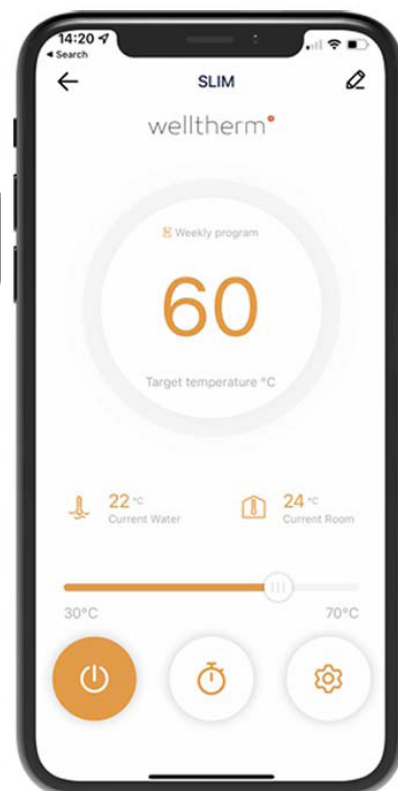
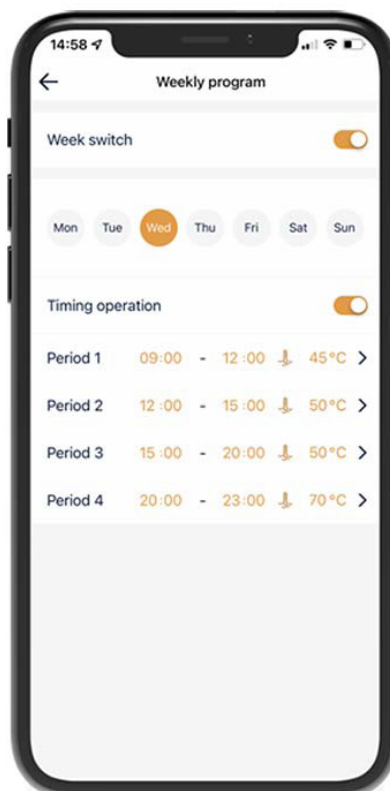


R4

Smart Heating Element User Guide



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- Use in Accordance With Regulations : Page 3
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Security

Please read this instruction manual carefully and keep all applicable documents for future reference.

Warnings are classified as follows:



Danger

Danger to life from electric shock



Danger

Danger to life or personal injury



Danger

Risk of property damage or damage to the environment

Use in accordance with Regulations

This heating element is a component and must only be used if connected to a liquid-filled radiator (e.g. towel rail or other suitable radiator).

The product must not be inserted into a flammable liquid. The liquid must be approved by the manufacturer, distributor or the professional installer.

Such radiators are suitable for increasing and maintaining the room temperature and/or drying towels. When choosing the element's power output (W), the manufacturer or distributor's guidance must be observed. The element's wattage must match the radiator's specification. Inserting the element into the wrong sized radiator is classed as improper use.

Ensure the Product's degree of protection (IP rating) complies with the required degree of protection for the place of installation.

General safety instructions



- Incorrect installation or operation can cause harm and damage the soundings.
- Touching live components risks fatal injury by electric shock.
- Do not work on the radiator (such as cleaning or repairs) until it has cooled down and disconnected from the power source.



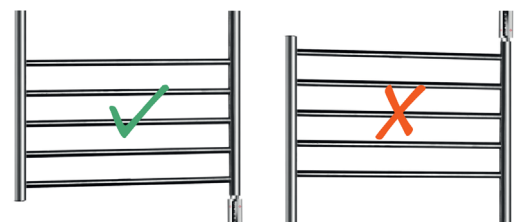
Caution

Never try to separate the controller box from the heating rod. The unit is connected and sealed at the factory. Opening the element can lead to the destruction of the device and will void all warranty or liability claims.

Use professional tools to tighten or loosen screw connections. Never screw the heating element by hand. This will twist and brake the internal connections. Which will void the product's warranty.

