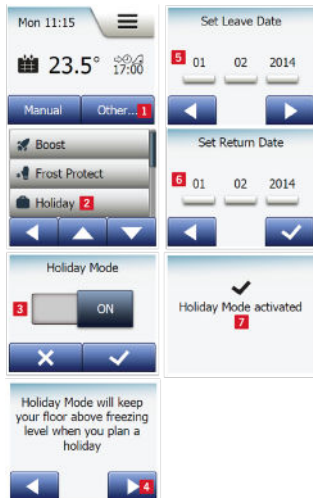
Holiday mode allows you to set the heating of your home to a minimum while you are away on holiday, thus saving energy and money. You must set the date you leave to go on holiday and the date you return. The thermostat will ensure that your floor is kept above freezing point and that your home is warm upon your return. This is accomplished in just a few steps:
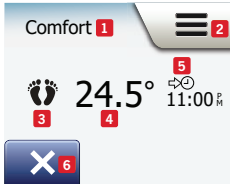
1. From the Scheduled Operation home screen, tap the "Other" button to access the alternative operating modes.
2. Tap the "Holiday" button.
3. Tap the "OFF/ON" button to "ON" and confirm with the "✓" button.
4. Tap the "Right Arrow" button on the confirmation screen that appears.
5. Set the date on which you are going on holiday. Tap the "Right Arrow" button.
6. Set the date on which you plan to return. Tap the "Right Arrow" button.
7. A confirmation screen will then be displayed briefly before the thermostat automatically enters the Holiday home screen.

During an active holiday period a suitcase is displayed on the screen together with the programmed leaving and return dates. You can cancel an active holiday period and return the thermostat to Scheduled Operation by tapping the "X" button.

Holiday 2/2

Holiday home screen:

Holiday	≡
🧳	01-09-2014
	05-01-2014
✖	

1. Indication of Holiday mode.
2. Tap here to access the menus.
3. Icon indicating the current operating mode
   (Suitcase = Holiday).
4. The date on which the thermostat entered Holiday mode and the
   date on which the thermostat will return to Scheduled Operation.
5. Tap here to quit Holiday mode and return to Scheduled Operation.
6. If leaving and returning dates have been entered but Holiday
   mode is not yet active, an alternative Scheduled Operation home
   screen will be displayed, featuring a suitcase.

Mon 11:15 🧳	≡
📅 24.5°	⇥⊙ 11:00
Manual	Other...

Eco Function

Eco Function reduces the energy spent on unnecessary heating if you leave the room/house during a scheduled heating event. When the Eco Function is enabled, the thermostat enters an energy-saving state, in which the lowest setback temperature in the event schedule is used as the temperature setpoint. At the next scheduled event change, the thermostat returns to normal Scheduled Operation. To be able to use the Eco Function, it has to be enabled under User Settings/Eco Function.

With Eco Function enabled in the User Settings:

1. Tap the "Eco" button on the Scheduled Operation home screen to access the Eco Function.
   The thermostat will then display the Eco Function home screen.
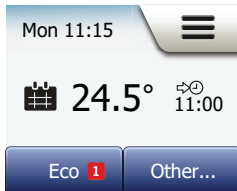
Eco Function home screen:

2. Indication of Eco Function.
3. Tap here to access the menus.
4. Icon indicating the current operating mode (Leaf = Eco Function).
5. Current target/setpoint temperature (if shown in red, heating is being provided).
6. The time at which the thermostat will return to Scheduled Operation.
7. Tap here to return to Scheduled Operation.

Thermostat Setup - Main Menu

📅 Heating Schedule

📊 Energy Use

👤 User Settings

🔧 Engineer Settings

📡 App Control

◀ ▲ ▼
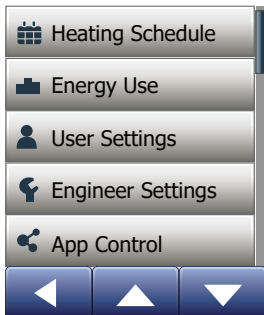
The main menu consists of four options which can be used to configure your thermostat.

The main menu is accessed via the "Menu" button on the home screen.

• Heating Schedule
• Energy Use
• User Settings
• Engineer Settings
• App Control

Some of the menus have various parameters which can be set.

Adaptive Function
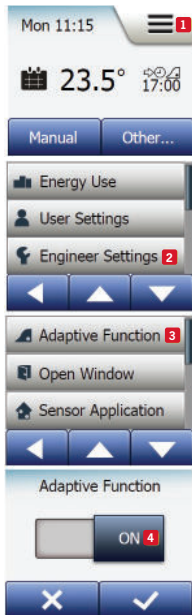
With this feature enabled the thermostat will calculate the time required to heat up and reach the desired temperature set point and will turn on earlier to ensure the floor is at the desired temperature at the start of a scheduled heating event.

Adaptive function is turned on as default.

After just a few days, the adaptive function will have automatically calculated how much earlier the heating must be turned on/off to achieve this.

Select "OFF" if you simply want the heating to start at the beginning of an event.

1. Tap the "Menu" button on the home screen.
2. Scroll down and tap the "Engineer Settings" button.
3. Tap the "Adaptive Function" button.
4. Tap the "OFF/ON" button to the setting you prefer and confirm with the "✔" button.
5. The thermostat will automatically return to "Engineer Settings".

Heating Schedule 1/3

The heating schedule allows you to control temperature automatically according to a programmed schedule of your choice. The thermostat comes with a pre-programmed schedule for easy and economic heating control, see Preset Schedule under Factory Settings. The heating schedule can easily be changed in the following way:

1. Tap the "Menu" button on the home screen.
2. Then tap the "Heating Schedule" button to access schedule options.
3. Tap the "Week Type" button.

Choose between "Work days/home days" and "All days are different". "Work days/home days" is best if you have fixed working hours.

4. If you chose "Work days/home days", an information screen about the schedule will be shown. Tap the "Right Arrow" button to proceed.
5. Select the days on which you work. Tap the "Right Arrow" button to proceed.
6. The thermostat will automatically designate the remaining days as home days. Tap the "✓" button to accept.
7. Tap the "Left Arrow" button to return to the "Heating Schedule" menu. Proceed to step 10.

If you chose "All days are different", each day of the week must be individually programmed, giving you complete control of every single event.

When the information screen appears, press the "✓" to confirm.

Heating Schedule 2/3

Week Type

Event Schedule

Events per Day **8**

◄

You can set the thermostat for a maximum of 4 **9** or 6 events per day

◄   ►

4 Events per Day ✓

6 Events per Day **10**

✕   ✓
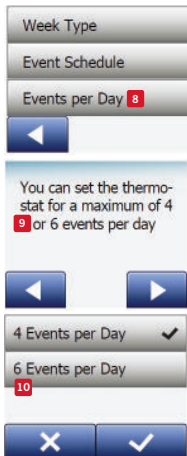
An event is a scheduled time of day when the thermostat automatically changes the temperature setting.

You can choose between a four or six event schedule.

Choose the setting that best fits your daily rhythm.

With a four event schedule, you can set four different events during work days and two different events during home days.
– Perfect if your day is as follows: You get up in the morning, you go to work, you return home and you go to sleep.

