ecostrad

INSTRUCTION MANUAL

Ecostrad iQ WiFi
Heating Element

PLEASE READ AND SAVE THESE INSTRUCTIONS

CE UK CA

Symbols

⚠ Warning

This symbol indicates a hazard with an average risk level which, if not avoided, could result in serious injury or death.

⚡ Warning of electrical voltage

This symbol indicates danger to the life and health of persons due to electrical voltage.

♨ Hot surface

This symbol located on the device indicates that its surfaces are hot during and immediately after operation. Hot surfaces should not be touched: danger of burns.

📖 Observe instructions in manual

This symbol located on the device indicates that instructions in the operating manual must be observed when installing and using the device.

Contents

1 | Warnings & Precautions

Read this manual carefully before using or installing the heating element. Always store the manual in the immediate vicinity of the element or its site of use.

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire, serious injury, or all of the above. Save all warnings and instructions for future reference.

⚠ Warning

Children of less than 3 years should be kept away unless continuously supervised. Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years and less than 8 years shall not plug in, regulate, or clean the appliance, or perform maintenance.

⚠ Warning

Do not use the device in enclosed spaces if persons are present who cannot leave the room independently and are not under constant supervision.

⚠ Warning

In order to avoid a hazard due to inadvertent re-setting of the thermal cut-out, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.

⚠ Warning

Some parts of this product can become very hot and cause burns. Do not touch the surface when in operation. Do not install close to curtains or other combustible materials. Particular attention should be given where children and vulnerable adults are present.

- Fluid-filled towel rails or radiators for space heating and towel drying are the only suitable appliances in which to install the element.
- The element must NEVER be used unless it has been professionally installed inside a radiator or towel rail filled with fluid to the correct level. The element will cease functioning if it is not fully submerged in a suitable fluid during operation.

- The element is designed for use in horizontal or vertical radiators, or vertical towel rails. Use in horizontal towel rails is not recommended because the long horizontal bars can impede heat circulation.
- It is imperative that the towel rail or radiator intended for use with the radiator has the correct volume of fluid. The recommend quantity of fluid with the radiator or towel rail is 90% of the unit's total volume. If you are installing the element in a radiator or towel rail that has been pre-filled for use with this element, do not allow fluid to escape when the element is fitted. In the case of loss of heating fluid, contact your supplier.
- The element must be installed by a licensed electrician in accordance with current IEE wiring regulations.
- The element must be connected to a 220-240 Volt AC mains power supply via a fused spur cable outlet, and must be earthed.
- The element is a Class I unit and therefore must always be earthed.
- Ensure the element's power cord does not touch the hot parts of the device or the radiator.
- Do not use the device if you detect damage to the mains plug or power cable. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard. All repairs and servicing must be carried out by a qualified person.
- The towel rail or radiator in which the element is installed must be permanently fixed to the wall. Do not fit the radiator below or in front of an electric socket.
- The element can be installed in bathrooms in Zone 1, as defined by applicable law, subject to any additional regulations concerning electrical installations in wet areas.
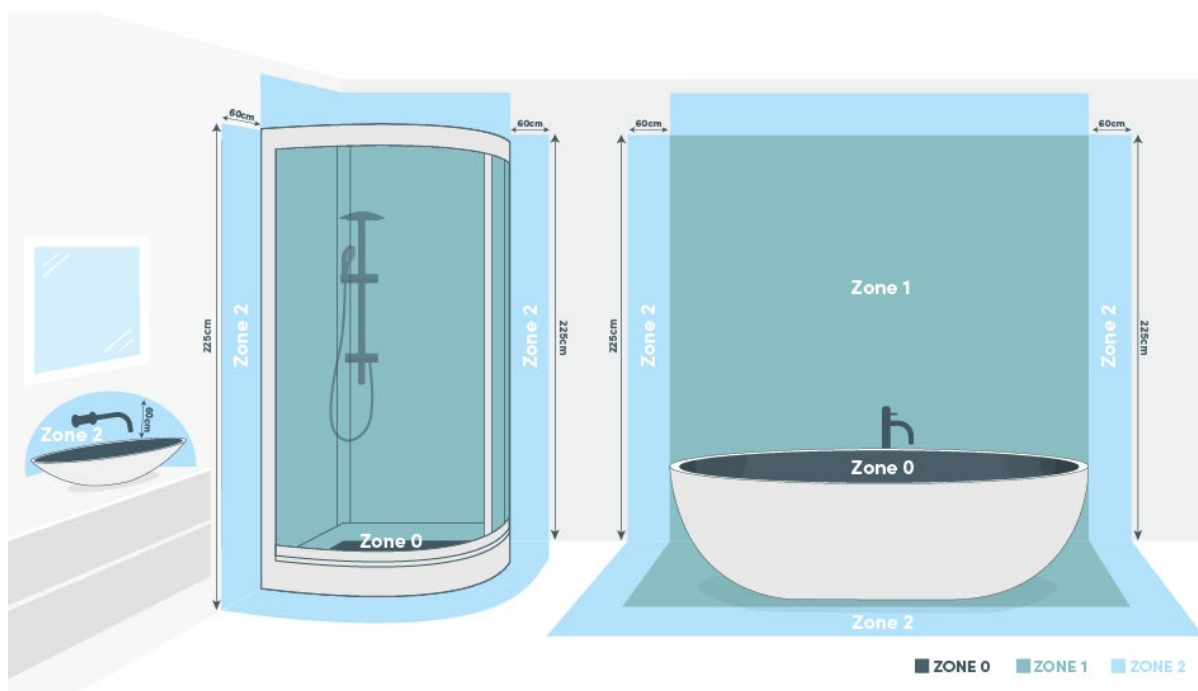
- The element must be placed where the switches and controllers cannot be touched by a person in a bathtub or shower.
- The element must be disconnected from the mains during cleaning and maintenance.
- Never attempt to disconnect the control head from the heating element. The product is an integrated unit that has been factory sealed.
- Do not open the element — any interference with internal components will invalidate the warranty.
- Towel rails or radiators fitted with the element can be very hot and can cause burns. Pay special attention when used in the presence of children or people with disabilities.
- If the radiator or towel rail is used to dry clothing or towels, ensure the fabrics have only been washed in water, to prevent the device coming into contact with harsh chemicals.
- Do not allow children to play with the element. This appliance is not a toy.
- The unit is not to be used by persons (including children) with reduced physical, sensory or mental capabilities. Such persons may only use the device if they are supervised by a responsible person.