Use a suitable spanner to screw the heating element into the radiator. The element's display must face forward (so it can be seen). Therefore it is not necessary to use the last turn to screw the heating rod as far as it will go.

The element must be screwed into the bottom of the radiator. Never at the top



Pre Installation

Always observe the national regulations, standards, directives and laws. Children must not play with the product or operate it .

The following work may only be carried out by persons who are sufficiently qualified. This is particularly true for the electrical work.

- Assembly
- Dismantling
- Installation
- Inspection and Maintenance
- Repair
- Decommissioning

1. Observe all instructions and information accompanying the product the manufacturer or distributor of the radiator.
2. Comply with all relevant guidelines, standards, laws and others regulations.

Ecodesign Policy

From 2018, electric room heaters must comply with Eco design Directive 2009 / 125 / EG. The aim of this regulation is to save energy in the context of environmental protection.

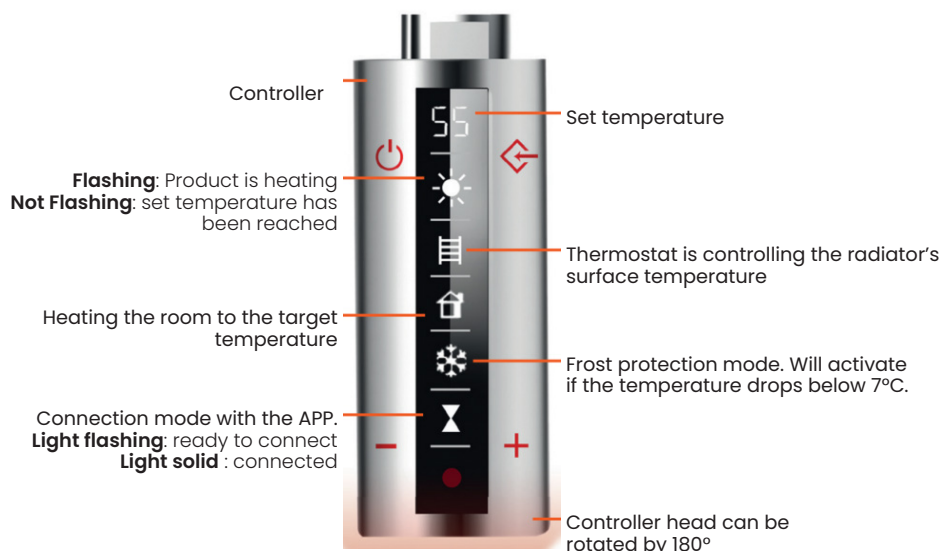
The R4 fully complies with this regulation. Thus making any radiator fitted with the R4 compliant. This is a necessity if the radiator is specified to be used as the room's primary source of heat.

First steps

The heating element must be placed securely fitted into a liquid filled towel rail or a similar radiator. The liquid should be a water/glycol mixture. Under no circumstances may flammable or hazardous materials be used.

The R4 is a 230V (class I) appliance and must be connected to either a plug socket (if this is permitted in the respective country) or to a fused connection box (according to the local regulations). Please observe the required degree of protection for electrical devices in the installation area. The installation must be conducted by an appropriate specialist. We don't accept any liability and obligations in the event of improper installation or commissioning.

Controls



Using the control unit

After the element has been connected to the power supply, the symbol "--" will flash in the upper area of the display. This indicates that the element is receiving power and ready for use. The element is in the standby position.



Pressing the power button will switch the element from stand by to "On".
The last temperature setting used will appear on the display.

If the Sun symbol flashes, this means the current temperature is different to the target temperature.

If the current temperature is lower than the target temperature, the sun will flash slowly and the element will start to heat.

If the sun is not flashing, the target temperature has been reached.



Change the target temperature in 5°C increments.



This is an input button with 4 functions, 2H, 4H, PC, RC.

