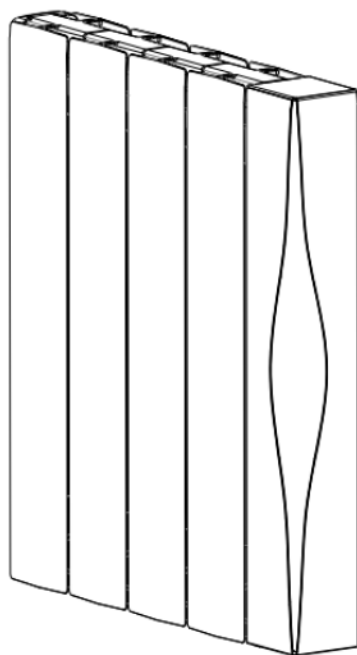




## INSTRUCTION MANUAL

### **rioECO Ceramic Core Energy Efficient Smart Electric Radiator**



# PLEASE READ AND SAVE THESE INSTRUCTIONS

## **SYMBOLS USED IN THIS MANUAL:**

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### **Warning**

This symbol indicates a hazard which could result in serious injury or death if not avoided.



### **Warning of electric shock hazard**

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



### **Do Not Cover**

This symbol indicates that nothing (e.g. clothes, towels, curtains etc) should be placed directly on, above, in front of or below the device, due to risk of overheating and fire hazards.



### **Hot surface**

This symbol indicates that the radiator's surfaces are hot during and immediately after operation. Do not touch the surface when in use or cooling down due to danger of burns.



### **Observe instructions**

This symbol indicates that the operating manual instructions must be read and observed when installing and using the radiator.


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# 1. WARNINGS AND PRECAUTIONS

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 Please read these instructions carefully before using or installing the radiator. Failure to follow the warnings or instructions could result in electric shock, fire, serious injury or all of the above. Always store the instruction manual in the immediate vicinity of the radiator or its site of use.

## Warning

- This appliance must only be operated by adults. Children should always be supervised when in the vicinity of the radiator.
- To avoid overheating, do not cover the radiator. 
- Ensure the appliance is fitted according to the installation instructions, obeying the minimum safety distances from walls and objects. 
- Some parts of this product can become very hot with use and cause burns. Do not touch the surface when in use. Particular attention must be paid where children and vulnerable adults are present. 
- The appliance is for indoor use only. It must be kept a minimum distance of one metre from flammable objects and materials e.g. curtains.
- Do not use this appliance with a programmer, timer, separate remote control or any device that automatically switches the heater on, due to risk of fire or damage.
- Do not use the appliance if you detect any damage to the mains plug or power cable. In the event of damage to the supply cord, it must be replaced by the manufacturer, a service agent or a similarly qualified person  only.
- The appliance must be installed in a fixed, upright position in accordance with national installation rules. Ensure the power cable is kept away from all hot parts of the appliance.
- All repairs and servicing must be carried out by a qualified professional. Repairs must be completed by the manufacturer, a service agent or a similarly qualified person.
- Do not locate the appliance immediately below an electrical socket outlet. 
- The heater must not be used in the immediate surrounds of a bath, shower, swimming pool, or any other water container, due to risk of electric shock. The device must not be used with wet or damp hands.
- This device is not weight-bearing. Do not sit on it. Never insert fingers or any other object into the device due to risk of injury or electric shock.