With a six event schedule, you can set six different events during work days and two different events during home days.
– Perfect if your day is as follows: You get up in the morning, you go to work, you return home for lunch, you go back to work, you return home and finally you go to sleep.

8. Tap the "Events per Day" button.
9. On the confirmation screen tap the "Right Arrow" button.
10. Tap the button with the number of events per day you wish to use. Confirm with "✓".

Heating Schedule 3/3

You can now setup your personalised heating schedule.

11. Tap the "Event Schedule" button to set up the target/setpoint temperature and start time for each event.

12. Tap the temperature if you want to change it, then tap the "Up Arrow" or "Down Arrow" button to set the required temperature.

13. Tap the time if you want to change it, then tap the "Up Arrow" or "Down Arrow" button to set the time in increments of 15 minutes. Confirm with "✓".

14. Tap the "Left Arrow" or "Right Arrow" button to toggle through the various events.

15. Once you have completed setting all the events, tap the "Right Arrow" button to view a confirmation screen and return to the Heating Schedule menu.

16. Tap the back arrow to return to the menu.

Energy Use

The "Energy Use" button allows you to obtain out energy usage data for your underfloor heating system.

1. Tap the "Menu" button on the home screen.
2. Then tap the "Energy Use" button to access schedule options.

You can choose between four different readouts:

- Last 7 days: A graph of usage during each day of the past seven days will be displayed.
- Last month: A graph of usage during each day of the past month will be displayed.
- Last year: A graph of usage during each month of the past year will be displayed. The graph shows hours per month.
- An overview of electricity consumption (kWh) and heating costs for the time periods specified above. (Note: actual load, currency and price per kWh must be set in the "Energy Tariff" menu under User Settings).

3. You can toggle between the readouts using the "Up Arrow" or "Down Arrow" button.
4. Tap the "Left Arrow" button to return to the "Main Menu".

User Settings

👶 Child Lock
☀ Display Brightness
z^z Screen Saver
$ Energy Tariff
🍃 Eco Function
📅 Date
📅 Date Format
🕐 Time
🕐 Time Format
🌙 Dayl. Saving Time
$ Unit
🚩 Language
ℹ Information
☎ Support
◀ ▲ ▼
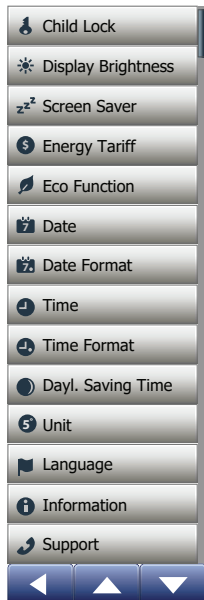
This menu allows you to set various parameters. The menu contains the following options:

- Child Lock
- Display Brightness
- Screen Saver
- Energy Tariff
- Eco Function
- Date
- Date Format
- Time
- Time Format
- Daylight Saving Time
- Unit
- Language
- Information
- Support

Child Lock
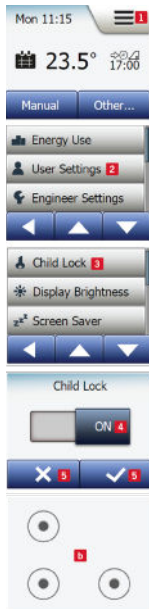
The child lock prevents children and others from tampering with the thermostat and changing any of its settings.

1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Tap the "Child lock" button.
4. Tap the "OFF/ON" button to the setting you prefer.
5. Confirm your choice with "✓" or discard it with "X".
6. The thermostat will automatically return to "User Settings".

The child lock is activated together with the screen saver if the thermostat has not been operated for about 3 minutes. Before you can operate the thermostat again, you must unlock the child lock in the following way.

From the idle home screen:

a) Tap the screen to activate it. Three circles containing dots will be displayed on the screen.

b) Draw an "L" on the screen in a single stroke without lifting your finger from the screen. Start by touching the dot in the circle in the upper left corner, then slide your finger downwards to the dot in the circle in the lower left corner and continue sliding your finger to the dot in the circle in the lower right corner, forming an "L". If done correctly, the home screen will appear.

Please note that the child lock will be reactivated when the thermostat returns to screen saver mode – unless it is deactivated in the menu: User Settings/Child Lock.

Display Brightness

This option allows you to change the brightness of the display.

1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Scroll down and tap the "Display Brightness" button.
4. Select one of the five levels of brightness using the "Up Arrow" or "Down Arrow" button.
5. Confirm your choice with "✓".
   The thermostat will automatically return to "User Settings".

Screen Saver
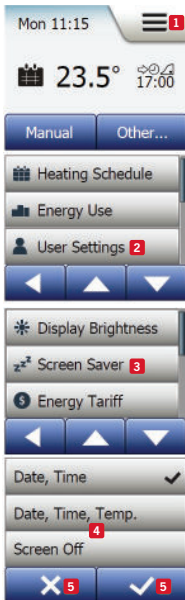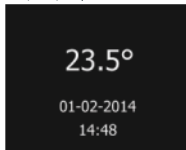
This option allows you to select the information to be shown on the idle home screen you can choose from:

• Date, Time.
• Date, Time and Temperature (measured).
• Screen Off.

1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Scroll down and tap the "Screen Saver" button.
4. Tap the information you want to be shown in screen saver mode.
5. Confirm your choice with "✓" or discard it with "X". The thermostat will automatically return to "User Settings".

Energy Tariff 1/2
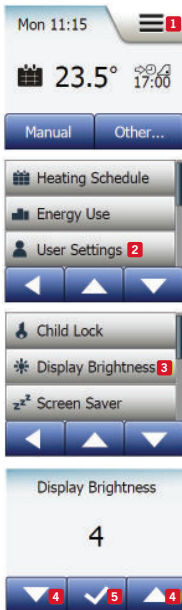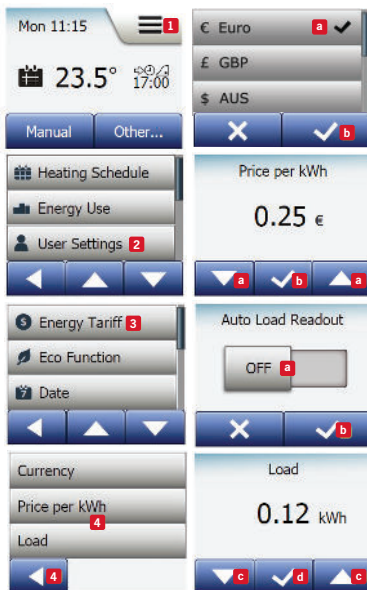
This option allows you to enter the various data used to calculate energy use.

The "Energy Use" function uses this information to calculate electricity consumption and the cost of heating for a given period of time.

1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Tap the "Energy Tariff" button.
4. Tap the parameter you want to change.

Currency
a) Tap the currency you prefer.
b) Confirm with "✓".
   The thermostat will automatically return to "Currency Screen".

Price per kWh
a) Tap the "Up Arrow" or "Down Arrow" button to set the price you pay per kWh.
b) Confirm with "✓".
   The thermostat will automatically return to "Energy Tariff".