By repeatedly pressing the button you move through each function:

- 2H (Boost)= The device works at maximum power for 2 hours and will return to the previous mode.
- 4H (Boost)= The device works at maximum power for 4 hours.

Upon completion of the boost term the device will return to the previously selected temperature.

- PC = APP mode to control with the APP
- RC = Program mode from the remote control



The hourglass indicates a timed program has expired.

Attention: If the element is disconnected from the power supply, the settings will be lost. However, settings from the app and remote control are retained.

WiFi App and control

Download the App

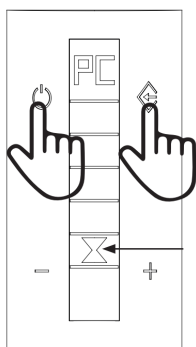
- Download and install the "SolAire WiFi IQ" APP from either the Android Play Store or the iOS APP Store
- Now you will need to create an account. If you already have an account, sign into the existing account.

An account can be registered under either a phone number or email address. If you enter a phone number, a verification number will be sent to your phone: enter this number to verify, then create a password. If you enter your email address, you'll just need to create a password.



Setting the element to WiFi pairing mode

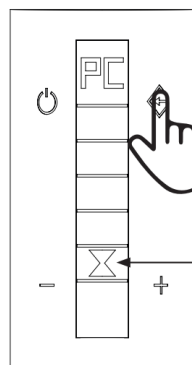
1) Turn the Device on



2) Go to app mode "PC"

The device is ready to pair
When this symbol is flashing fast. If not flashing fast, reset the device.

Resetting the Device



Press for 5 seconds until the beep sounds

Flashes fast / slow

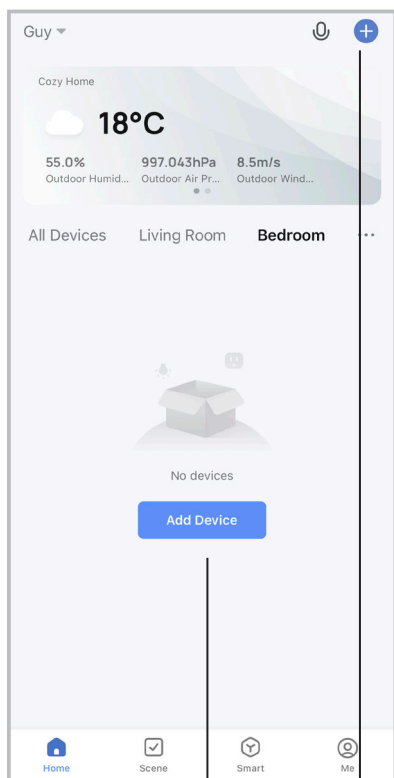
Pairing the element to the App

Auto Pairing



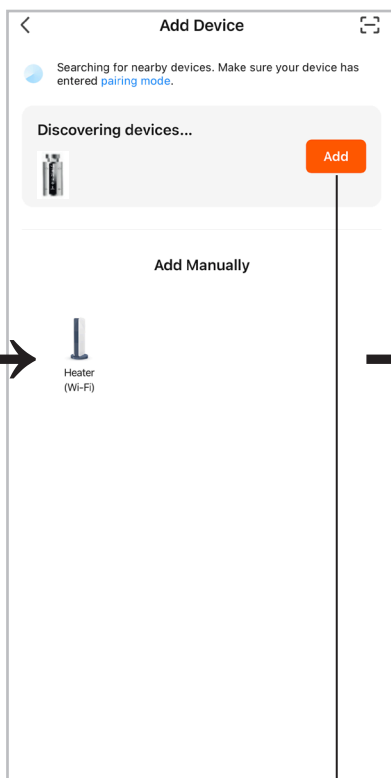
Before pairing, make sure the element has been set to pairing mode.