## 2. TECHNICAL SPECIFICATIONS

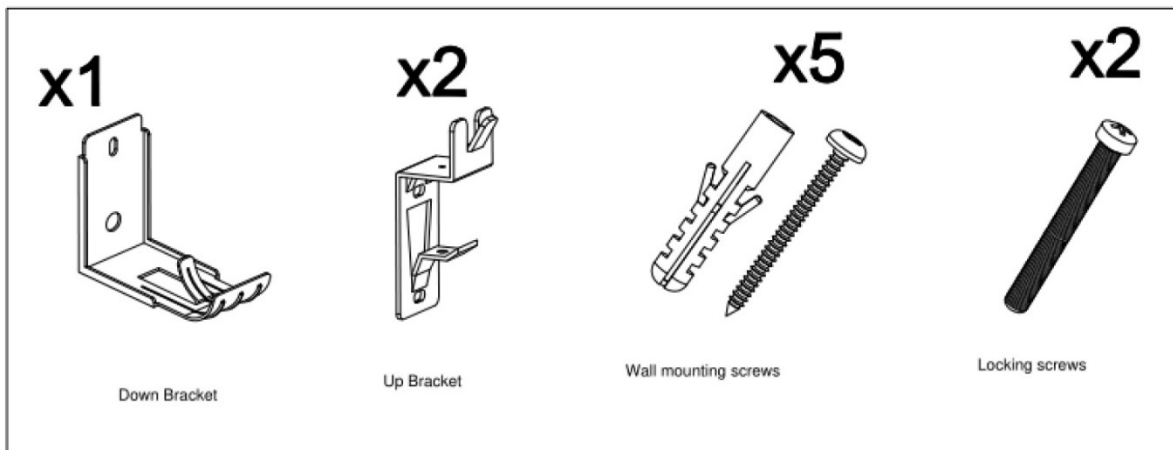
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Heating Element	Ceramic core
Power	230V~ / 50 Hz
Wattage	1000W, 1500W, 2000W
Temperature Setting <ul style="list-style-type: none"><li>- Range</li><li>- Minimum temperature setting value</li></ul>	7 – 30 °C 0.5 °C
Appliance Class	Class II

## 3. INSTALLATION

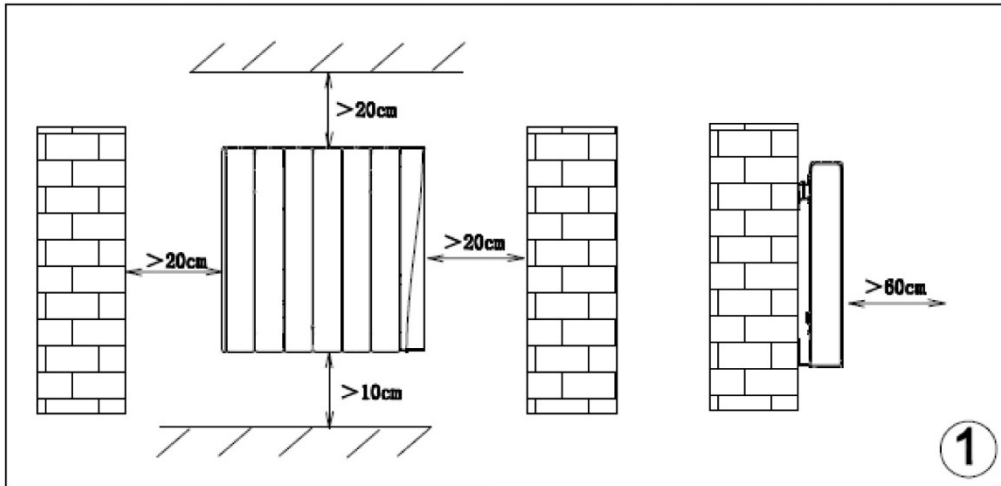
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Before installing the radiator, please ensure that all fixings are supplied, as per diagram below. Only fixings provided by the manufacturer should be used to mount the device to the wall.

