

Sol*Aire

Remote Controlled Thermostatic Heating
Element With Built In 24/7 Time Function



Safety & Warnings

Before you begin installation, setup or operation of the unit, please read all of these instructions carefully. Please note all signs, notices and technical information. All instructions to be followed in full.

Check all components before any work can proceed, please contact supplier if damage or defect found, DO NOT carry on with installation.

Electric Towel Rails must be installed by a qualified competent electrician in accordance with the current IEE wiring regulations.

Ensure that the electrical supply is fully isolated before commencing installation or servicing.

The product should be permanently fixed and connected to the 220/240 Volt AC mains power supply via a fused spur/cable outlet, and earth bonded.

Bathroom installation should be powered via a double pole isolator switch having a contact separation of at least 3mm in all poles fitted outside the bathroom, or a ceiling mounted pull cord switch of same specification, and a 30Ma RCD.

The element is splash proof (IPX4), and should never be immersed in, or subject to a constant spray of water.

The element must NEVER be used without the towel rail being full of water or fluid. This

product is a Class 1 unit and as a result it must be earthed. Earth grounding is marked by this icon. ⊕

Never attempt to disconnect the control unit from the heating element. The R2 thermostatic heating element is factory-sealed. Any separation or attempted separation can lead to the destruction of the whole device and invalidate all claims under warranty or liability.

Proper use of the electrical heating element with integrated control unit.

For indoor use only.

Only use the device in a suitable towel rail, for space heating and/or towel drying. This element should be mounted vertically and in the bottom of the towel rail only. It is imperative that you have the correct fluid level in the towel rail before the element is used.

Installation of the R2 Element into the Towel Rail

The heating element can be used as a electric heater in a sealed towel rail or as a summer element in a towel rail that has also been plumbed into the central heating system, if the latter is the case that the element will be used in conjunction with a central heating system the element will need to be fitted with a conversion tee, as below.

Dual Fuel installation

Before the towel rail is installed onto the central heating system, you must install the electric element.

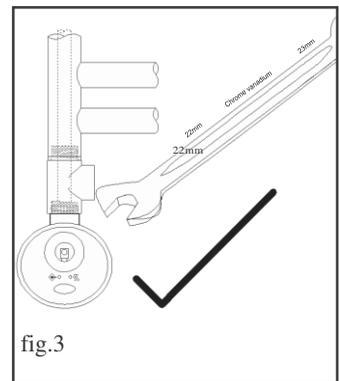
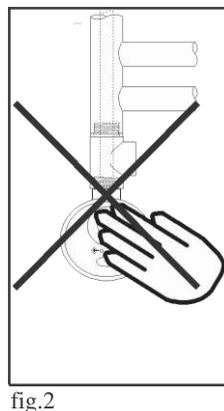
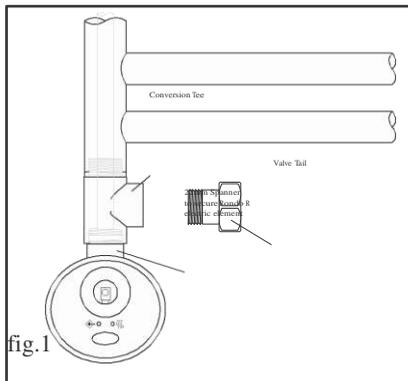
Install conversion tee then install the electric element and secure. fig.1

You can continue to install the towel rail, but **DO NOT** connect the element to the electrical supply until the towel rail is filled with water from the central heating system, once this has been done the element can be wired into the electrical system following IEE regulations and by a certified electrician.

Warning

The heater is only suitable for vertical installation on the bottom of the Towel rail. Do not install horizontally, as correct operation cannot be guaranteed.

Never tighten using the housing itself (fig.2), Always use the correct tools (22mm Spanner) (fig.3). If you are unsure about the type and manner of the installation/ suitability of the radiator for use with the heating element, please consult the manufacturer for advice. All electrical work should be carried out by a fully qualified person. When using the heating element in a bathroom environment please ensure the location meets the correct bathroom zone application.