2 | Technical Information

| Voltage	220–240V AC / 50Hz
Wattage	100–1200W
Temperature setting	
Room Temperature	7–30 °C
Internal Temperature	30–70 °C
IP rating	IPX4
Appliance class	Class I
Power cable length	1.5m
Thread size	G ½ "

3 | Installation

These are general-purpose instructions for fitting your element into a suitable radiator or towel rail. Always check with the radiator manufacturer to ensure the product is suitable for use with the element, and follow any additional installation guidance provided with the unit. Installation must be completed by a qualified electrician. Do not attempt installation DIY.

WARNING – Do not attempt to operate the element before it has been installed in a fluid-filled radiator or towel rail. Switching on the element in an empty radiator or in open air will cause the element to cease functioning.

3 – 1 | Fitting Instructions

1. Read all safety instructions and warnings stated in the preceding section of this manual. Failing to follow these instructions can cause damage to life or property.

2. Identify the inlet where the element will be fitted in the radiator or towel rail. For vertical models, the element is fitted vertically, entering at the bottom of the right-hand vertical strut. For horizontal models, the element is fitted horizontally, entering sideways through the lowest horizontal strut. Never fit the element at the top of a radiator or towel rail.
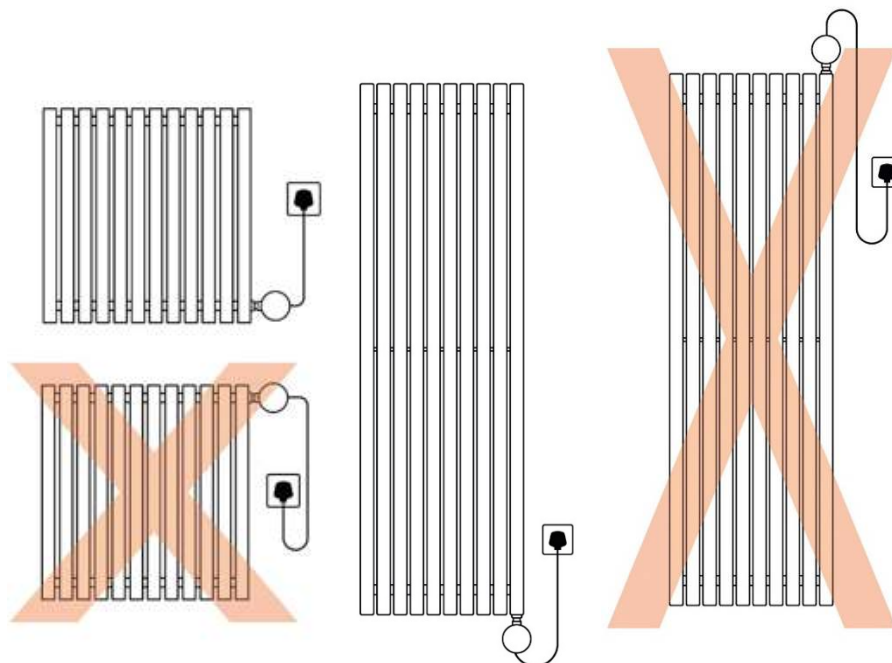
3. Tilt the radiator until the fitting location is at the highest point. This prevents any fluid escaping if your radiator is pre-filled.
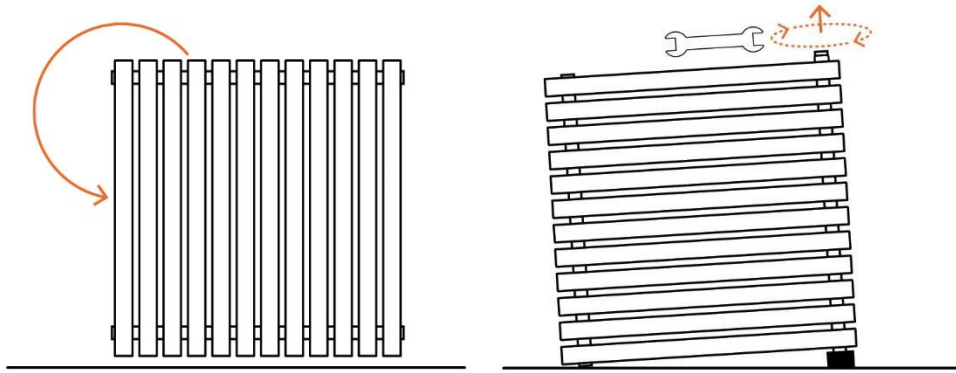
4. Remove the cap from the inlet and push the heating element into the radiator.