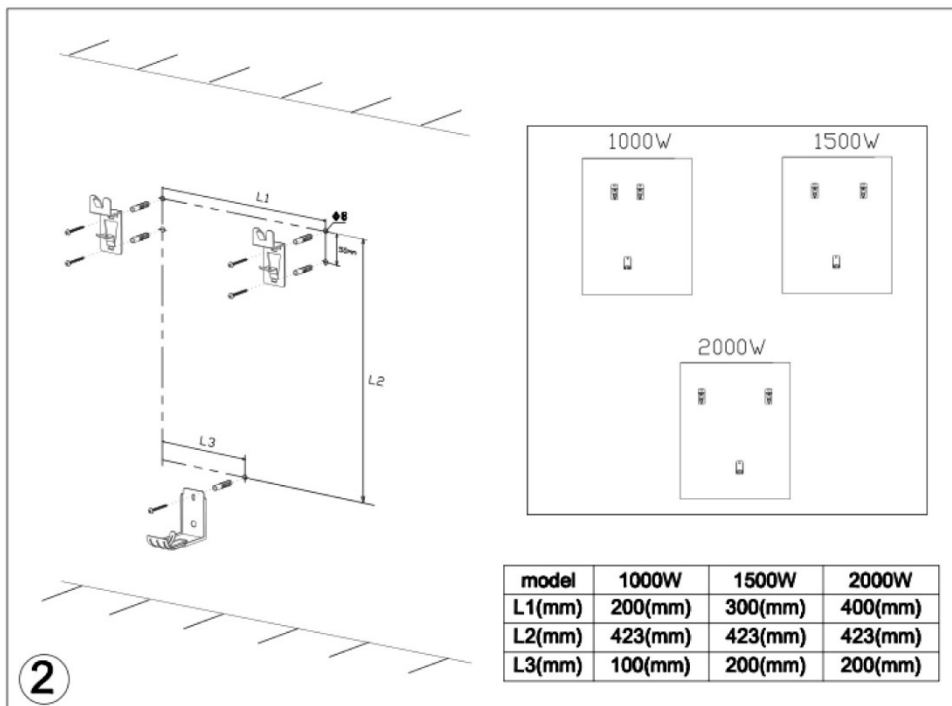


**⚠ CAUTION: Appliance must be correctly and securely fixed to the wall before being switched on.**

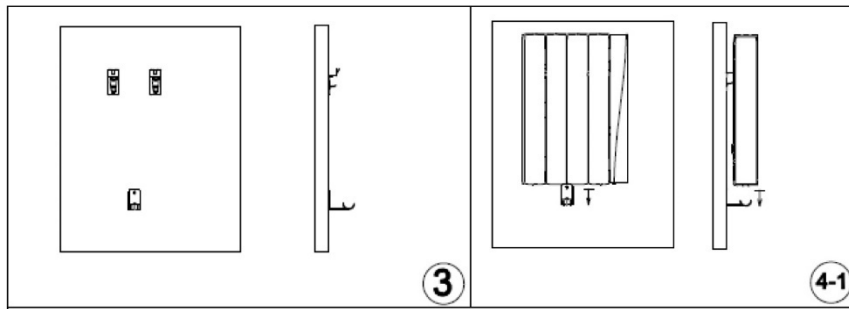
1. Decide where to mount the radiator on the wall, ensuring that it is positioned in accordance with the required minimum distances from surrounding walls, ceilings or fixed objects shown in the diagram below. I.e. at least 10cm from the floor, 20cm from the top, 20cm from the sides and with at least 60cm space in front. Failure to adhere to these distances could cause the device to overheat or result in damage to surrounding objects and surfaces.



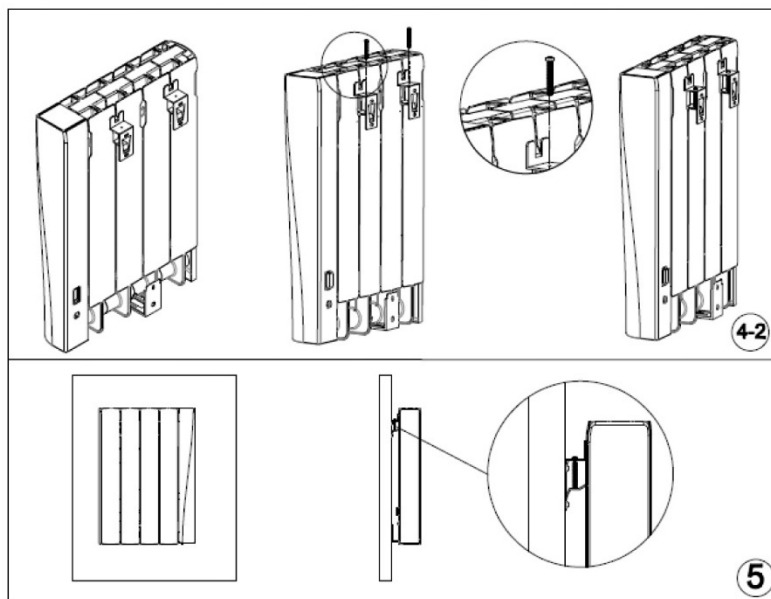
- Place the template against the wall and mark the locations of the 5 drill holes required for your product size. Before drilling, ensure there are no pipes, electric cables or other hazards. Once drilled, fit the wall plugs into the 5 holes and fix the brackets in place with the wall mounting screws, as shown in the diagram below.



- Now it is time to mount the unit into place. Carefully lift the appliance and slide the struts of the upper brackets into the grooves, then lower the appliance so it locks into the lower bracket on the wall.