Load
a) If you do not want the thermostat to automatically detect the load of your underfloor heating system, tap the "OFF/ON" button to "OFF", otherwise leave it at "ON".
b) Confirm with "✔".
c) If Auto Detection is set to "OFF", tap the "Up Arrow" or "Down Arrow" button to set the kW load of your underfloor heating system. You should ask your heating engineer for this information.
d) Confirm with "✔".
The thermostat will automatically return to "Energy Tariff".

If auto load is switched on the thermostat will automatically detect the load on the thermostat. Please note that the auto load cannot be used when the thermostat is wired to a contactor.

5.   Tap the "Left Arrow" button to return to "User Settings".

Eco Function
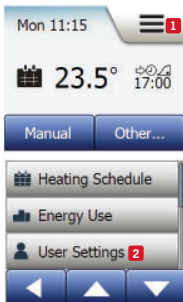
Eco Function reduces the energy spent on unnecessary heating if you leave the room/house during a scheduled heating event.
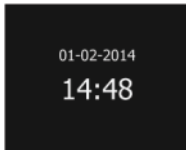
1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Tap the "Eco Function" button.
4. Tap the "OFF/ON" button to the setting you prefer.
5. Confirm your choice with "✓" or discard it with "X".
6. The thermostat will automatically return to "User Settings".
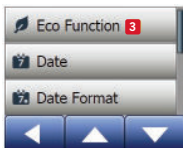
With Eco Function enabled, the Scheduled Operation home screen is altered. The lower left button, "Manual", is changed to "Eco".

Tap the "Eco" button to activate the Eco Function.

In Eco Mode, the thermostat enters an energy-saving state, in which the lowest setback temperature in the event schedule is used as the temperature setpoint.

At the next scheduled event change, the thermostat returns to normal Scheduled Operation.

Date
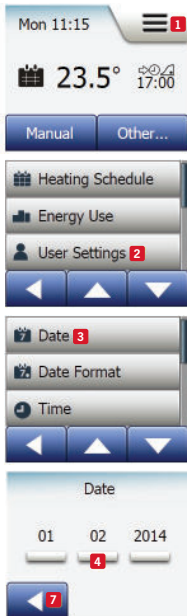
This setting allows you to change the date, which is sometimes shown on the home screen and is used for functions such as "Holiday" mode and "Daylight Saving Time".

1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Scroll down and tap the "Date" button.
4. Tap the parameter you want to change.
5. Tap the "Up Arrow" or "Down Arrow" button to set the day, month and year.
6. Confirm each setting with "✓".
7. Tap the "Left Arrow" button to return to "User Settings".

Date Format
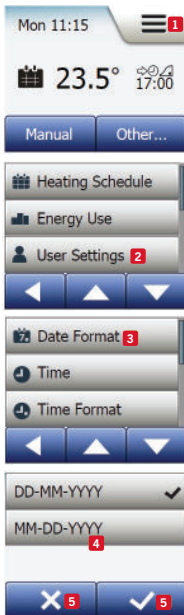
1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Scroll down and tap the "Date Format" button.
4. Tap the date format you prefer:

   • DD/MM/YYYY (default)
   • MM/DD/YYYY

5. Confirm your choice with "✓" or discard it with "X".
   The thermostat will automatically return to "User Settings".

Time

This option allows you to change the time, which is used by the thermostat to control heating schedule events during Scheduled Operation.

1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Scroll down and tap the "Time" button.
4. Tap the parameter you want to change.
5. Tap the "Up Arrow" or "Down Arrow" button to set the hours and minutes.
6. Confirm each setting with "✓".
7. Tap the "Left Arrow" button to return to "User Settings".
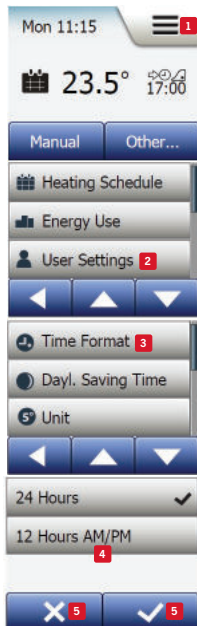
Time Format

1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Scroll down and tap the "Time Format" button.
4. Tap the time format you prefer:
   • 24 Hours
   • 12 Hours AM/PM (default)

5. Confirm your choice with "✓" or discard it with "X". The thermostat will automatically return to "User Settings".

Daylight Saving Time

When set to ON, the "Daylight Saving Time" function will automatically adjust the thermostat clock to the daylight saving time for the "Region" chosen in the "Startup Wizard".

Note! Only regions within North America and Europe are supported.

1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Scroll down and tap the "Daylight Saving Time" button.
4. Tap the "OFF/ON" button to the setting you prefer.
5. Confirm with the "✓" button.
   The thermostat will automatically return to "User Settings"

Unit
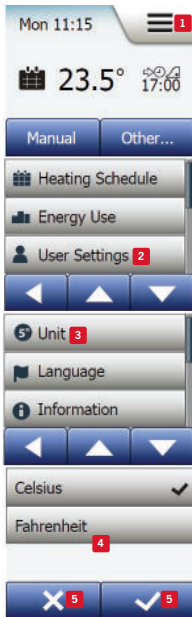
This setting allows you to select your preferred temperature unit of measure.

1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Scroll down and tap the "Unit" button.
4. Tap the unit you prefer:

    • Celsius
    • Fahrenheit

5. Confirm your choice with "✓" or discard it with "X".
   The thermostat will automatically return to "User Settings".

Language
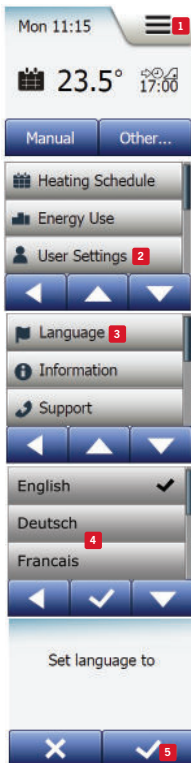
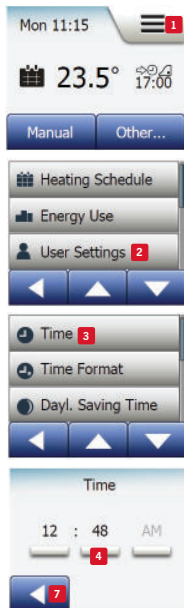This option allows you to change the language used on the screen.