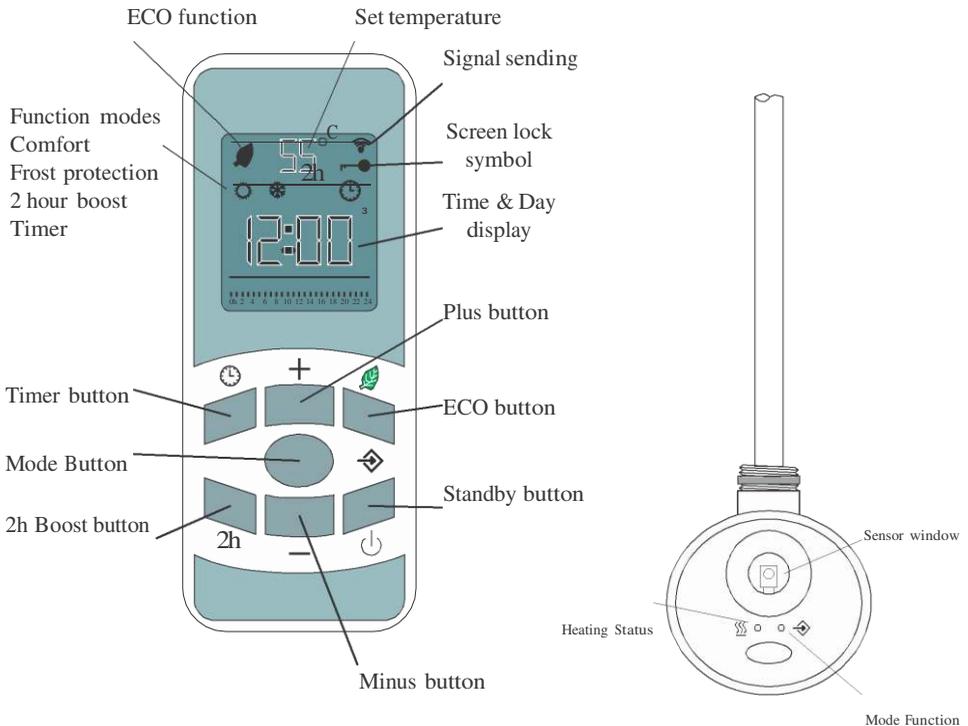


R2 Remote Control

The R2 remote comes complete with a wall mounting bracket. This should be attached using the supplied screws and wall plugs.

The remote control sits safely on the holder. You will need 2 xAAA LR03 1.5V batteries.

The supplied remote control is an infrared (IR) remote, it will work up to a maximum of 8m. Please note a clear line of sight is necessary between remote control & element to function correctly. Inside the heating element is an NTC (negative temperature coefficient) sensor. This thermistor will send information to the controller to be converted into temperature values. It will show the temperature of the fluid in the radiator, which is approximately equivalent to the surface temperature.



Using the R2 Remote

The Temperature selection is made by the +/- buttons on the control unit in 5⁰C increments between 30⁰C and 70⁰C.

The controller has a simple visual display which makes it easy to use. The controller has 7 functional areas denoted as modes.

Using the R2 Remote

Mode	Mode display on the controller (LED)	Values on display remote control
A. Standby	Green	Only current time
B. Comfort	Red	Sun Icon
C. Timer	Orange	Clock Icon
D. Booster	Red Blinking	2h Icon
E. ECO	-	Leaf Icon
F. Antifreeze	Green Blinking	Snowflake Icon
G. Screen Lock	-	Key Icon
H. Error	Red/Green Blinking	Battery

R2 Remote Control Operation

First activate the remote by inserting the batteries, remove the battery compartment cover on the back of the remote control, and insert the 2 x AAA LR03 1.5V batteries.

Once the batteries are installed and the battery cover has been replaced you can commence with the first operation.

Setting the Day & Time

The days are displayed down the right hand side of the screen numbered 1-7 (1 = Monday 7 = Sunday), using the +/- set the correct day of the week, once selected press the Mode button.

The hours will now begin flashing, select correct hour with +/- and confirm with the Mode button.