4. Now feed the locking screws into the upper brackets, to secure the unit in place, as pictured below:



## 4. OPERATING INTRUCTIONS

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### 1. Power Switch

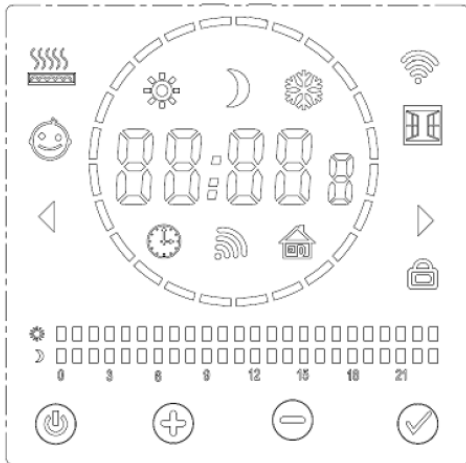
Before first use, the radiator must be switched on at the mechanical switch at the back of the unit. This switch must be kept in the ON position for the radiator to remember its set times and programmes.



## 2. Display

The appliance features a lockable touchscreen control panel with backlit LCD display. The backlight will appear when the panel is in use and will switch off after one minute of inactivity.

Image 1



	Power on/off button
	Mode button
	to increase temperature and time
	to decrease temperature and time




To switch between different modes, press the button. This will allow you to browse through Comfort , Eco , Anti-Freeze , Timer , Sensor and Pilot mode. Alternatively, you can swipe the touchscreen left or right to switch between the different modes.

Icon	Description	Icon	Description
	Time		SENSOR MODE
	Day of the week		ON/OFF
	Switch Mode		PILOT MODE
	Decrease / Increase time or temperature		Open Window Detection
	COMFORT MODE		Keypad locked (Child Lock)
	ECO MODE		Device is heating
	ANTI-FREEZE MODE		TIMER






### 3. Modes


#### COMFORT MODE

When the  icon appears on the display screen, this denotes that the radiator is in Comfort Mode. In this mode, the radiator will heat to a constant set temperature e.g. 19°C (default temperature). The internal thermostat measures the room temperature and switches the radiator on and off accordingly to maintain the desired temperature. You can adjust the set temperature using the  and  buttons on the display screen.


#### ECO MODE

When in Eco Mode, the  icon will appear. This mode operates as above, however the default temperature is designed to be lower – at 15.5°C – to save energy. As with Comfort Mode, you can adjust the temperature using the  and  buttons on the display screen.

#### ANTI-FREEZE MODE


The  icon will appear on the display screen when the radiator is in Anti-Freeze Mode. Under this setting, the radiator will turn on when the room temperature drops below 7°C to prevent pipes from freezing. Please note: this temperature cannot be adjusted.

#### PILOT WIRE MODE

The radiator is in Pilot Mode when the  icon appears on the display screen. This activates external control of the device via a pilot wire (not supplied). In this mode, there are 6 externally controlled modes available: Comfort, Comfort-1, Comfort-2, Economic, Anti-Freeze and Power Off.

*Please note: This option is tailored to the French market and is not available on UK models.*

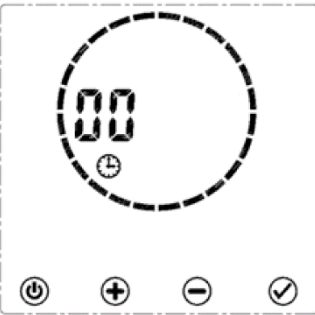

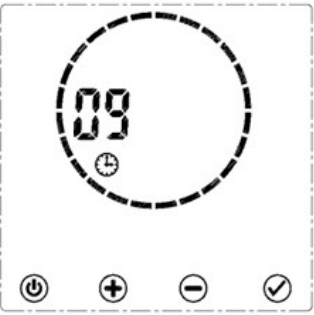



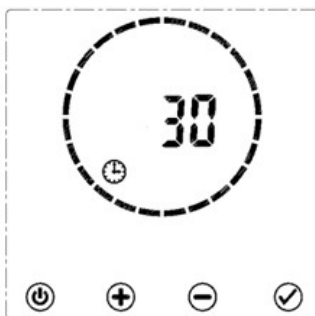



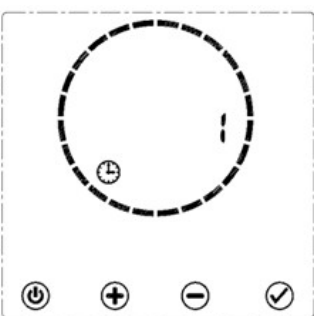



#### TIMER MODE

The  icon will appear on the display screen when you are in Timer Mode. In this mode, the radiator will heat according to your set daily/weekly programming.