1 Open the App

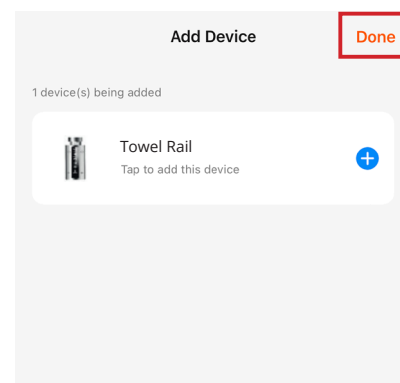


2) Press Add Device

3) The App will search for the device

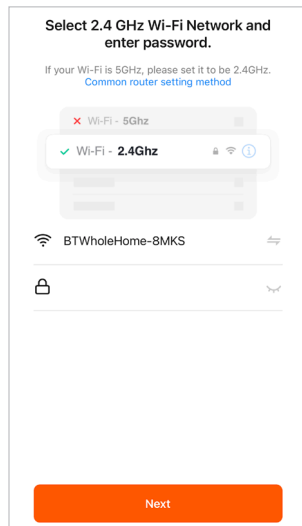


4) Press Add



5) Now press the plus Icon.
Then "Done"

6) Enter WiFi details and press Next



7) The App will then begin to pair with the R4.

Wait until the App prompts you to proceed.



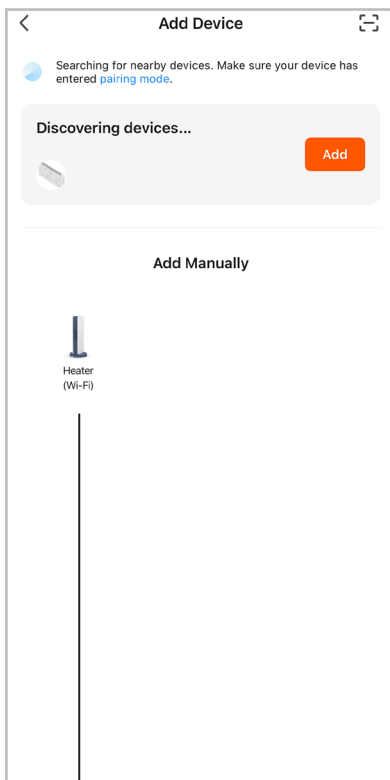
8) Once connected, the above image will be displayed.

Now name the device and save

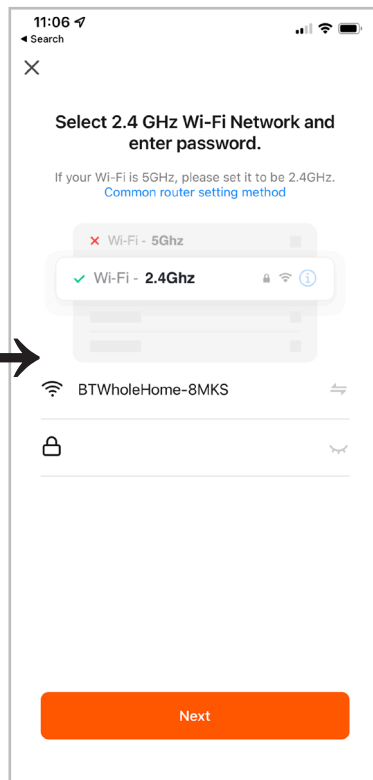
Manual Pairing

If the heater does not appear, as showing step 3, add the heater manually.

1) Press Add device, then select Heater (WiFi). This can be found under "Small home appliances", if not immediately visible.