1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Scroll down and tap the "Language" button.
4. Tap the language you prefer:

   - English
   - German
   - French
   - Finnish
   - Polish
   - Czech
   - Swedish

   - Dutch
   - Lithuanian
   - Russian
   - Italian
   - Spanish
   - Norwegian
   - Portuguese

5. Confirm your choice with "✓" or discard it with "X".

Information
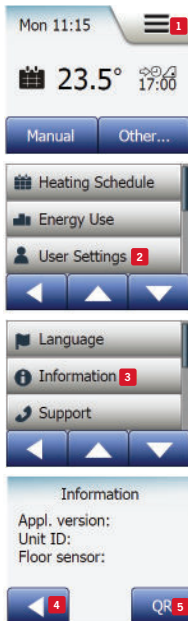
This setting provides a read-out containing the following information:

- Application version
- Unit ID
- Sensor temperatures
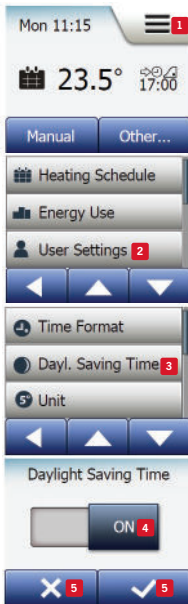
1. Tap the "Menu" button on the home screen.
2. Then tap the "User Settings" button to access the various user settings.
3. Scroll down and tap the "Information" button.
   Use the "Down Arrow" to scroll through the information pages
4. Tap the "Left Arrow" button to return to "User Settings".
   Or tap the "QR" button.
5. If "QR" is selected, you can scan the QR Code with a suitable device with access to the Internet. Software supporting QR Code scanning is necessary, e.g. an app. Scanning the QR Code provides the following data from the thermostat:

   - Contact
   - Serial Number
   - Software Version
   - Sensor Type
   - Application
   - Mode
   - Adaptive Function
   - Open Window
   - Child Lock
   - Temperature Unit
   - Heating Schedule
   - Energy Use

6. Tap on the QR Code to return to the Information screen.
7. Tap the "Left Arrow" button to return to "User Settings".

Engineering Settings

| Adaptive Function |
| Open Window |
| Sensor Application |
| Sensor Type |
| Floor Sens. Calibr. |
| Room Sens. Calibr. |
| Temp. Scale |
| Factory Reset |
| EN50559 |
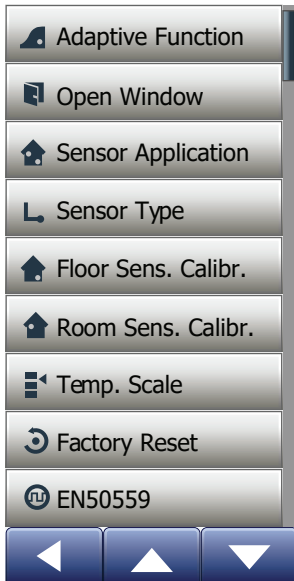
This menu contains all the parameters that must be set by the engineer during thermostat installation or service. The menu contains the following options:

• Adaptive Function
• Open Window
• Sensor Application
• Sensor Type
• Floor Sensor Calibration
• Room Sensor Calibration
• Temperature Scale
• Factory Reset
• EN50559

Open Window
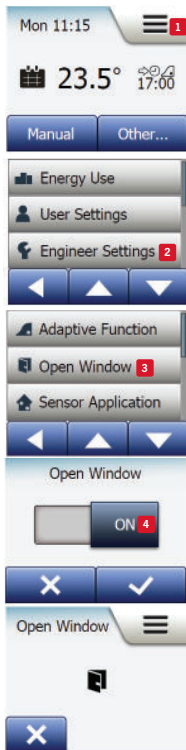
This option allows you to enable the "Open Window" function.

Open window function is turned on as default.

The thermostat can detect an open window by registering a rapid drop in temperature.

With the function enabled, the thermostat shuts off the heating for 30 minutes if an open window is detected.

1. Tap the "Menu" button on the home screen.
2. Scroll down and tap the "Engineer Settings" button.
3. Tap the "Open Window" button.
4. Tap the "OFF/ON" button to the setting you prefer and confirm with the "✓" button.
5. The thermostat will automatically return to "Engineer Settings".

If an open window is detected, the "Open Window" screen will appear, allowing the function to be cancelled by tapping "X".

Sensor Application
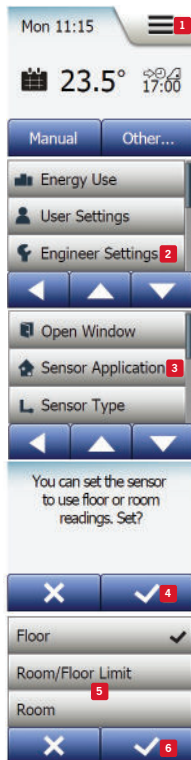
This option allows you to choose which sensor is used to control the heating system.

- Floor (default): With this setting, the floor sensor controls the heating system.
- Room/Floor Limit (advanced): With this setting, the room sensor controls the heating system subject to maximum and minimum limits for floor temperature. The maximum temperature limit protects wooden floors from excessive heat. The minimum temperature limit prevents the floor from becoming uncomfortably cold when heating is not needed, e.g. in a bathroom. Note that this function will increase energy consumption. Floor Limit temperatures are set in the "Temperature Scale" menu.
- Room: With this setting, the room sensor inside the thermostat controls the heating system.

Maximum temperature depends on floor type and temperature scale.

1. Tap the "Menu" button on the home screen.
2. Then tap the "Engineer Settings" button.
3. Tap the "Sensor Application" button.
4. Confirm that you want to set the Sensor Application.
5. Then tap the application you want to use.
6. Confirm your choice with "✓" or discard it with "X".
7. The thermostat will automatically return to "Engineer Settings".

Sensor Type

This option allows you to choose the type of floor sensor used with the thermostat. You can therefore choose to use an existing sensor with the thermostat, e.g. in renovation projects.

Choose the sensor actually used from the list. The sensor supplied with the thermostat is an 12kΩ sensor listed as: "Factory".

- Factory (default)
- Sensor 6.8 kΩ
- Sensor 10 kΩ
- Sensor 12 kΩ
- Sensor 33 kΩ
- Sensor 47 kΩ
- Custom

1. Tap the "Menu" button on the home screen.
2. Then tap the "Engineer Settings" button.
3. Scroll down and tap the "Sensor Type" button.
4. Tap the type of floor sensor actually used.
5. Confirm your choice with "✓" or discard it with "X".
6. If "Custom" is chosen, you must provide resistance values for the sensor concerned at four given temperatures: 15°C, 20°C, 25°C and 30°C – ask the supplier of your sensor for these values.
7. Use the "Right Arrow" or "Left Arrow" button to toggle through the temperatures.
8. Tap the resistance value to change it.
9. Tap the "Up Arrow" or "Down Arrow" button to set the Resistance.
10. Then repeat steps 7-9 until all four resistance values have been set.
11. Tap the "Left Arrow" button to return to "Engineer Settings".

Floor Sensor Calibration
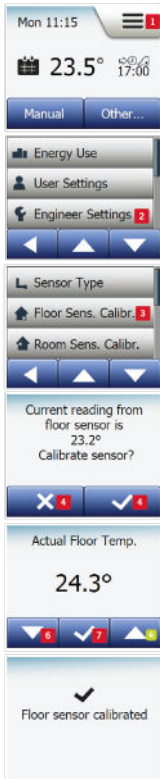
This option allows you to calibrate the floor sensor providing this has been installed.

You should only calibrate the sensor if the temperature reading differs from the actual floor temperature.

Note that changes in the floor sensor characteristics may damage certain floors.