To set the time and programme, follow the instructions below.



*Please note: when setting the time and day of the week, the control panel will automatically jump to the next step if no adjustments are made in 30 seconds.*




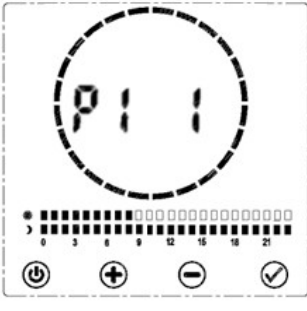


**Setting the time:**

	<p>1. Press and hold the  button for 5 seconds until the hours icon starts to flash.</p>		<p>2. Use the  or  to set the hour and press  to confirm. The minutes icon will then begin to flash.</p>
	<p>3. As before, use the  or  buttons to set the minutes on the timer and press  to confirm. The 'Day of the Week' symbol to the right of the minutes will then start to flash.</p>		<p>4. Use the  and  to set the day of the week: 1 = Monday, 2 = Tuesday, 3 = Wednesday, 4 = Thursday, 5 = Friday, 6 = Saturday and 7 = Sunday. Press  to confirm. The display will then move on to the programme setting stage.</p>


**Setting the programme:**


After setting the time (see above), P1 will appear on the screen, meaning you are ready to begin setting your daily programmes. P1 = Monday, P2 = Tuesday, P3 = Wednesday, P4 = Thursday, P5 = Friday, P6 = Saturday, P7 = Sunday.

Each programme is made up of 24-hourly slots. You can set the radiator to heat in either Comfort Mode  or Eco Mode . The temperature the radiator will heat to will be whatever it has been set to on either mode.


	<p>When you see this screen, it means you are choosing a mode for midnight on Monday morning.</p> <p>Press <b>+</b> to select Comfort Mode  or <b>-</b> for Eco Mode </p>		<p>The bars at the bottom of the screen will change to reflect your choice, and the display will advance to P1 01 – which means 1am on Monday morning. Continue pressing <b>+</b> or <b>-</b> to select your mode for the rest of the day.</p> <p>Press <b>✓</b> to save and move on to Tuesday and repeat.</p>
	<p>If you want Tuesday's programme to be the same as the previous day, press and hold <b>✓</b> until the bars change to match. Or, repeat the previous steps to customise your mode for each hour.</p> <p>Press <b>✓</b> to confirm and repeat the process for each day of the week until your programme is set.</p>		<p>When all 7 days have been set, press <b>✓</b> to return to the main display screen.</p>

## SENSOR MODE

When the  icon is displayed on screen, it means the radiator is in Sensor Mode. The motion sensor within the radiator detects whether the room is occupied, and heats accordingly in Comfort Mode – with the icon flashing when it detects a presence.

If no presence is detected – after set intervals of your choosing e.g. 15, 30, 45 or 60 minutes – the radiator will lower the temperature incrementally, before switching to Eco Mode . The radiator will remain at this temperature for 24 hours, before switching to Anti-Freeze Mode, provided no presence is detected in the room during this time. If the motion sensor detects a presence at any point during this cycle, it will revert to its previous state, eventually switching back to original Comfort Mode if it continues to detect a presence in the room.

## SETTINGS





To enter the settings menu, press the  icon to put the radiator into standby mode, then press and hold down the **+** for five seconds. To switch modes press the **✓**, or swipe left or right on the display touchscreen.

The settings menu enables you to activate, disable and configure the following functions:


- **Temperature compensation (F0)**

The default temperature is 0°C. Use the **+** or **-** to increase or decrease the temperature (within a range of -5 to 5 °C). Press **✓** to confirm changes.

- **Sensor Mode (F1)**







This setting determines the length of time the radiator will wait to reduce its temperature after a presence is no longer detected in a room. The default time is 15 minutes. To customise, press the  to scroll through the settings menu until F1 appears on the screen and use the  or  buttons to select either 15, 30, 45 or 60 minutes. Confirm your changes by pressing the  icon.