5. Tighten the element at the main nut, using a size 22 spanner. Ensure the rubber O-ring, above the main nut, makes a firm seal between the radiator and the element. This prevents leakage after installation.
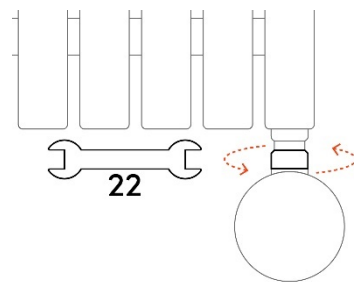
NOTE – Never attempt to tighten the element by twisting the control head or product housing. Always use the correct tools as directed in the instructions.

6. If the radiator has been pre-filled by the manufacturer, skip to the next step. If the radiator is yet to be filled, tilt the radiator so the next free filling cap is at the highest point. Remove the cap and fill the radiator to 90% of its volume with a suitable heating medium. This should be a glycol-based formulation approved by the radiator manufacturer. Replace cap when done.

Air cushion: 10% of unit volume at room temperature
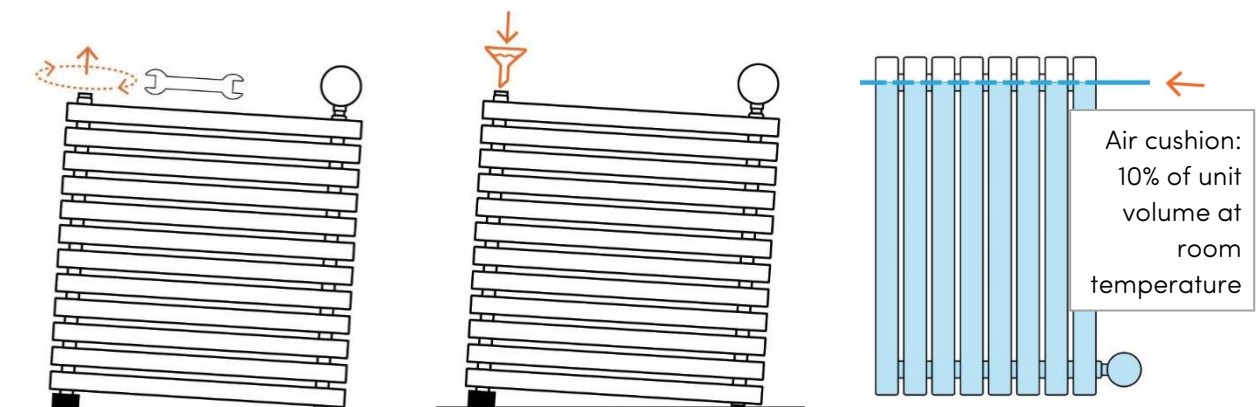
NOTE – It is critical that the correct volume of heating medium is used. Underfilling the radiator will impede circulation and prevent the unit from heating up. Overfilling the radiator can cause a dangerous build up of pressure as the fluid heats up. A suitable air cushion must be maintained. Calculating the volume of heating medium is a job for a professional

electrician or heating engineer and should not be attempted DIY. If unsure, use the element only with a pre-filled radiator.