The minutes will now begin flashing, select the correct mins with +/- and confirm with the Mode button.

The correct day and time will now be set, if you now wish to exit the set-up press the Mode button several times to exit to the set time with the Sun icon on the left hand side of the display.

Controlling the R2 element

Standby Mode

When the R2 element is connected to the power supply it will default to standby mode, this is identified by a single green LED on the front right side of the element head.

Comfort Mode

Comfort mode is either on/off and identified by the sun icon (see table). To enter into comfort mode, you only need to press the standby button and select the desired temperature by using the +/- buttons, the element will show a Red LED when it is heating up and a Blue LED once desired temperature is achieved.

Timer mode

This allows you to program on/off times at 1 hour intervals for 24 hours of every day of the week. Please follow instructions to enter your personal program. Press the Clock symbol - current day will flash ** - press mode button to confirm

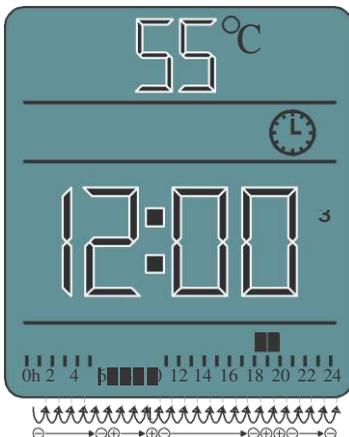
Hours will flash ** - press mode button to confirm

Minutes will flash ** - press mode button to confirm

You are now directed to the program table at the bottom of the screen. (you will be entering the program for the current day e.g Wednesday)

Press the + to add a 1hr segment (this 1hr segment is the on phase) Press the - to skip a 1hr segment (this 1hr segment is the off phase)

Get used to using both the + & - to add and skip segments, you will not store any information until you are happy with the selection.



Once you have mastered moving the cursor across the screen, scroll to the hour you wish the element to come on, grouping segments together will give you a continuous on time, Using the +/- buttons program as many on/off periods you wish for that day, once happy with your selection press the Mode button to confirm and move on to the next day, repeat the process for all 7 days.

When running in timer mode the element temperature will be governed by the last set temperature.

If you pause for longer than two minutes the controller will revert back to the time and date.

** (use +/- button to adjust if necessary)

Booster Mode

The Boost mode allows the element to run at its maximum output for a 2hr period, overriding the current program & temperature, simply press the boost button to activate and again to de-activate. Once complete or de-activated the R2 element will return to the previous setting.

ECO Mode

By pressing the ECO button (leaf button) you will have a maximum temperature of 50⁰C.

Antifreeze/holiday Mode

This function is designed to prevent freezing damage and power limitation when you are away from your home. To activate this function, press the snowflake button, The R2 will now remain in a sleep state unless the fluid temperature drops below 7⁰C, when it will start to operate to maintain 7⁰C, if the temperature rises above 7⁰C power will once again be cut, the element will remain in this function until manually changed.

Lock Mode

To stop any unwanted adjustments being made, press the Mode button plus the + button for 3 seconds, a small key will appear in the top right hand side of the screen, to de-activate the Lock mode repeat these instructions.

Error modes & safety features

The remote control monitors its battery level every minute and if the level falls too low the battery indicator will begin to flash, and the batteries should be changed.

The R2 element has an in built safety feature, if the fluid should raise above 125⁰C or below -25⁰C the red and blue LED will flash alternatively and the element will shut down.

Specifications	
Voltage	230/240V / 50 Hz
Insulation Class	1
Degree of protection	IP X4
Temperature Range	30°C - 70°C
Threaded Connection	1/2" BSP
Control head Dimensions	60 x 70 x 40
Heating element 12mm Power W	Length MM
300	370
600	560
900	760
Cable interface:	White or Chrome
Cable colour:	White
Cable end:	Bare
Remote Control	
Wireless, Battery powered, 2 built in transmitters with approx 8m range, 7 buttons, LCD display, wall mount, housing white and silver.	
Dimensions	100 x 42 x 20
Batteries	2 x AAA-LR03 1.5V