- **Open Window Detection (F2)** 







This energy-saving feature will turn off the radiator if it detects a window has been opened. The  will appear on the display screen if the ambient temperature suddenly drops by 2°C or more within 5 minutes. At this point, the radiator will switch to Anti-Freeze Mode. This setting allows you to set the time the radiator waits before reverting back to the full set temperature, disabling the Open Window Detection function by default.

- **WiFi function**  (F4)


This setting allows you to enable or disable the radiator's connection to WiFi. Disabling the connection is temporary: if you have already added the radiator to your app account, disabling the connection will not remove it. You will be able to control via the app as soon as you re-enable the connection.

- Press  to put the radiator into standby mode and hold down  for 5 seconds to enter the settings menu.
- Press  to skip through the settings until F4 appears on the screen, followed by the current setting. Default is "oF" – disabled.
- Use the  and  keys to adjust. Select "oN" to enable and "oF" to disable
- Press  to confirm and move onto the next setting.

- **CHILD LOCK** 

To activate the Child Lock function, press and hold the  and  buttons simultaneously for 5 seconds until you see  icon appear on screen. This means the child lock has been activated, with all keys locked except for the standby button. To release, press and hold down  and  for five seconds until the  disappears.

- **RESET TO DEFAULTS**

In the event you need to reset your radiator, press and hold the  button for 10 seconds. This will restore the device to the original default settings.

## 5. Connecting to WiFi



### | Downloading the App

The rioECO Ceramic Core Energy Efficient Smart Electric Radiator 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.

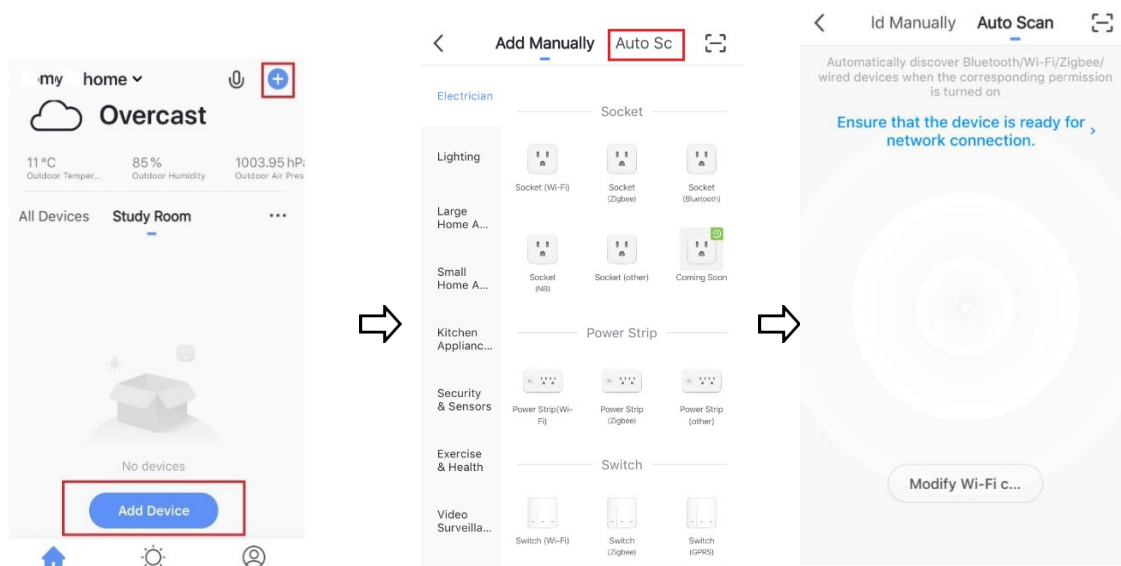


NOTE – The Smart Life app is a constantly evolving third party system.

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.

