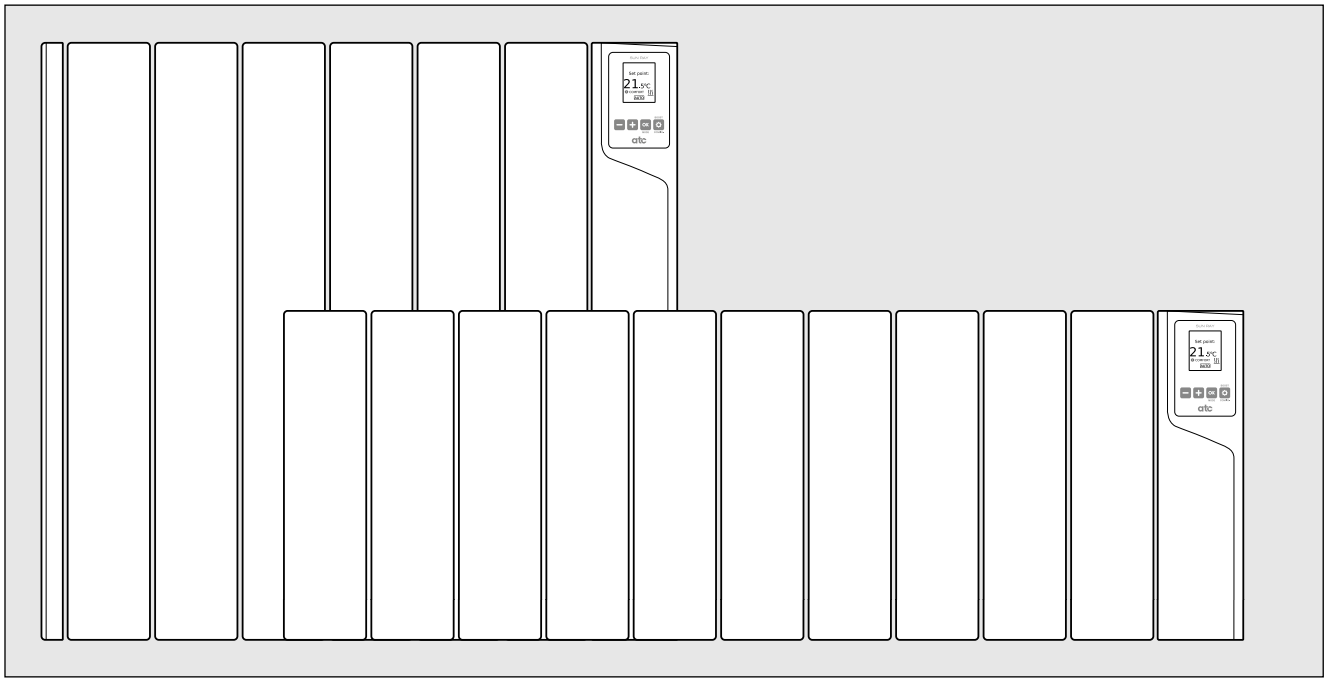
Sun Ray RF

Electric Radiator

Operating and Installation Instructions

(Read these instructions carefully and retain for future reference)



Models:

Sun Ray RF 350w
Sun Ray RF 500w
Sun Ray RF 750w
Sun Ray RF 1000w
Sun Ray RF 1250w
Sun Ray RF 1500w
Sun Ray RF 1800w
Neptune RF 950w
Neptune RF 1425w

NOTE:

A qualified electrician must carry out the electrical installation of this radiator. The Electrical installation must comply with the current UK and Irish regulations. Any claim on the warranty could be invalid if these requirements have not been met.

CONTENT

IMPORTANT INFORMATION

See Section “Installation Instructions – Location of Radiator” for important safety notes regarding the positioning of the appliance.