Add



2) Enter WiFi details and press Next



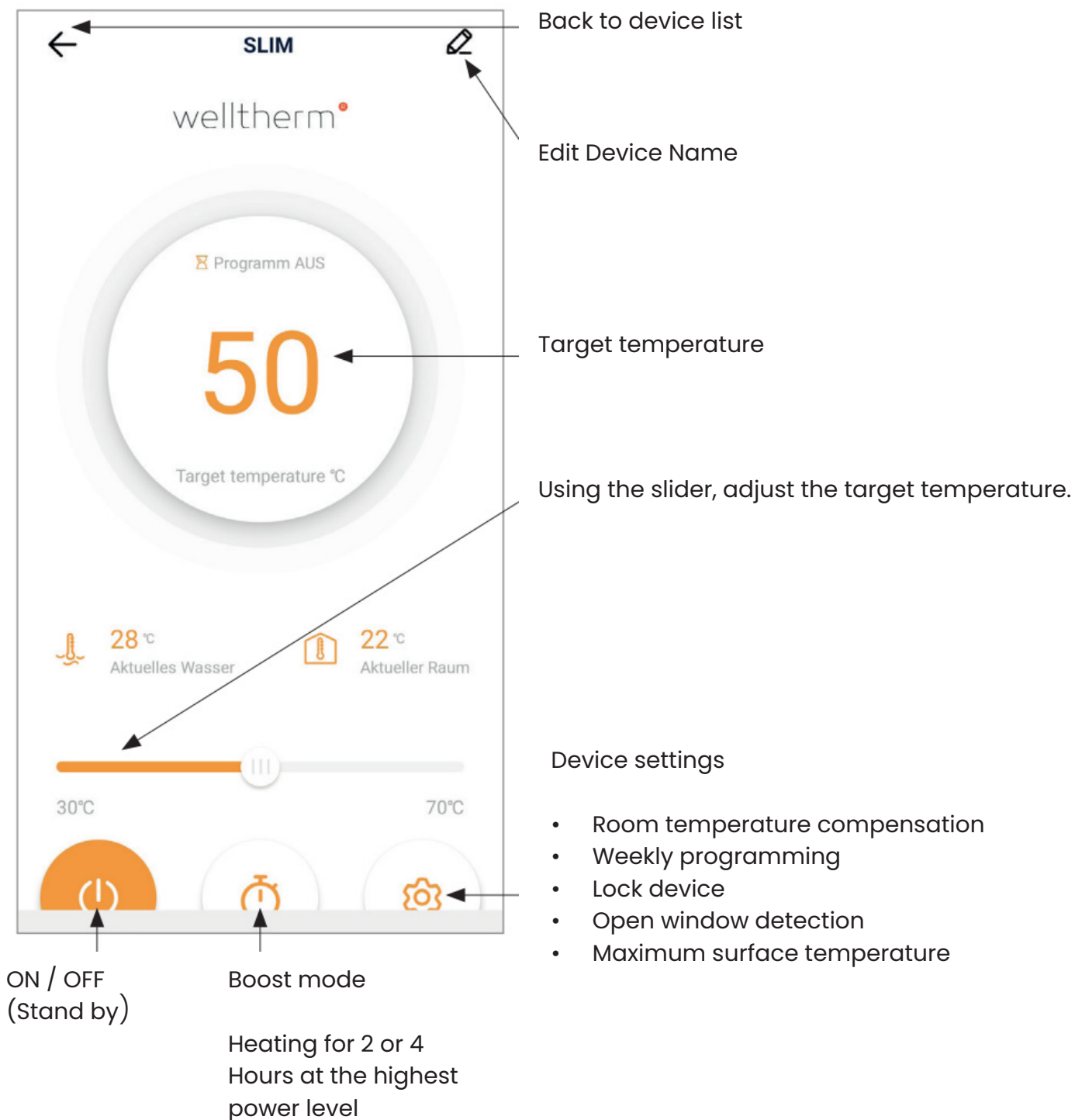
3) Ensure the device is flashing quickly. Then press Next

4) The App will then begin to pair with the R4.

Wait until the App prompts you to proceed.