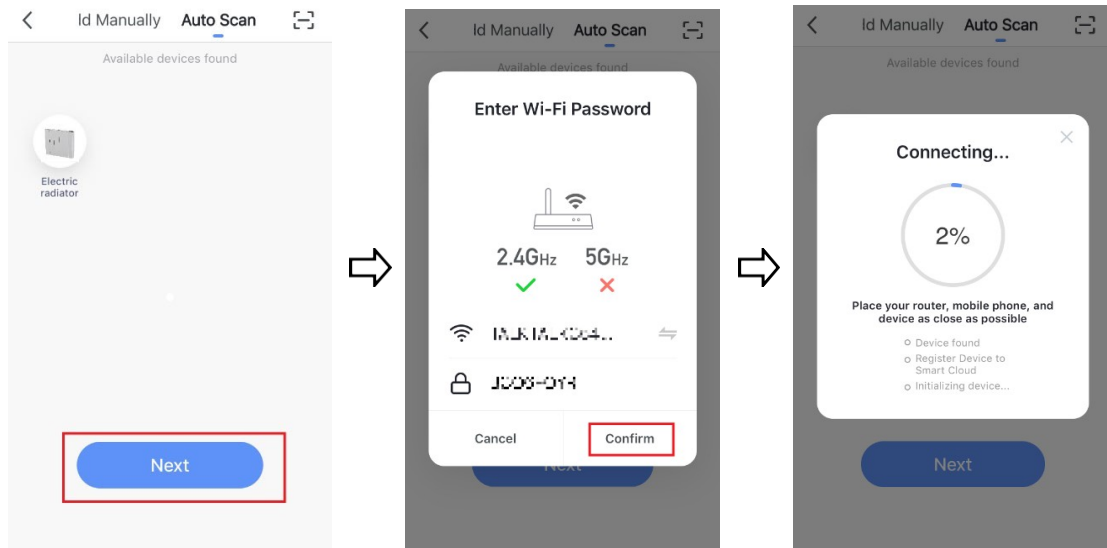
### | Connecting to the App


1. Ensure WiFi control is enabled in the radiator settings. If the  icon is flashing, WiFi connection is enabled and you can move onto step 2. If the icon is not flashing, go to section F4 (WiFi function above) and follow the instructions to enable.
2. To put the radiator in pairing mode, press  to enter standby mode and hold down  until the screen switches to the connection screen. This begins a 180 second count down, giving you 3 minutes to make the connection on the app.
3. On the home page of the app, press + or add device.
4. Select auto-scan from the top navigation.



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

6. The app will ask you to enter and confirm your WiFi password.

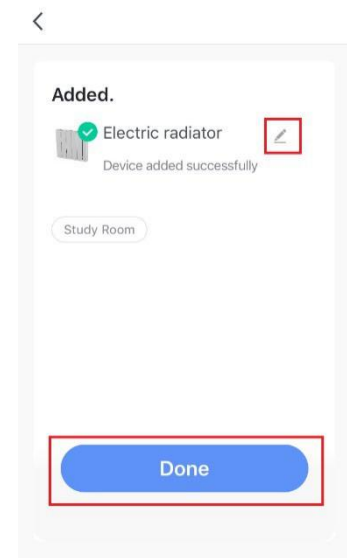


7. The radiator will begin connecting. When it is successfully added, it will appear as below on the app. Press  to change the name of the radiator or Done to return to the home screen.

## Troubleshooting

If the radiator does not connect on the first attempt:

- Make sure both the radiator and your smart device are in range of your router.
- Make sure you complete the connection process in 3 minutes. If the 180 seconds has reached the end of its count, begin the process again.
- Ensure your router has a strong internet connection.
- Ensure WiFi is enabled on the radiator.
- 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 your radiator.
- Ensure you are connected to a 2.4GHz WiFi band. See instructions within the app if you are currently connected to a 5GHz 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

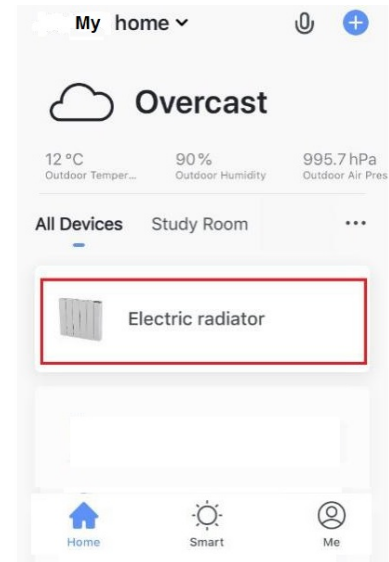
NOTE – The Smart Life app is a constantly evolving third party system. The guide below was correct at time of printing but may differ slightly from future versions.

### | 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.



### | Control Interface

Tap the heater listing to go to the control interface.