- To prevent overheating, do not cover the radiator.
- You must not sit on the radiator.
- This appliance is not intended for outdoor use.
- If the power cord is damaged, it must be changed by the manufacturer, its after-sales service or persons qualified to do so, to avoid possible danger.
- In case of breakdown or damage turn off the appliance at the main On/Off switch and notify the supplier.
- The radiator should not be located underneath an electrical connection. The electric supply line should be protected with a high sensitivity differential device (RCBO).
- The radiator must be installed so that around the radiator there is sufficient space for proper circulation of hot air, with a minimum distance of 150 mm to curtains, furniture, etc.
- Do not dry clothes or towels on the radiator nor leave fabrics, magazines, spray cans, volatile substances or similar objects within 250mm of the radiator.
- Anyone who is in the bathtub or shower should not have access to the switches and other power operation devices. Always keep at least 0.6 m (UK) or 3.0 m (Ireland) between the radiator and the bath or shower.(UK: Outside zone 2, Ireland: Outside zone 3)
- This heating apparatus holds a specific amount of special oil. Repairs where it is necessary to open the oil tank must only be made by the manufacturer or ATC. ATC should be contacted in case of any oil leakage.
- A Fused Spur must be included in the wiring to the radiator.
- This appliance can be used by children aged 8 years and above and persons with reduced physical, sensory or mental abilities or lack of experience and knowledge, if they have been given supervision or appropriate training regarding the use of the device in a safe way and they understand the dangers involved.
- Children should not play with the appliance. Cleaning and maintenance should not be performed by unsupervised children.
- Children under 3 years should be kept out of reach of the appliance unless they are constantly supervised.
- Children between age 3 and younger than 8 years old should only turn on / off the device whenever it has been placed or installed at its normal operating position provided they are supervised or have received instructions concerning use of the appliance safely and understand the risks that the device has. Children from 3 years and under 8 years old should not plug in, regulate, clean the appliance or perform maintenance.

CAUTION - Some parts of this product can become hot and cause burns. Pay particular attention when children and vulnerable people are present.

WARNING: In order to prevent overheating, do not cover this appliance. There has to be free movement of air around all surfaces of the appliance.

This symbol “DO NOT COVER”, is placed on the radiator as a reminder to the user.

- If the radiator is discarded, ensure it is recycled responsibly and follow any local provisions concerning recycling of oil.
- A Safety Data Sheet is available from sales@atc.ie on request.

TECHNICAL DATA

MODEL	Number Of Fins	Power Rating (W)	Size (mm) HxWxD	Net Weight (Kg.)	Fuse Rating
Sun Ray RF 350	3	350	580 x 340 x 100	6.9	5 Amp.
Sun Ray RF 500	4	500	580 x 420 x 100	8	5 Amp.
Sun Ray RF 750	6	750	580 x 580 x 100	12	5 Amp.
Sun Ray RF 1000	8	1000	580 x 740 x 100	16	10 Amp.
Sun Ray RF 1250	10	1250	580 x 900 x 100	20	10 Amp.
Sun Ray RF 1500	12	1500	580 x 1060 x 100	24	10 Amp.
Sun Ray RF 1800	12	1800	580 x 1060 x 100	24	10 Amp.
Neptune RF 950	10	950	340 x 880 x 100	13.7	10 Amp.
Neptune RF 1425	15	1425	340 x 1280 x 100	20.1	10 Amp.

GENERAL INFORMATION

The Sun Ray RF has a special cast aluminium body specifically designed to assure the maximum rate of heat radiation; the air circulation channels provide a very efficient convection effect.

A unique manufacturing process provides bubble free filling so that the fluid delivers warmth from the heating element in a totally uniform way, ensuring that the entire surface of radiator provides comfortable heat.

A tube heating element ensures maximum heat output.
Designed and fabricated in accordance with EN 60335-1, EN 60335-2 and EN 55014 (regulations for domestic appliances)

- Standard colour White (RAL 9016)
- Class I
- Wall mounted (by quick fixing system)
- On-off main switch
- Overheat protection
- Key-pad locking optional code lock(anti-tamper)
- NTC electronic sensor
- Fitted with mains power cable approximately 1450mm long (without a plug)
- Lithium battery CR2032

ELECTRICAL CONNECTION

A qualified electrician must carry out the electrical installation of this radiator. The electrical installation must comply with the current UK and Irish regulations. Any claim on the warranty could be invalid if these requirements have not been met.

The radiator requires a 230/240V 50/60Hz power supply.