You can calibrate the sensor to +/- 10°C in increments of 0.5°C in the following way:

1. Tap the "Menu" button on the home screen.
2. Then tap the "Engineer Settings" button.
3. Scroll down and tap the "Floor Sensor Calibration" button.
4. Confirm that you want to calibrate the sensor with " " or cancel with "X".
5. If " " is chosen, you must then offset the thermostat to reflect the floor temperature actually measured.
6. Use the "Up Arrow" or "Down Arrow" button to set the measured floor temperature.
7. Confirm the value with " ". A confirmation screen will be displayed briefly.
8. The thermostat will automatically return to "Engineer Settings".

Room Sensor Calibration
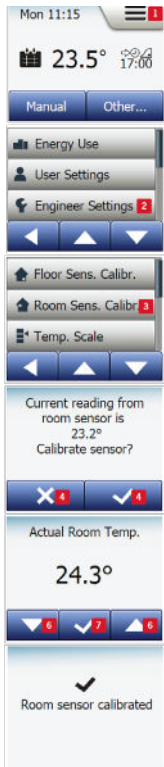
This option allows you to calibrate the room sensor.

You should only calibrate the sensor if the temperature reading differs from the actual room temperature.

You can calibrate the sensor to +/- 10°C in increments of 0.5°C in the following way:

1. Tap the "Menu" button on the home screen
2. Then tap the "Engineer Settings" button.
3. Scroll down and tap the "Room Sensor Calibration" button.
4. Confirm that you want to calibrate the sensor with "✓" or cancel with "X".
5. If "✓" is chosen, you must then offset the thermostat to reflect the room temperature actually measured.
6. Use the "Up Arrow" or "Down Arrow" button to set the measured room temperature.
7. Confirm the value with "✓".
   A confirmation screen will be displayed briefly.
8. The thermostat will automatically return to "Engineer Settings".

This function allows you to set the minimum and maximum temperature to which the thermostat can be set – as well as the minimum and maximum limits for floor temperature.

Operating temperatures:

- Minimum Temperature Scale can be set between 5°C and 15°C.
- Maximum Temperature Scale can be set between 20°C and 40°C.
  (If "Sensor Application" is set to "Floor", a maximum temperature of 27°C can be set to protect wooden floors from drying out. For information regarding max temperature for your specified flooring please contact your flooring supplier).

Floor limit temperatures:

Floor limit temperatures allow you to set the lowest (Minimum Temp. Limit) and highest (Maximum Temp. Limit) permissible floor temperature during normal room temperature control. If floor temperature drops below the Minimum Temp. Limit, the thermostat will activate the heating system to maintain the temperature above the set minimum. If floor temperature rises above the Maximum Temp. Limit, the thermostat will deactivate the heating system to maintain the temperature below the set maximum.

Floor Limit temperatures are only available if "Room/Floor Limit" has been selected under "Sensor Application".
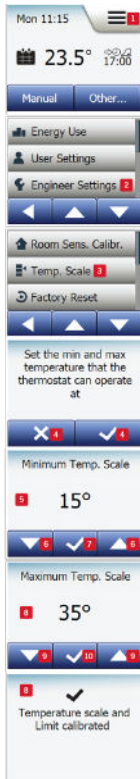
- Minimum Temp. Limit – use this setting to maintain comfort temperature on tile floors. Can be set between 5°C and 25°C.
- Maximum Temp. Limit – use this setting to protect wooden floors from excessive temperatures. Can be set between 10°C and 40°C.

NOTE: If the maximum limit for floor temperature is set too high, sensitive floor types may be permanently damaged.

1. Tap the "Menu" button on the home screen.
2. Then tap the "Engineer Settings" button.
3. Scroll down and tap the "Temp. Scale" button.
4. Confirm that you want to set minimum and maximum operating temperatures for the thermostat by tapping "✓" or cancel with "X".
5. If "✓" is chosen, you can set a Minimum Temp. Scale.
6. Use the "Up Arrow" or "Down Arrow" button to change the Minimum Temp. Scale.
7. Confirm the setting with "✓"
8. You can now set a Maximum Temp. Scale.
9. Use the "Up Arrow" or "Down Arrow" button to change the Maximum Temp. Scale.
10. Confirm the setting with "✓". If "Room/Floor Limit" has been selected under "Sensor Application", proceed to step 11. Otherwise, proceed to step 16.

Minimum Temp. Limit

11   5°

12 ▼   **13** ✓   **12** ▲

Maximum Temp. Limit

14   40°

15 ▼   **16** ✓   **15** ▲

17 ✓

Temperature scale and
Limit calibrated
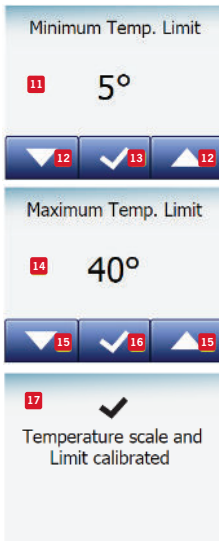
11. You can now set a Minimum Temp. Limit.
12. Use the "Up Arrow" or "Down Arrow" button to change the Minimum Temp. Limit.
13. Confirm the setting with "✓".
14. You can now set a Maximum Temp. Limit.
15. Use the "Up Arrow" or "Down Arrow" button to change the Maximum Temp. Limit.
16. Confirm the setting with "✓".
17. A confirmation screen will be displayed.
18. The thermostat will automatically return to "Engineer Settings".

Factory Reset
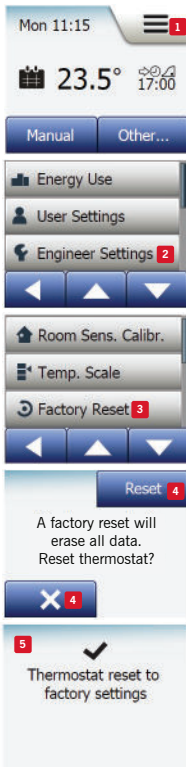
This option allows you to restore the thermostat to factory settings.

Note! This action cannot be undone, and all your personal settings will be lost.

1. Tap the "Menu" button on the home screen.
2. Scroll down and tap the "Engineer Settings" button.
3. Tap the "Factory Reset" button.
4. Tap "X" if you want to maintain your settings and return to "Engineer Settings". Tap "Reset" if you want to restore the factory settings.
5. The thermostat will then be reset and the "Startup Wizard" will appear on the screen.

EN50559 1/2

This thermostat complies with EN 50559 (VDE 0705-559) for electrical floor heating. The regulation applies to electrical floor heating, with a maximum floor weight of 4 kN/m². To ensure that hotspots due to unintentionally covering up the surface are avoided, the heating function can be time-limited as per EN/DIN.

Note that this function is not applicable to other heating applications such as wall and/or ceiling heating.

If it can be foreseen in advance that unintentional covering up of a floor might occur, then it is important to assess the correct period of time for which the floor heating must be time-limited.

The heating can be limited using a set number between 0 - 20 minutes per hour.

Example:

If obstacles could be present that cover up the floor, then the heating might need to be limited by some number of minutes so as to avoid hotspots in the floor.
If you want the thermostat to heat a maximum of 90 % of the time, then the thermostat should be limited by 10 %.
Ten percent of one hour is 6 minutes.