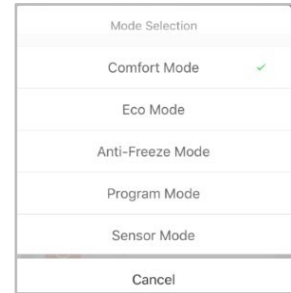
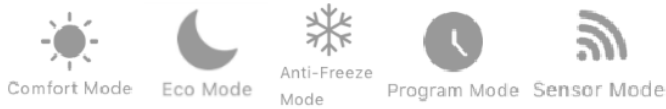
Here you can turn the radiator off and on, adjust set temperatures, choose mode and access weekly programmer and device settings.




1. Device information
2. Device name
3. Power button
4. Selected mode (Comfort, Eco, Anti-Freeze, or Sensor mode available)
5. Current selected temperature
6. Current room temperature
7. Temperature selector (button or scroll)
8. Set timer and programme mode
9. Device settings

## | Choose Mode

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




## | Setting the Program


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

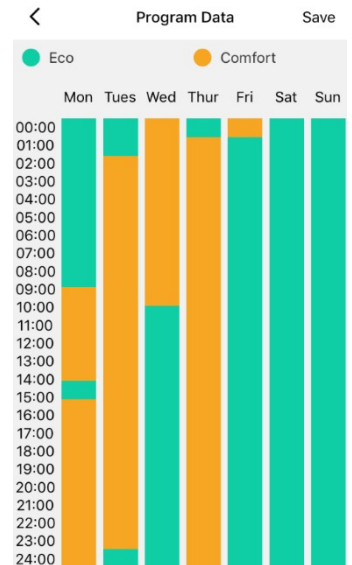
A program consists of 24 hourly intervals for each day, which you can set to Comfort or Eco temperature.

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.

## | Device Settings

Tap the  icon to view and adjust the radiator's settings. These correspond to the settings available through the control panel.

Tap the  icon for settings that relate to the radiator's listing on the app, including its name, any automations it is included in, and the quality of its network connection. Note – the limit function that appears in the settings menu is not available with this model.



# 7. MAINTENANCE

## Warning

**Always switch off and unplug the device and allow it to cool completely before carrying out maintenance care or repair work.**

**Any maintenance or repair work must be carried out by the manufacturer, a service agent of the manufacturer or a similarly qualified professional.**

- Cleaning should be carried out using a damp cloth only.
- Do not use the device with wet or damp hands.



- Do not use any solvent-based products or abrasive chemicals or materials to clean the device.
- Never immerse the device in water or any other liquid.
- Do not expose the device to water jets.
- Do not operate the radiator when wet. If the device gets wet during cleaning, allow it to dry completely before using.
- Never try to open the radiator even when it is not electrically powered.

## 8. Information requirements for electric space heaters

Model	HCJ100T	HCJ150T	HCJ200T
<b>Heat output</b>			
Nominal heat output (P <sub>nom</sub> /kW)	0.7	0.9	1.4
Minimum heat output (indicative) (P <sub>min</sub> /kW)	N/A	N/A	N/A
Maximum continuous heat output (P <sub>max.c</sub> /kW)	0.7	0.9	1.4
<b>Auxiliary electricity consumption</b>			
At nominal heat output (e <sub>lmax</sub> /kW)	0	0	0
At minimal heat output (e <sub>lmin</sub> /kW)	0	0	0
In standbymode (e <sub>sb</sub> /kW)	0.001	0.001	0.001

Item	Unit
<b>Type of heat input, for electric storage local space heaters only (select one)</b>	
manual heat charge control, with integrated thermostat	N/A
Manual heat charge control with room and/or outdoor temperature feedback	N/A
electronic heat charge control with room and/or outdoor temperature feedback	N/A
fan assisted heat output	N/A
<b>Type of heat output / room temperature control (select one)</b>	
Single stage heat output and no room temperature control	[no]

Two or more manual stages, no room temperature control	[no]
with mechanic thermostat room temperature control	[no]
with electronic room temperature control	[no]
electronic room temperature control plus day timer	[no]
electronic room temperature control plus week timer	[yes]
<b>Other control options (multiple selections possible)</b>	
room temperature control, with presence detection	[yes]
room temperature control, with open window detection	[yes]
with distance control option	[yes]
with adaptive start control	[no]
with working time limitation	[no]
with black bulb sensor	[no]

## 9. DISPOSAL

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This symbol indicates that this product contributes to the protection of the environment by applying the WEEE Directive 2012/19/EU. Disposal of used electrical and electronic equipment with household waste or in the environment is prohibited.