Connecting wires:

Brown: Live
Blue: Neutral
Yellow-Green: Earth

The connecting wires must be of the appropriate section, in regards to the length of cable, type of cable and power rating of the apparatus.
The apparatus must be connected into a **fused** connecting box fitted with an appropriate sized fuse for the radiator – see Technical Data on Page 4.
We recommend that the connecting box is positioned 10cm to the right of the apparatus and at 15cm above the floor.
According to regulations, the apparatus must be connected to the power supply by means of an all-pole circuit breaker with a contact gap of at least 3mm or by a thermal-magnetic circuit breaker.
Neptune RF Models are double insulated and do not require an earth.

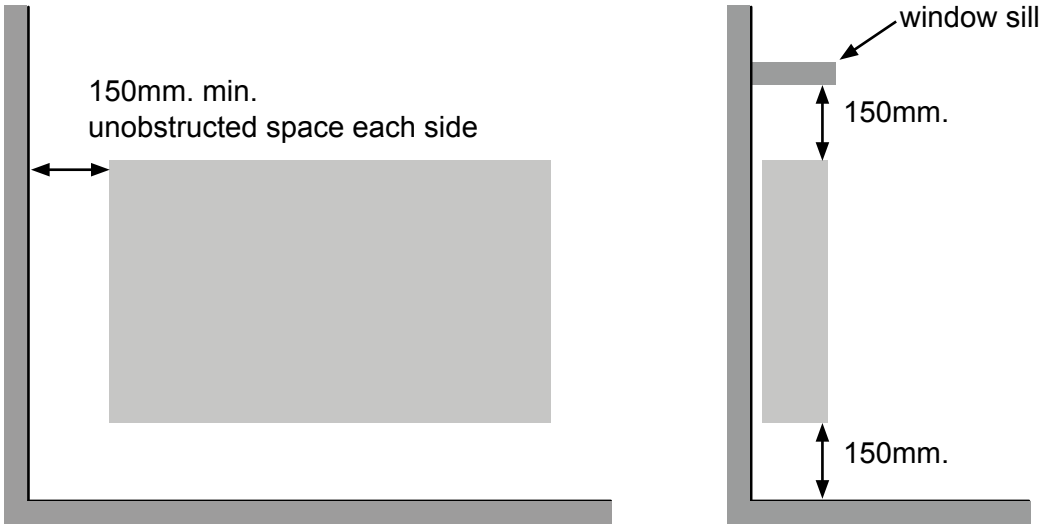
LOCATION

The ideal place to position the Sun Ray RF radiator is as close as possible to coolest wall in the room but it is not recommended to site the radiator on un-insulated exterior walls, in this case, the part of the wall behind the radiator should be insulated.

In bathrooms, the radiators must not be installed inside the protected areas. In the UK the heater must be mounted outside Zone 2. In Ireland the heater must be mounted outside Zone 3. The control unit switches must not be reachable, directly or indirectly, by a person in the bath / shower or using the wash basin.

The radiator, under no circumstances, should be installed below an electric power point.
Choose the location of the radiator in respect of the minimum distances that are indicated in Figure A.

Fig. A



Note: If the window sill protrudes less than 20mm the gap above the heater can be disregarded.

MOUNTING THE RADIATOR

Place the radiator on the floor, as shown in Figure 1a. For radiators with 4, 6, 8 or 10 elements position the supports supplied with the radiator as shown in Figure 1b. For radiators with 12 elements the supports should be positioned between the second and third elements from each end.