Enter 6 min. in the EN50559 menu in order to lower the heating by 10 %.

EN50559 2/2

Equation to calculate number of minutes that could be entered in the EN50559 menu - when an average heating effect is desired:

$$\left(1\left(\frac{\text{Average wanted heating effect pr. m}^2}{\text{Floor heating element effect pr. m}^2}\right)\right) * 60 \text{ min.}$$

Note! If the result of the equation is negative, then nothing should be entered.

1. Tap the "Menu" button on the home screen.
2. Then tap the "Engineer Settings" button.
3. Scroll down and tap the "EN50559" button.
4. Use the "Up Arrow" or "Down Arrow" button to set the number of minutes the thermostat should not heat per hour.
5. Confirm the value with "✓".
6. The thermostat will automatically return to "Engineer Settings".

App Control

Heating Schedule
Energy Use
User Settings
Engineer Settings
App Control
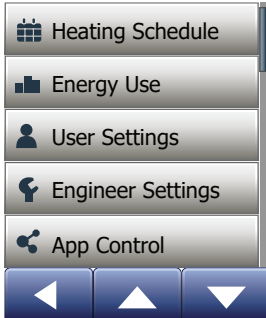
These settings allow you to set up your thermostat for connection to your wireless network, through which the thermostat is able to connect to our thermostat cloud server. Server connectivity enables you to control your thermostat remotely using the OJ Microline® SWATT app from a smartphone or tablet with Internet connection. See page 68.
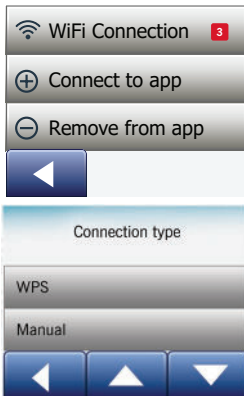
You can set up a Wi-Fi connection in the following way:

1. Tap the "Menu" button on the home screen.
2. Then tap the "App Control" button to access the app setup options.
3. Tap the "Wi-Fi Connection" button to set up the Wi-Fi connection.

Note that if a Wi-Fi configuration is already made, the "Status" screen will be displayed showing the current status of the Wi-Fi connection. In this case, tap the "Right Arrow" button to proceed, or the "Left Arrow" button to return to the main menu.

4. Choose the desired connection type on the "Connection type" screen:
   • Tap "WPS" for automatic setup. Proceed to steps 5 to 6.
   • Tap "Manual" for manual setup. Proceed to steps 7 to 10.

Automatic setup requires that you can activate WPS on the router. For details about the location of the WPS button on your router, please check your router manual.

5. Go to your Wi-Fi router and activate WPS.
6. On your thermostat, tap the "Right Arrow" button to start connecting the thermostat.

Manual connection:

The "Searching networks" screen is displayed while the thermostat is searching for available networks. The detected networks are then displayed in a list.

7. Tap the name of the desired network on the list. If you cannot see the name of your network on the list, you have to enter the network name manually in the following way:

   • Tap "Other" at the bottom of the list of networks.
   • You are now asked to enter the network name (SSID).
     Tap the "Right Arrow" button to proceed.
   • Enter the network name (SSID) for your wireless network at the top of the screen.
   • Confirm the network name with "✓"

See tips on using the keyboard on the following page.

8. You are now asked to enter the network key (password).
   Tap the "Right Arrow" button to proceed.
9. Enter the network key (password) for your wireless network at the top of the screen.

Tips on using the keyboard:

a. Tap the "Character set" button to the left to choose between different character sets, e.g. lowercase letters, uppercase letters, numbers and special characters.

b. Tap the "Up Arrow" and "Down Arrow" buttons to scroll up and down in the selected character set.

c. Tap the highlighted character to enter it at the top.

d. d) Tap the "Delete" button to the right to delete the last character.
If the key is too long to be displayed in the text field, you can tap the text to see the entire text. Tap it again to return to the keyboard.

10. Confirm the network key with "✓" to start connecting the thermostat. The thermostat will now attempt to connect to your wireless network. Please be patient, since this may take a while (several minutes).

• If the connection is successful, a confirmation screen will be displayed briefly. After that the "Status" screen will be displayed showing the current status of the Wi-Fi connection. Tap the "Left Arrow" button to return to the menu.

• If the connection fails, the thermostat will tell you so. In this case, check troubleshooting, and then tap the "X" button to return to step 4 and try again.
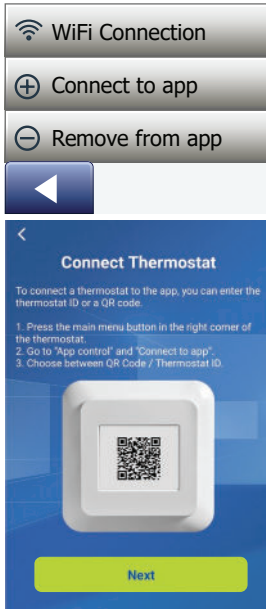
Wi-Fi Connection 4/4

If problems persist, or if anything unexpected happens during setup of the Wi-Fi connection, please consult the "Troubleshooting" section in this manual.

You can disconnect a Wi-Fi connection in the following way:
1.   Tap the "Menu" button on the home screen.
2.   Then tap the "App Control" button to access the app setup options.
3.   Tap the "Wi-Fi Connection" button to show the "Status" screen which
     displays the status of the current Wi-Fi connection.
4.   Tap the "Right Arrow" button to proceed to the "Connection type" screen.
5.   Tap the "Down Arrow" and tap "Disconnect" to remove the current Wi-Fi connection.
6.   Confirm with "✓". You will now return to the App Control menu.
7.   A confirmation screen will be displayed briefly.

Note if you tap the "X" button you will return to the "Connection type" menu.

Connect to App

⬤ WiFi Connection

⊕ Connect to app

⊖ Remove from app

◀

Connect Thermostat

To connect a thermostat to the app, you can enter the thermostat ID or a QR code.

1. Press the main menu button in the right corner of the thermostat.
2. Go to "App control" and "Connect to app".
3. Choose between QR Code / Thermostat ID.

Next

Install the OJ Microline® SWATT app on your smart device.

1. When you have successfully set up a Wi-Fi connection on your thermostat, you can connect it to OJ Microline® SWATT app in the following way:
2. Tap the "Menu" button on the home screen.
3. Then tap the "App Control" button to access the app setup options.
4. Tap the "Connect to App" button to connect to your app.
5. Choose how to connect to your app:

   • Tap "QR Code" to display a QR code that you can scan with your mobile phone.
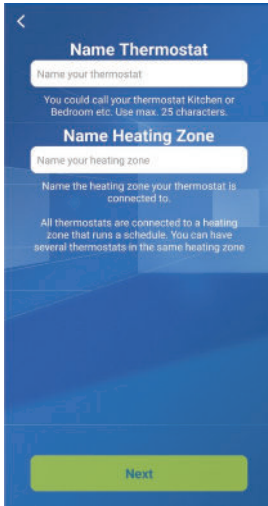   • Tap "Thermostat ID" to display the thermostat ID that you can enter in your app.