7. Rotate the radiator to its correct orientation and hang on the wall, according to the instructions provided with the unit.

8. Connect the element electrics in accordance with the guidance below. This step must be completed by a qualified electrician.

   a. Brown wire – live connect to the circuit.

   b. Blue wire — connect to neutral.

   c. Yellow & green wire — connect to earth.

4 | Control Dial

4 – 1 | Display

The touchscreen control dial features a backlit LCD display. The backlight engages when any key is pressed, and times out after a minute not in use.

Guide to symbols

	☀	☾	🕒	⌂	🗏	📶	🔒
Steady	Comfort	Eco	Program Mode	Room Temperature Mode (Not heating)	Radiator Temperature Mode (Not heating)	Connected to WiFi	Keypad locked
Flashing				Device is heating	Device is heating	No connection	

4 – 2 | Standby Mode ⏻

In standby mode the time is displayed and the element does not heat. You can use the ⏻ button to switch between standby and the heating modes. When the element is first switched on, the time will appear as 00:00. The display will update to the correct time when the element is connected to the app.

4 – 3 | Heating Modes

Tap the ⏻ button to switch the element on. Tap ⚙ to switch between modes. The icon on the display will change accordingly, browsing through: Comfort ☀, Eco ☽, Program ⏰, and Radiator ☰ mode.

4 – 3 – 1 | Comfort Mode ☀

When the ☀ and 🏠 icon display on the screen, you are in comfort mode. In this mode, the element controls the room temperature and heats to a constant set temperature. The external thermostat measures the ambient temperature and instructs the element to heat or stop heating according to the temperature set. When heating, the 🏠 symbol flashes; when not heating, the 🏠 symbol is fixed.

The temperature displayed is the set temperature. Set temperature range is 7–30 °C and can be adjusted using the ⋁ and ⋀ buttons. You can check the current room temperature when you are connected to the app.

The temperature set in comfort mode also applies to comfort intervals when they occur in program mode.

4 – 3 – 2 | Eco Mode ☽

When the ☽ and 🏠 icon display on the screen, you are in eco mode. Just like comfort, in this mode the element heats to a constant set room temperature. However, eco mode is designed to be set to a lower temperature, providing a low-heat, energy-saving alternative for when you are sleeping or out.

Set temperature range is 7–30 °C and can be adjusted using the ⋁ and ⋀ buttons.

The temperature set in eco mode also applies to eco intervals when they occur in program mode.

4 – 3 – 3 | Program Mode ⏰

When the ⏰ icon and current time display on the screen, you are in program mode. In this mode, the element follows a user-

customisable program. You can modify the program when you connect to the element with the app. See section **6-3-2** for full instructions. It is not possible to set the program via the control dial.

The program consists of 24 hourly slots for each day of the week which can be set to either comfort ☀ or eco ☽ mode. When a comfort or eco interval is running in program mode, the display will show ☀ or ☽ accordingly, and the element will heat the room to the temperature set on the corresponding mode. If you put the element in program mode when you have not yet connected to the app, the element will follow the default program: eco mode for every interval.

4 – 3 – 4 | Radiator Mode ▤

When the ▤ icon displays on the screen, you are in radiator mode. In this mode, the element controls the radiator's internal temperature and heats to a constant set temperature. The internal thermostat measures the temperature of the heating fluid and instructs the element to heat or stop heating according to the temperature set. When heating, the ▤ symbol flashes; when not heating, the ▤ symbol is fixed.
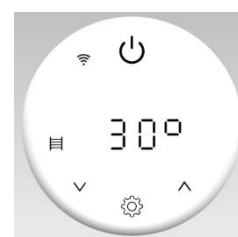
The temperature displayed is the set temperature. Set temperature range is 30–70 °C and can be adjusted in steps of 5 °C using the ∨ and ∧ buttons.

Timer Function

Radiator mode also incorporates a timer function. When the timer is set, the element will heat to the set internal temperature for the time period selected. When the period ends, the element will switch to standby mode and cease heating.

When the timer is running, the element displays the remaining time, rounded up to the nearest hour, instead of the set temperature. Set timer range is 0 – 8 hours, in steps of one hour, and can be adjusted as below:

- Hold down the ⚙ button until the display shows "2H".

- Use the ∨ and ∧ buttons to set timer period.
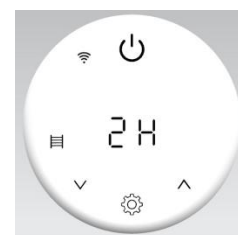
If you need to cancel the timer, you can either press ∨ until the display says "0H", or use the ⚙ button to cycle through the modes until the ▤ icon displays again. The element will resume heating to a constant temperature indefinitely.