Fig. 1a

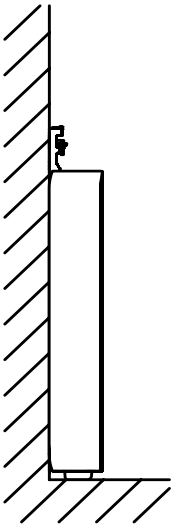
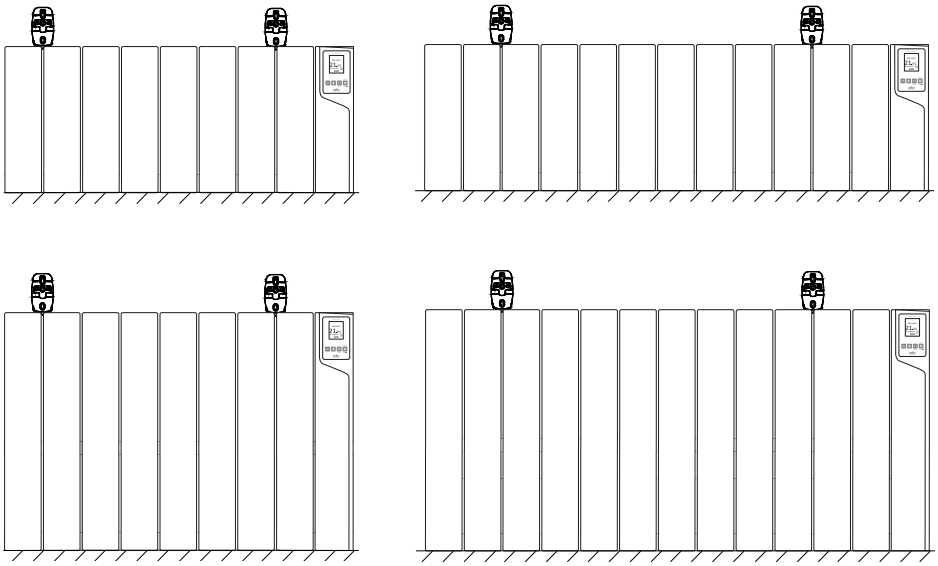


Fig. 1b



Place the supports between the elements as shown in Figure 2a, mark points on the walls through the fixing holes as shown in Figure 2b. This determines the spacing of the supports. Fix the supports to the wall with plugs and screws. Be sure that the supports are mounted in the correct position.

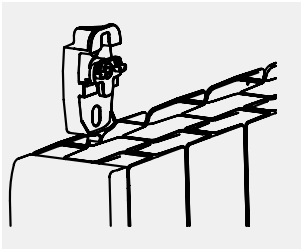


Fig. 2a

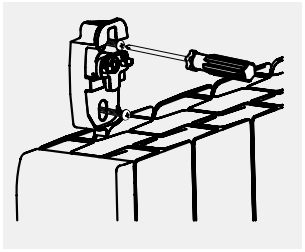


Fig. 2b

Lift the radiator and hang it on the supports, as shown in Figures 3a and 3b.

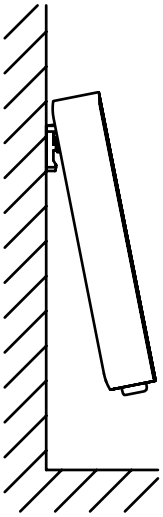


Fig. 3a

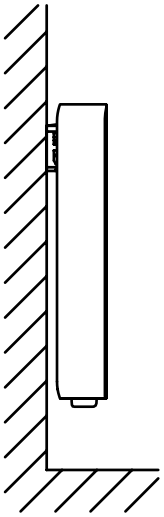


Fig. 3b

Once the heater is hanging as shown in figure 3b, place the locking bracket at the rear edge of the heater (Fig 4a) and slide it until it aligns with the edge of the heater.
Mark the location of screw 1 on the wall and then remove the bracket. Drill the hole for the fixing and insert the supplied wall plug, re-attach the locking bracket to the heater and then fix the heater to the wall with screw 1.
Locking Bracket not available for Neptune RF models.