Android Device

Apple Device

SWATT®

SWATT®

Only available for IPhone and Ipad

Connect to App

You can now name your thermostat and heating zone.

Your thermostat name helps you identify the exact thermostat such as kitchen.

The zone allows you to place the thermostat in a zone and then add addition thermostats to that zone such as living zone which includes thermostats in the hallway, kitchen and living room.

Wait until the confirmation screen appears on the Thermostat before confirming on both the thermostat and the app. This can take up to a minute.

This completes your wireless connection.

Remove from App

🛜 WiFi Connection
⊕ Connect to app
⊖ Remove from app ▪3
◀
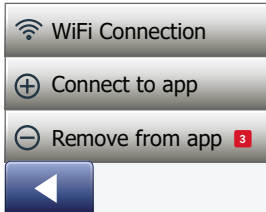
You can remove your thermostat from your app in the following way:

1. Tap the "Menu" button on the home screen.
2. Then tap the "App Control" button to access the app setup options.
3. Tap the "Remove from App" button to remove the thermostat.
4. Confirm with "✓".
5. A confirmation screen will be displayed briefly.
6. The thermostat will automatically return to the "App Control" menu.

Note that the thermostat cannot be removed from the app, until the connection is interrupted from the thermostat using this menu.

Using the App
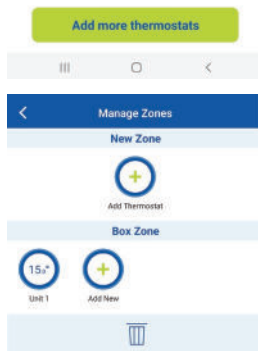
Adding additional Thermostats

You can add additional Thermostats immediately after adding your first Thermostat by tapping the "Add more thermostats" button at the bottom of the screen.

Alternatively you can add additional thermostats at any time by entering the menu located in the top right hand corner, select manage zones and select to either add a new zone (E.G. a family room with multiple thermostats) or add a new thermostat to an existing zone.

Using the App
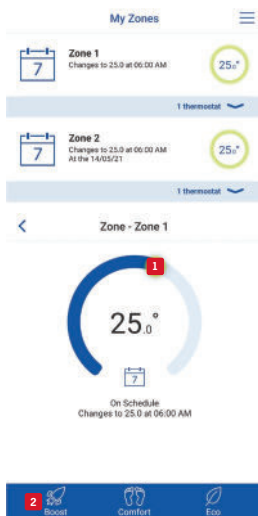
Controlling your thermostat

To control the mode of your thermostat, tap the required zone from the home screen of your app.

You can then adjust all of the thermostats on that zone or you can select each thermostat individually.

This will allow you to select between manual mode, boost mode, holiday mode and eco mode or return to your heating schedule.

1. To operate in manual mode press and hold the green circle on the dial and slide this to achieve your desired temperature.
2. To operate is boost, comfort or eco modes press the icon at the bottom of the app screen.

Using the App

Setting up your schedule

To set your heating schedule select the menu button in the top right-hand corner and select set up schedule.

3. If you have multiple zones, the various zones will be displayed; select your desired zone.
4. Depending on your daily settings you will have either 4 or 6 events showing each day. You can select the day that you wish to set your schedule for along the top of the screen.
5. The heating schedule can then be copied to your desired days through using the copy schedule button located at the bottom of the screen.

Using the App

Setting up your schedule continued

6. When setting your schedule begin with event 1 and tap the start time to adjust this. Select your desired on time.

7. Select the temperature to set your desired temperature.

8. Move on to set event 2, this would normally be considered the off time. You can turn this event on and off using the slide button located directly below the event name on the left hand side. This is turning that entire switching period either on or off not just turning on an off temperature.

Follow the above process to set all the desired times and temperatures for the various events.

9. This can then be copied to the various days of the week using the copy schedule button located at the bottom of the screen.

10. To save your schedule select OK located in the top right hand corner of the screen.
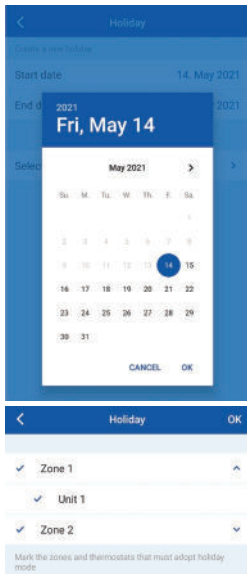
Setting Holiday Mode

To enter holiday mode select the menu button in the top right hand corner and select the holiday field.

Tap the start date to select your holiday start date and press OK to confirm.

Follow this same process to set the holiday end date.

Tap the select zones button to set the desired zones that you wish to be on holiday mode.

Tap OK to save.

Using the App

Thermostat Information

You can view a range of your thermostat settings on the app in the Thermostat Information tab. Select the menu in the top right hand corner, select your zone and select Thermostat Information.

This will display information regarding your thermostat. Open Window, Adaptive function and sensor settings all need to be adjusted via the thermostat settings.
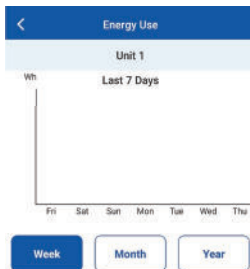
Energy Usage

You can also view a readout of your energy usage by the thermostat. Select the menu button in the top right hand corner and select energy use. Adjusting your energy usage information can be done on the thermostat. Refer to page 35.

Using the App
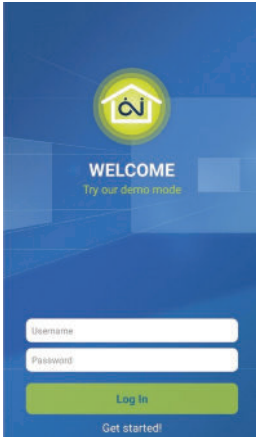
Adding multiple users to the thermostat

Each individual thermostat can only be connected to one account at any given time.

If multiple people want to be able to able to control the same thermostats i.e. Multiple family members controlling the same thermostats, they will need to log in under the same account that controls the thermostats.

Your account information can be found under the My Profile tab in the menu section on the app.

Factory Settings

Preset Temperatures:	
Operating mode	Factory preset temperature
Scheduled Operation	See Preset Schedule*
Manual Override	23°C*
Comfort Mode	23°C*
Boost Mode	Max °C ≤ Maximum Limit
Holiday Mode	5°C
Frost Protection	5°C

*You can change the settings for these temperatures to suit your needs – see Operating Modes in this manual.

Preset Schedule

Event Name	Event Start	Target/Setpoint Temperature dependent on "Sensor Application	
Work Days:		Floor	Room/Floor Limit
Wake up	6:00	25°C	20°C
Leave home	8:00	20°C	15°C
Daytime home*	12:00	25°C	20°C
Daytime leave*	13:00	20°C	15°C
Come home	17:00	25°C	20°C
Go to Sleep	23:00	20°C	15°C
Home Days:		**Floor**	**Floor**
Wake up	8:00	25°C	20°C
Go to Sleep	23:00	20°C	15°C

*Only available with 6-event schedule

Error messages:
If a fault or error occurs, the thermostat will display one of the following error messages:

E0: Internal failure. The thermostat is defective. Contact your heating engineer.
The thermostat must be replaced.