4 – 4 | Child Lock 🔒

Press and hold the ∨ and ∧ keys for 5 seconds to lock the display. The 🔒 icon will appear and all keys will be locked. To unlock, repeat this process, and the 🔒 icon will disappear.

5 | Connecting to WiFi

5 – 1 | Downloading the App

The element is designed to work with the Smart Life app.

Scan the code below to go to the app. Press install and follow the app's instructions to create an account.

NOTE – The Smart Life app is a constantly evolving third party system. This guide was correct at time of printing but may differ slightly from future versions. The app is designed to work on Android or iOS but older software versions may affect app presentation and performance.

5 – 2 | Connecting to the App

1. On the home page of the app, press + or "Add Device".

2. Select auto scan from the top navigation.
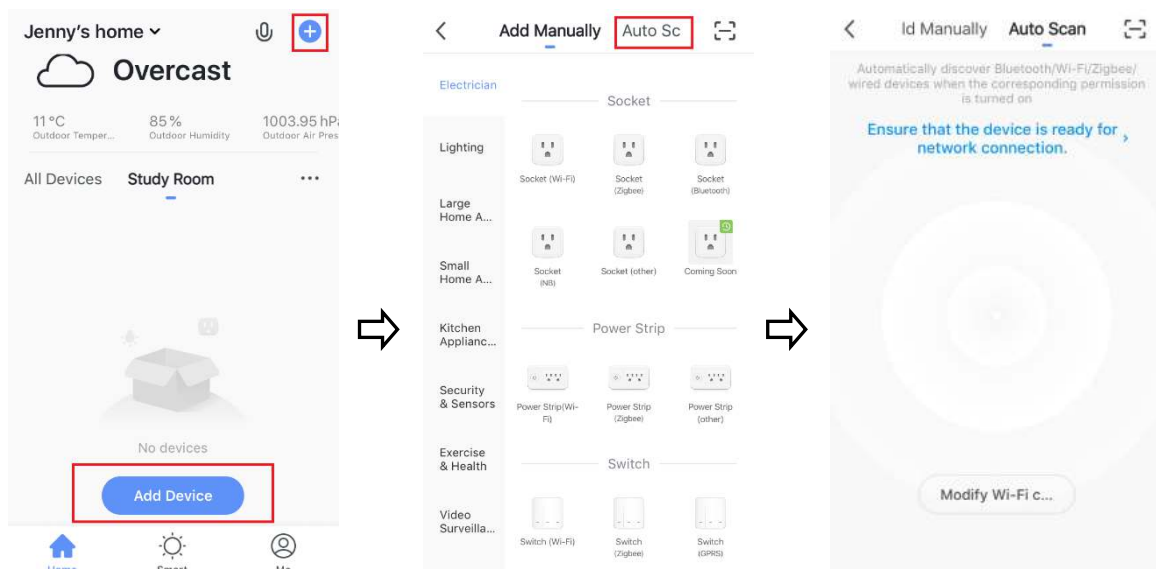
3. Put the element into standby mode by pressing the ⏻ key.

4. Hold down the ⚙ button to activate pairing mode. The display will begin a countdown from 99, giving you 99 seconds to complete the connection.

5. The app will demonstrate that it has found the element. Press "Next".

6. The app will ask you to choose your WiFi network and enter the password. Press "Next".
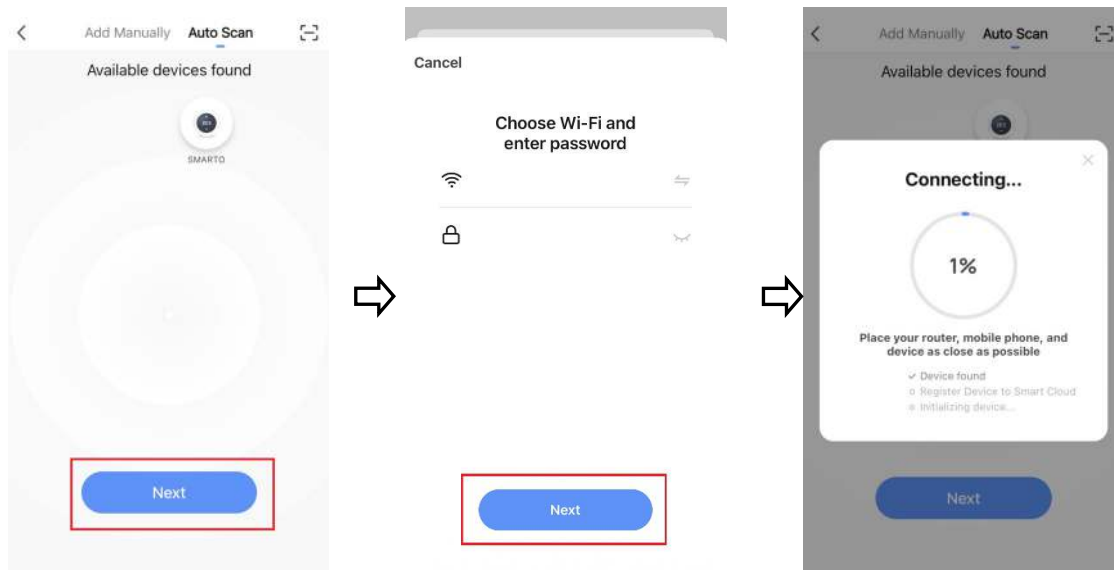
7. The element will begin connecting. When it is successfully added, the word "PASS" will show on the display and the element will appear as below on the app. Press ✎ to change its name or "Done" to return to the home screen.