Fig. 4a

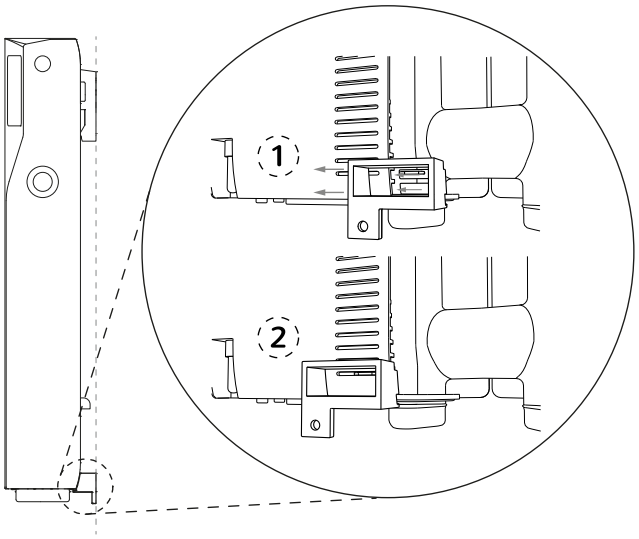
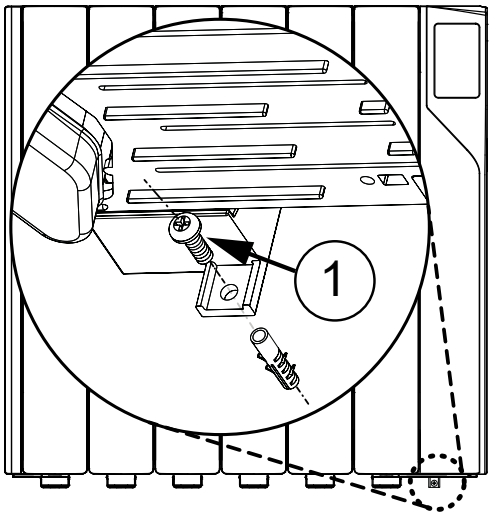
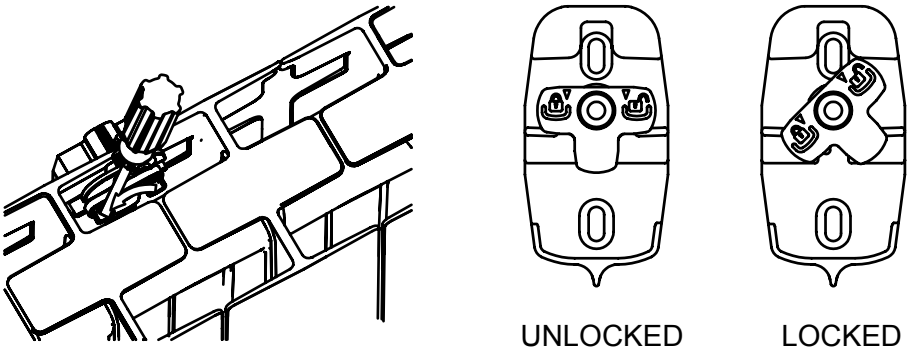


Fig. 4b



For locking the wall brackets, push on the left side of the locking plates on the top brackets until a click is heard. See Figure 5.

Fig. 5



CONTROL OPTIONS

The Sun Ray RF is designed to be used in conjunction with the SunRay Smart Gateway system and App, providing total control of your radiators from anywhere in the world via the internet. The App is available for both Android and IOS devices and offers the ultimate in control and energy monitoring.

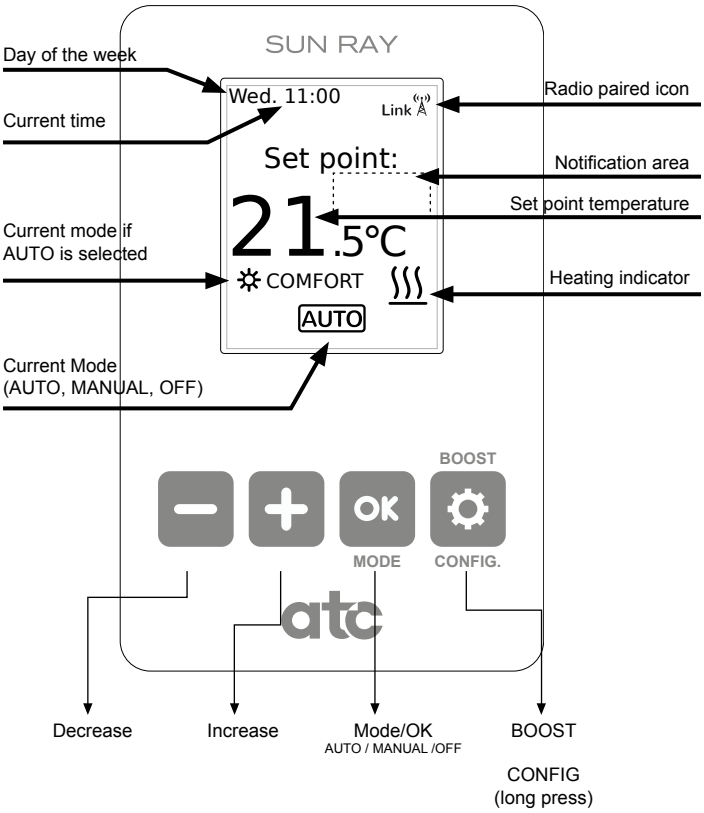
Search for "Tevolve" on the either the Google Play store or the Apple App Store.