5) Once connected, the above image will be displayed. Now name the device and save



Element's Keypad

Symbol



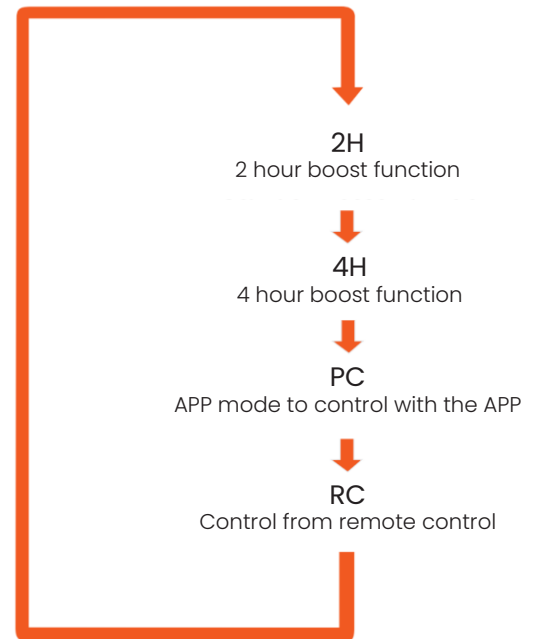
On / Standby" button
(With acoustic signal)



Adjust target temperature



Fixed program functions
(Press button several times)



If the element is disconnected from the power supply the controller will lose the program data. When power is restored, the controller will switch to the last used water temperature.

The program data must be re-sent to the element from the remote control. The remote will store the programme data.

Remote Controller

IR remote control

Remote Controller
(Supplied Separately)



Using the remote control

Batteries (2 pieces type AAA 1.5V) are not included



Do not use the remote control in the bath, shower etc. Keep the remote control far away from water and other liquids.

To remove the protective foil

The display of the remote control is protected by a foil. This can be removed before use.

Inserting the batteries

Open the cover at the back of the remote control. Then insert the two batteries (2 pieces, type AAA, 1.5 V) into the slot.

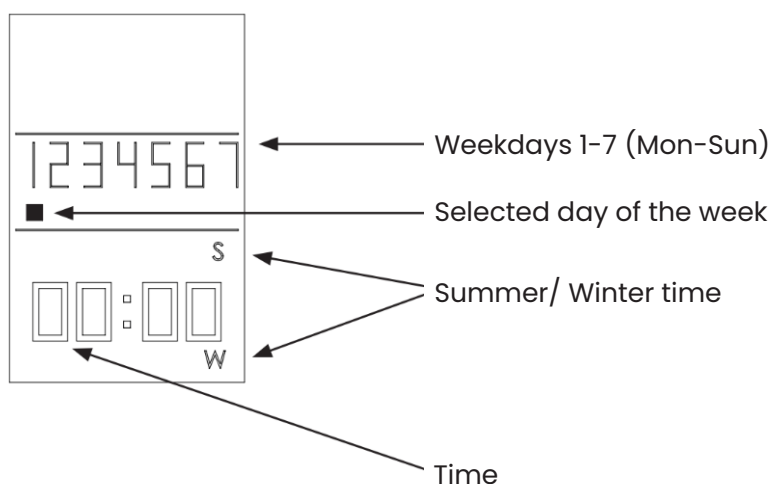
Wall mount for remote control

The wall bracket included can be attached using the included mounting parts. The remote holder / bracket can be attached to the wall.

Buttons on the remote control



Symbol	
	Send button (Send programme to the element)
	Basic settings (date, time)
	Work settings (e.g. switching times)
	Reduce value
	Increase value
	Check program, enter password
	Confirmations, undo



Setting the timer using the remote control

- Select which day(s) of the week are being programmed.
- It is possible to programme a single or multiple days.
- Up to 4 different periods per day can be defined.

Press  the days 1-7 will be displayed. A cursor will flash under the 1st day of the week (Monday).

If you'd like to programme several days to be the same, press the + button. The cursor will flash quickly, indicating the above day has been selected. Now press  to move to the next day. The cursor will move to 2 (for Tuesday). To skip a day, press  without pressing +.

After pressing the  button for the last day of the week, the system will go to the data entry screen.

The selected days will appear on the display. The "01" at the top of the display indicates that period 1 is being set. Up to 4 periods can be set each day.