Troubleshooting

If the element does not connect on the first attempt:

- Make sure both the element and your smart device are in range of your router.

- Make sure you complete the connection process in 99 seconds. If the display reaches the end of the countdown, it will show "FAIL" on the display, and you must begin the process again.

- Ensure your router has a strong internet connection.

- Ensure WiFi and Bluetooth are enabled on your smart device.

- Make sure the app has registered successfully.

- Make sure your smart device is connected to the same WiFi network as that to which you are attempting to connect the element.

- Ensure you are connected to a 2.4G WiFi band. See instructions within the app if you are currently connected to a 5G band.

- Check any local restrictions on your WiFi. WiFi networks in public places such as hotels and airports may require extra identification steps.
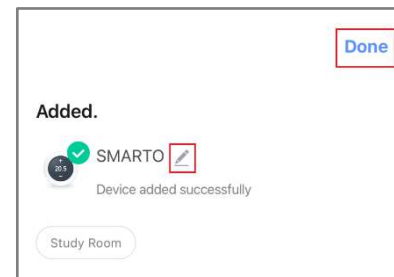
6 | Using the App

NOTE – The Smart Life app is a constantly evolving third party system. The guide below was correct at time of printing but may differ slightly from future versions.

6 – 1 | Home Overview

You can use the Smart Life app to control multiple devices. All devices are displayed on the home screen with their status.
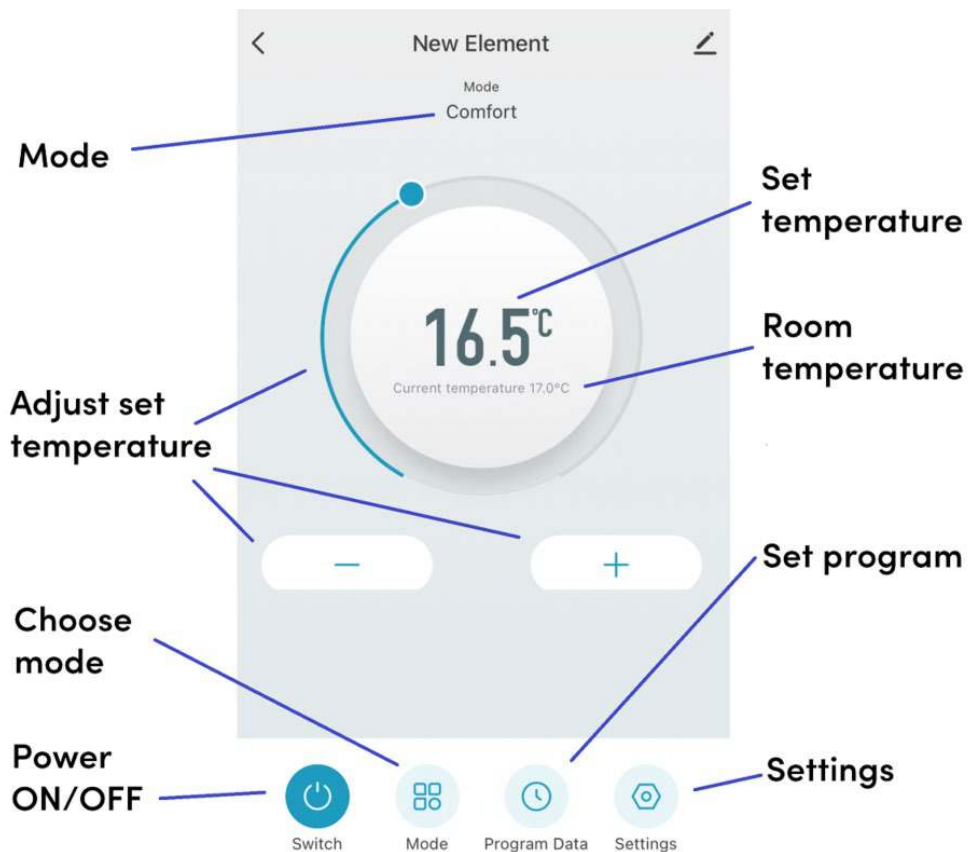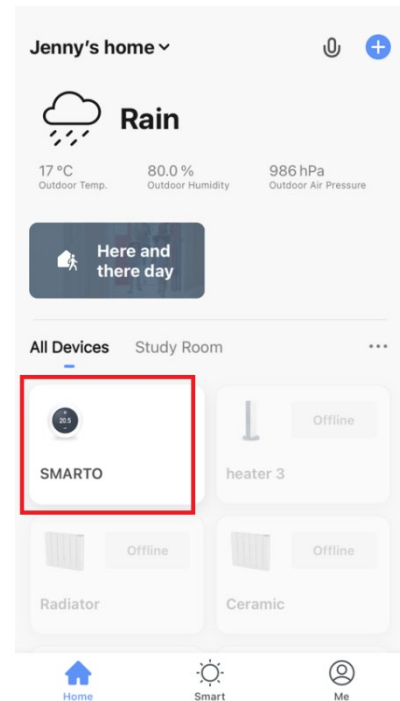
Possible statuses:

- Online – Heater will respond to app commands.

- Offline – Device is turned off at wall or power switch. It cannot be controlled by the app.
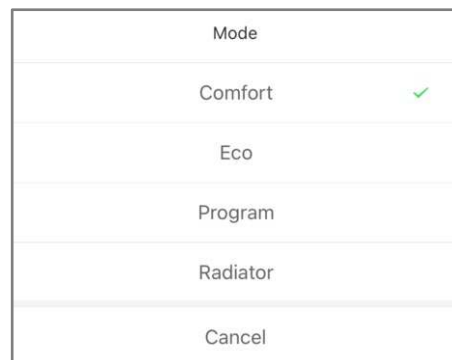
6 – 2 | Control Interface

Tap the heater listing to go to the control interface.

Here you can turn the element off and on, adjust set temperatures, choose mode and access weekly programmer and device settings.

6 – 3 | Choose Mode

Tap the mode icon ⊞ on the control interface to choose mode. The four options correspond to the five modes on the control panel.

6 – 3 – 1 | Comfort & Eco Mode

In comfort and eco mode, simply use the sliding dial or the – and + keys to adjust the set temperature.

6 – 3 – 2 | Program Mode

Tap the program data 🕐 icon on the control interface to configure a program.

The program consists of 24 hourly intervals for each day, which you can set to Comfort or Eco temperature.

Tap the interval to choose Comfort (yellow bar) or Eco (green bar). You can drag the start and end times of each mode block to make setting your program quick and easy.
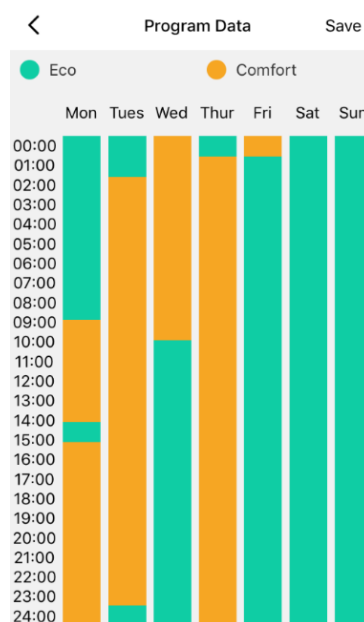
NOTE – your set program will only run in program mode.

6 – 3 – 3 | Radiator Mode

In radiator mode you can adjust the set internal temperature and set an optional timer.

As the timer counts down, the slider will shift through the time remaining, rounded up to the nearest hour. Once the time elapses, the interface will switch automatically to standby mode.