It is also possible to programme each radiator individually without the App by using the inbuilt buttons and LCD screen. This may be convenient for single radiators however we recommend the Sun Ray RF Gateway to control multiple radiators.

Finally the radiators can be used in manual mode or Easy mode which bypasses any programming and provides simple On/Off operation.

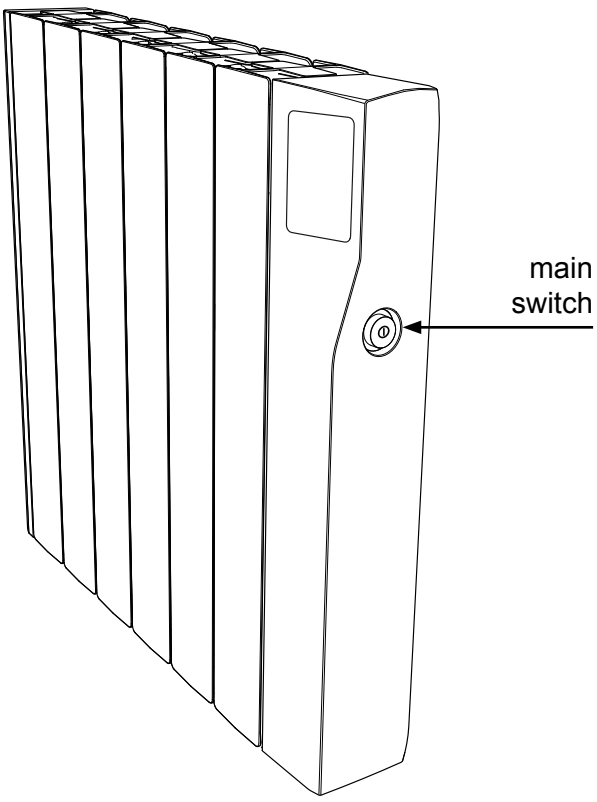
OPERATING INSTRUCTIONS

The control is based on four buttons and a TFT display.



Sun Ray RF Radiator Controls

The first press of any button will wake up the radiator any further button presses will activate the function required.



Switching ON (Master):

Once the radiator has been mounted on the wall and correctly connected to the main electricity power supply, press the main On-Off switch on the right hand side of the radiator.

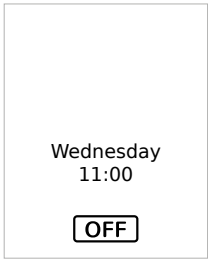
After around 3 seconds the screen will show various information and the radiator is ready to operate. It is recommended to leave the radiator on and use the standby function (below) to turn the radiator off.

Switching OFF (Master):

To switch off the radiator press the main On-Off switch on the right hand side of the radiator. The TFT screen will turn blank and the radiator will lose any connection with the SunRayRF Gateway.

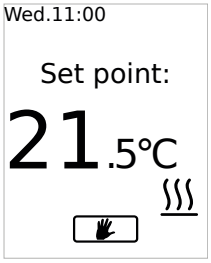
Stand-by function:

From any on screen press the Mode/OK button until the OFF symbol is present as shown in the following screen.