E1: Internal sensor defective or short-circuited. Contact your heating engineer.
The thermostat must be replaced.

E2: Check that a floor sensor has been installed and try switching the unit to ambient sensor.

E5: Internal overheating. Contact your heating engineer in order to have the
installation inspected.

Three circles containing dots are displayed on the screen; the thermostat cannot be operated.
The thermostat is in "Child Lock" mode. To unlock connect the dots in an L shape patten and refer to page 37 for how to disable.

Internal sensor fault (E1)	External wired floor sensor fault (E2)	Internal overheating. Heating is shut off (E5)	⦿ ⦿ ⦿

Why does a specific function not work in a specific mode?

Not all functions are available in all modes or make sense in all modes.

Mode vs Function	Scheduled Operation	Manual	Boost	Comfort	Frost Protection	Holiday	Eco
Open Window Detection	Yes	Yes	Not available	Yes	Not available	Not available	Not available
Floor Comfort Override Sensor Application	Yes	Yes	Not available	Yes	Not available	Not available	Not available
Eco Function	Changes the home screen to display the Eco button instead of manual	Not available	Not availablew	Not available	Not available	Not available	Not available

I can't connect to my Wi-Fi network	
Possible causes	Solution
Insufficient Wi-Fi signal	Try connecting another device, such as your mobile phone, to your wireless network. Stand next to your Wi-Fi Thermostat, and access your phone's wireless network settings. If the wireless network signal cannot be detected by your phone, or it is very weak, other devices may also have trouble connecting to the network from that area of your home. You may be too far away from your Wi-Fi router, or there may be a problem with it. If you are too far away from your Wi-Fi router, you can purchase a Wi-Fi signal repeater which will improve the range of the Wi-Fi signal in your home for all devices or try moving the router closer to the thermostat.
Manual Override	Some Wi-Fi routers limit the number of wireless devices that can connect to the Internet. To test whether this is the problem, shut down one of the other Wi-Fi-enabled devices in your home. Once that device is completely shut down, try once again to connect your Wi-Fi Thermostat to the network. If the Wi-Fi Thermostat connects successfully, consult the documentation for your access to find out if you can increase the number of simultaneous connections to your Wi-Fi network.
Other devices are interfering with the wireless signal	Try turning off other wireless devices (Bluetooth, Wi-Fi, wireless phones/cameras) that may cause interference, then test the Wi-Fi Thermostat's network connection.
You have entered the correct SSID and network key, but connection cannot be established.	Please check the router manual for additional help on troubleshooting.

I can't connect to my Wi-Fi network	
Possible causes	Solution
Your Wi-Fi router does not match the technical requirements supported by the Thermostat Wi-Fi module	The Wi-Fi router has to match the technical specifications supported by the Thermostat Wi-Fi-module: • Wireless standard: 802.11 b/g/n • Security Mechanisms: WPA-PSK/WP A2-PSK • Encryption: TKIP/AES • Frequency range: 2.412GHz-2.484GHz Please check your router manual to confirm this. Also make sure that no firewalls are blocking the communication from the thermostat to the Internet (port 9513).
Your Wi-Fi router has insufficient security	With so many home devices now connected to the Internet, we want to make sure that your Wi-Fi Thermostat is connected to a secure network so that hackers cannot gain control of devices in your home. Wi-Fi routers utilize two main types of protective encryption: WEP and WPA. WEP is the original form of encryption and it offers very little security. Hackers can very easily break into your wireless network if your router is set up for WEP encryption. WEP encryption was replaced with WPA encryption in 1999 and WPA2 in 2006. WPA is a security protocol that makes it much more difficult to break into networks. Your Wi-Fi Thermostat currently supports WEP, WPA and WPA2 encryption. If your router was manufactured after 2003, you should be able to change the setting from WEP to WPA by following the guide in the link: (http://www.tech-faq.com/how-to-change-wep-to-wpa.html). Your Wi-Fi Thermostat can still control your floor heating system without wireless network connection. As the best course of action, OJ Electronics recommends that you upgrade your security settings to properly protect your network from hackers. If that is not possible, contact your network administrator.

| I can't connect to my Wi-Fi network	
Possible causes	Solution
Maybe your Wi-Fi router requires a restart/reboot	The problem might be with your router (even if your other wireless devices are still connected). A simple restart of the router will usually resolve such problems. While most routers simply have to be unplugged and then plugged back into their power source to restart them, you should refer to your router's documentation for specific instructions.
Maybe your Wi-Fi router firmware needs to be updated	Contact the router manufacturer for instructions on how to update the firmware.
Maybe your Wi-Fi Thermostat has to be reset	Reset your Wi-Fi Thermostat. For details on how to do this, please consult the "Factory Reset" section in this manual. Note! This action cannot be undone, and all your personal settings will be lost.
Maybe your thermostat has lost its Wi-Fi connection	In the following situations, you have to re-establish the Wi-Fi Connection from the thermostat: If you have performed a factory reset. If you have changed the settings of your Wi-Fi router, or if you have replaced your Wi-Fi router.

| I can't connect to my Wi-Fi network	
Possible causes	Solution
$((\cdot))$ $((\cdot))$	Show in Home screen
	Black icon: Connected to server
	Grey icon: Not connected to server
	Not connected to Wi-Fi router
	No icon displayed: No Wi-Fi configuration

Technical Information

WIRING DIAGRAM

1. 220-240 AC Supply Neutral
2. 220-240 AC Supply Live
3. Underfloor Heating Live (Load L)
4. Underfloor Heating Neutral (Load N)
5. X. Do not connect
6. Sensor connections (no polarity)
7. Sensor connection (no polarity)
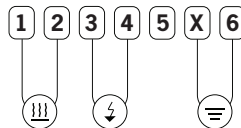
BOX CONTENTS

1 x 5235W Thermostat
1 x Mounting Plate
1 x Fixing Bracket
1 x Installation Guide
1 x 3m Sensor probe
1 x 2m Sensor Conduit
2 x Fixing Screws
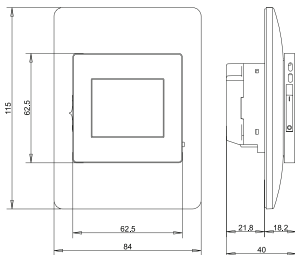
TECHNICAL DATA

Supply voltage	220-240V 50/60Hz
Maximum load	16A
Temperature range	5 ~ 40°C
Compatible sensors	6.8kΩ, 10kΩ, 12kΩ, 33kΩ, 47kΩ (@25°C)
Accuracy	±0.5°C
Warranty	3 years
IP rating	IP21
Width	84mm
Height	115mm
Depth	40mm (22mm in wall)
Wi-Fi	IEEE 802.11 b/g/n - 2.4GHz
Display	176x220 pixels TFT - resistive touch
Backup Storage	5 Years

Service and Support

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AUSTRALIA

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▶ Watch the video guide on our website
www.thermogroup.com.au

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