Adjust set radiator temperature

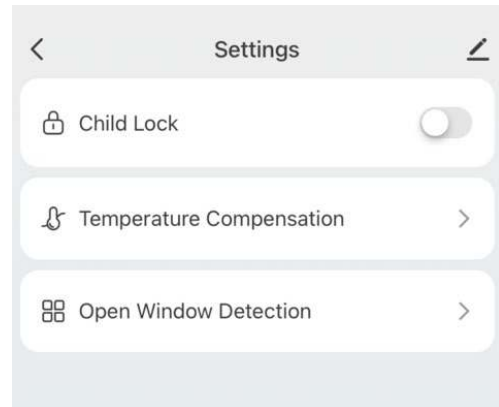Set timer
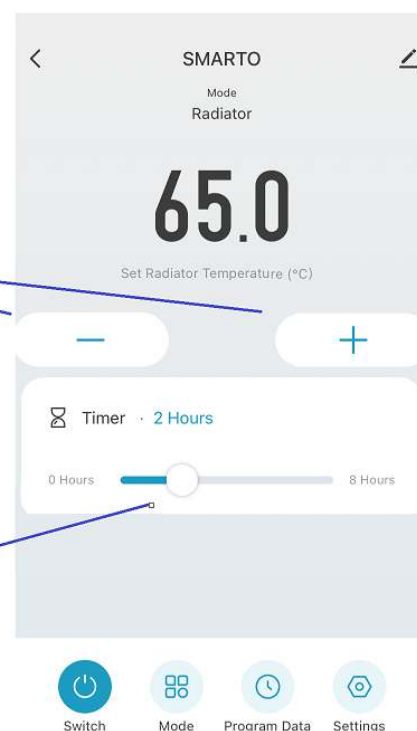
6 – 4 | Device Settings

Tap the ⊚ icon to view and adjust the element's settings. This menu allows you to configure several settings not available through the control dial.

Tap the ✎ icon for settings that relate to the element's listing on the app, including its name, any automations it is included in, and the quality of its network connection.

6 – 4 – 1 | Child Lock

Use the toggle switch to lock or unlock the element display.

6 – 4 – 2 | Temperature Compensation

You can adjust the temperature compensation in steps of 1 °C, from –5 °C to 5 °C. The default temperature compensation is 0 °C.

This setting allows users to adjust for any discrepancy between the average room temperature and the temperature sensed by the element thermostat. For instance, if the temperature in the room is 18 °C, but the thermostat senses 16 °C, a compensation factor of +2 °C will offset the difference.

The accuracy of the element's temperature reading can be affected if the unit is mounted such that the sensor is positioned in a hot or cold spot – e.g., near hot water pipes or in a draughty doorway. The sensor is the short probe on the reverse of the control dial.

6 – 4 – 3 | Open Window Detection

There are three options for the open window detection function: OFF, 60 minutes and 90 minutes. Open window detection is enabled by default.

Open window detection is an energy-saving feature designed to cut power to the unit if a window is opened. If the thermostat detects a sudden drop in temperature (2 °C or more within 5 minutes), the element will switch to an anti-freeze state where it only heats if the temperature drops below 7 °C. This helps prevent loss of energy as heat escapes through the window.

The element remains in this state until the time set (60 or 90 minutes) has elapsed, whereupon it will resume heating according to its previous settings. If the temperature drops again, the cycle begins again.

The control dial will display "OPEN" when the open window function is triggered.

7 | Warranty

The Ecostrad iQ WiFi element carries a 2-year guarantee. Within the stated period, starting from the date the customer receives their unit, Ecostrad guarantee to repair or replace the unit where a fault is due to defects in materials or manufacturing.

The warranty does not cover any defect arising from damage, negligence, usage outside the product's intended purpose or fair wear and tear. The warranty is only valid when the unit has been used at the specified supply voltage, and in accordance with all conditions specified in this manual. The warranty will be void if the element has been tampered with or opened in any way; if it has been used in open air, or in an unsuitable vessel; or if the ratings label has been removed.

The warranty does not cover failures and faults due to force majeure, accidental damage, mishandling, external impact, chemical agents or atmospheric phenomena, incorrect use of the device, the purchaser's faulty electrical installations, transporting the device or problems caused by the device being handled by persons not authorised by Ecostrad. The element is not a DIY product; an invoice may be required to confirm installation was carried out by a qualified professional. Ecostrad cannot accept responsibility for damage, loss or injury caused by incorrect installation, maintenance, cleaning or covering the device.

The warranty is a contract with the original purchaser and does not transfer if the unit is re-sold, gifted or inherited. Proof of purchase, including order number and order confirmation or invoice, will be required if a claim is made.

The warranty covers only the model shown on the purchase invoice. The warranty covers the repair or replacement of the defective product only and Ecostrad shall have no liability for installation costs or consequential losses however incurred. Claims must be made with the establishment where the device was purchased. This warranty does not affect the customer's consumer rights.

8 | Disposal

In accordance with WEEE Directive 2012/19/EU, the icon with the crossed-out waste bin on electrical or electronic equipment stipulates that this equipment must not be disposed of with household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your local authority.

The separate collection of waste electrical and electronic equipment enables the re-use, recycling and other forms of recovery of waste equipment, and prevents any negative effects for the environment or human health caused by the disposal of hazardous substances potentially contained in the equipment.