The word "Start" will appear with a time flashing underneath. This time is when the radiator will switch on. It can be changed by pressing the + or – buttons.

Once the time has been selected, press the  button and the word "Stop" will appear. (Stop is when the element will stop heating). Now enter the required time in the same way. Then and press the  button again.

On the top edge of the display, the heated towel rail symbol is displayed. Press the + or – button to switch between radiator or room temperature control. The symbol shown on the display represents the selected option. Confirm the selection by pressing the  button.

Now the temperature will flash. Use the + and – buttons to select the desired temperature, and then press the  button to confirm.

Available temperatures are 30–70°C (in 5°C increments) for the radiator temperature, and 15–35°C (in 1°C increments) for the room temperature.

Now, the start time will flash on the display and "02" will be shown. This indicates the 2nd period is being set.

Repeat these steps to set periods 1–4.

If you do not wish to enter 4 periods, press the  button for the last entered programme and then press the  button as soon as the new number for the next programme appears. This will end the programme entry. The word will "good" appear and the device switches to the standard display. Please note: if multiple days were selected, the programme will be applied to all of these days.



Setting the current time and day



Press:

- 1 times = Set summer/ Winter time (Change with + or -)
- 2/3 times = Set the current time (Change with + or -)
- 4 times = Set the day of the week (Change with + or -)

Setting programme example

To programme Monday and Wednesday the same, select both days then enter the start and stop times. Then if you want a different entry for Friday, go to the data entry again and only select Friday.

If you want the radiator will be off completely for a day, make sure that no start/ stop times are entered on that day.



Press: 1x= Mon, 2x=Tue, 3x=Wed, 4x=Thu, 5x=Fri, 6x=Sat, 7x=Sun

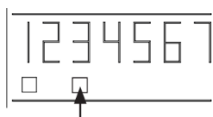
If you'd like to set several days the same press the + button on the days you'd like to select. The cursor will flash quickly, indicating that day has been selected. Now press to move to the next day. The cursor will move to the next day. If you do not want to select a day press without pressing +.

Example

As an example, Wednesday is also selected for programming.



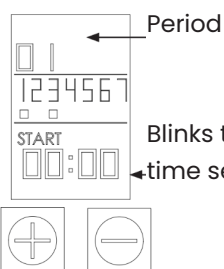
Press 1x to select Mon, then + to confirm. Press twice to skip Tuesday and move onto Wednesday.



Press + and the cursor will flash quickly



Press to move onto the next day.



Set time with +/-

Period

Blinks to start time setting



Confirm selection

Press until the every day has been passed.

Sending data from the remote to the element

The element can only received data sent from the remote if:

- The transmission is performed at a short distance (max. 8 metres)
 - There are no obstacles between the element and remote
 - The element is in RC mode.
- The remote control must not be password-protected. If the remote control is password-protected, remove the protection and send this change to the controller as well.
- *Notice: If the remote control batteries are low, the remote may not be able to send the signal.*

To send data to the element, point the remote transmitter towards the element. Then send the data by pressing the  button. Transmission is confirmed on the remote control display.

In order to receive sent data, the element must be in position RC mode. Once the transmission button is pressed the element will adopt the new data. Any old data will be overwritten.

Restoring deleted data

To reuse deleted data, proceed as if you were going to enter a new programme.

When a day which has data deleted previously is selected, the deleted data will appear as suggestion. To apply this data, press the  button for all programmes for that day. The word "good" will appear on the display to confirm. This procedure can also be carried out for an individual deleted day.

Setting a Maximum Temperature Using the Remote

To enter a maximum temperature for the radiator, proceed as follows:

On the remote, Press and hold the - button until a temperature appears at the top.

Use the - or + buttons to set the desired maximum temperature, then press  to confirm and activate the setting. The active maximum temperature will now be displayed permanently on the display. This temperature cannot be exceeded by the radiator.

To deactivate the maximum temperature, press and hold the + button on the remote. The word "OFF" will appear. There will no longer be a maximum temperature shown on the standard display.