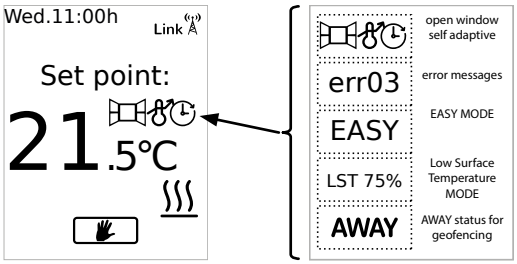


When the radiator is in Stand-by Mode it will retain programs and continue to communicate with the SunRayRF Gateway(if connected) but will not heat.

To switch the radiator on again, press the MODE button to choose programme mode AUTO or manual mode ✋ you will see the following screens:



In any of the operation modes the area above the temperature set point may display a message showing the status of the Radiator, see the following screens:

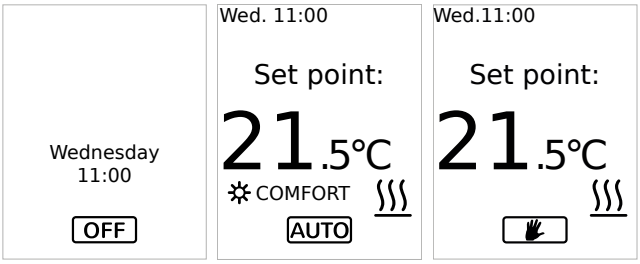


MANUAL PROGRAMMING

To assist with programming the TFT screen is backlit and will stay illuminated for approximately 10 seconds after the last button is pressed. (to change the backlight time, see the section on DISPLAY)

When the radiator is operational and the room temperature is lower than the set temperature the heating symbol will be shown indicating that the radiator is producing heat. When the room temperature equals or is above the set temperature the heating symbol will not be present indicating the radiator is not producing heat.

The following screens show **OFF**, **AUTO** and **MANUAL** modes. To change between the different modes press **MODE/OK** button.



When the radiator is in **AUTO** mode the temperature can be adjusted by pressing the +/- buttons. This change will remain active until either the next programme change or until midnight when the temperature will revert to the preset value.

When the temperature has been adjusted in AUTO mode a hand will show beside the auto to symbol to show the amended setpoint. To manually return the heater to the setpoint cycle the modes until returning to AUTO.

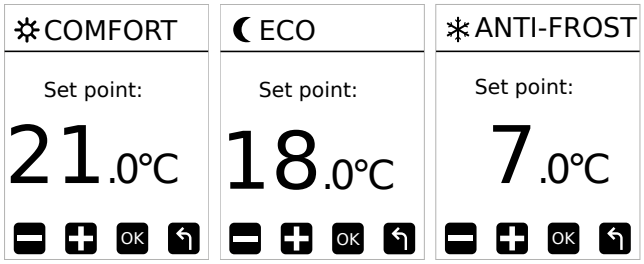
Use the +/- keys to set the temperature when the radiator is in **MANUAL** mode.

SET PROGRAM TEMPERATURES

Adjusting the temperature set points in the following way will only affect the temperatures that are used for program modes.

To change these set up temperatures press and hold the CONFIG button until the following screen appears:

Select either Comfort, Eco or Anti-Frost and press OK to enter the menu.

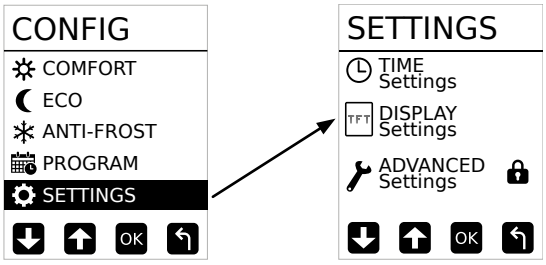


Press the +/- button to change the temperature of each mode then press OK to confirm and return to the main operation screen, repeat the above to set the other temperature setpoints.

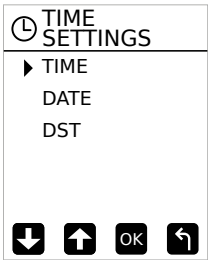
SETTING THE TIME AND DATE

If a radiator is paired with a Sun Ray RF Gateway then the local time from the internet is automatically applied to the radiator.

To set the Clock on an unpaired Radiator, press and hold the Config button until the CONFIG menu is shown and then select SETTINGS and the press OK.