Setting a password lock

Unwanted modification can be prevented by setting a password.

To enter a password, press and hold the  button. 4 dashes will appear on the display "-- --" a number from 1 to 4 can be assigned to each dash. Numbers can be entered by pressing the buttons 1 – 4 on the remote.

Once the code is entered press the  to save. The word "good" will appear confirming the lock is activated.

To send the lock to the element, point the remote towards the element and hold the transmission button : . This will active the lock on the element. Now it is not possible to make any entries without entering the password.

To lift the lock, hold the  then enter the password on the remote. Now press the transmission  button to lift the lock on the element .



Deleting entries during data entry

If you make a mistake when entering the day, time, temperature etc., the entry can be cancelled by pressing the $\Rightarrow$ button. The display will then return to the last step.

Switching between Summer and Winter time

Press and hold the $\Rightarrow$ button. Each time the button is pressed, the S – W – S information changes. When the required time is displayed, there is no need to press a button to confirm. All times are adjusted automatically.

Display all saved programmes

Pressing the  button will display the saved programmes that have been sent to the control unit or that are ready to be sent by pressing the  transmission button.

This will let you check the element's weekly programme data.

Automatic Settings

Overheat protection

The temperature information from the NTC in the heating rod and at the mains cable outlet are used to regulate the unit. If the automatic control fails and the water temperature increases in an uncontrolled manner, the system has two safety mechanisms to prevent excessive pressure in the radiator.

- Firstly, the entire system is completely shut down electronically when a water temperature of 95°C is reached.
- If this protection mechanism fails, a simple downstream thermal fuse ensures complete shut-down.

Frost protection

The frost-protection setting can prevent the internal liquid and room from freezing. If the radiator temperature falls below 7°C, the system will switch on automatically and heat the liquid to 15°C then switch off again.

This safety mechanism works even if no work programme has been selected. The only prerequisite is that the control unit is in "standby" mode and is therefore being supplied with power.

Room temperature compensation

As the NTC for the room temperature is located on the back of the element, it is close to the warm radiator.

Therefore the measured temperature may not accurately reflect the temperature in other parts of the room. For this reason, there is an automatic temperature adjustment of - 3°C in the control unit.

Open window/door detection

This function detects when the air temperature falls by 2°C. In order to save energy, the heating system is switched off automatically. The controller checks the room temperature and compares it with the stored measured value. The heating will be switched off for as long as the difference increases.

As soon as the temperature is no longer falling, the heating is switched on again.



Symbols on the display

If the remote control has been disabled by a password and you try to make an entry, the display “Lo Ct” will appear and you will not be able to make the entry.

Once a password has been successfully entered to disable the system, the word “good” will appear and the remote control will be disabled. This symbol is also shown to confirm successful entry for other entries, e.g. when entering a maximum temperature

Low remote control batteries

If the batteries are low, this is indicated by the display becoming gradually weaker. This means that the batteries should soon be replaced.

Recycling and disposal

The product contains recyclable materials and materials that are harmful to the environment. Therefore, do not dispose of the product with household waste. Instead, send the heating system to a collection point for electronic or electrical waste.

Recycling and disposal

The product contains recyclable materials as well as environmentally incompatible materials. Disposal Therefore, do not dispose of the product with household waste. Instead collection point for electrical or electronic waste.

Voltage	230 V, 50 Hz
Max. heating rod output	1000 Watt
Insulation class	I or II
Protection class	IP X4
Controller diameter	70 x 60 mm (oval)
Controller depth	50 mm
Housing colour	White or chrome
Connecting cable	White, L = 1.5 m
Cable end	Schuko plug or stripped
Grey cable on request	Other outputs on request
IR remote control	
2 batteries (not included)	1.5 V - LR03 AAA

Voltage	230V, 50HZ
Insulation class	I or II
Protection class	IPx4
Connection Cable	White 1.5m
WiFi requirements	2.4Ghz



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