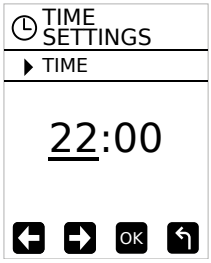


In the TIME menu the Time, Date and Daylight Savings (DST) can be set.



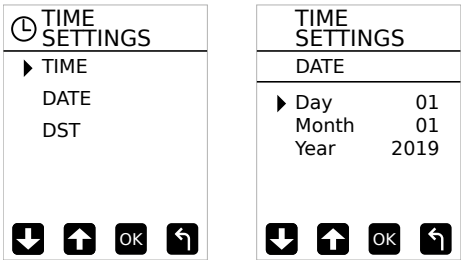
Select the TIME menu with the +/- keys and press OK.

The current set time is shown on the display, to change the Hours or Minutes move the underline to the Hours and press OK.



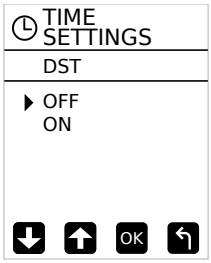
The hours will flash, use the +/- keys to adjust to the correct value and Press OK, move to the minutes and repeat to set the correct time. Once complete press the CONFIG button to exit.

To set the Date select the Date menu, press OK and enter the Day, Month and Year.



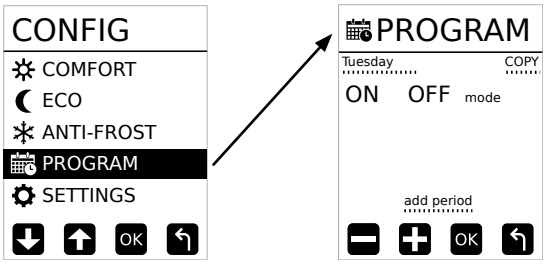
TO exit the Date menu, press the CONFIG button.

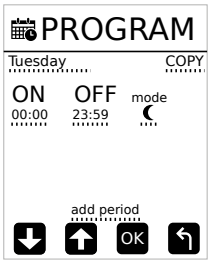
The Radiator can automatically adjust the time offset for Daylight savings. To set this option on or off choose ON or OFF in the DST menu



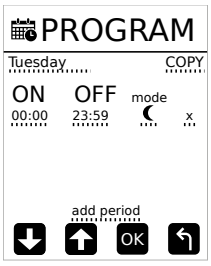
ENTERING A PROGRAM

The AUTO mode of the Sun Ray RF allows you to run a program designed to accommodate your lifestyle. To enter a new program into the Heater press and hold the CONFIG button until the CONFIG menu appears, then use the +/- buttons to select PROGRAM and press OK.

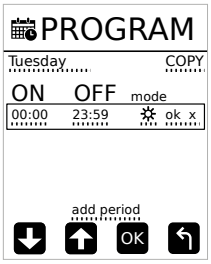




To enter a program into the radiator first select the day of the week in the upper left corner of the week and press OK, change the day to the day you want to program and press ok.



Once the correct day is selected, move the underline to the time of day. The underline will change to a box around the times that can be changed. Press OK and the ON time will begin to flash.

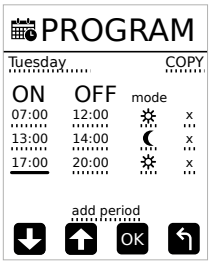


Change the on time to the Starting time the radiator should heat (7:00 in our example), Press OK and the OFF time starts to Flash. Change the OFF time to the end of the heating period required (e.g.12:00).

Once the Times have been Entered, chose the temperature set point required for the Heating Period; either Comfort ☼ or Economy ☾ .

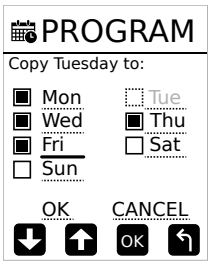
Any time periods outside of Comfort or Economy are automatically set to Anti-Frost ❄ .

Once the set point is chosen choose either “ok” on the screen to save the setting or “x” to delete.



Extra heating times can be added by selecting “add period” and repeating the above procedure.

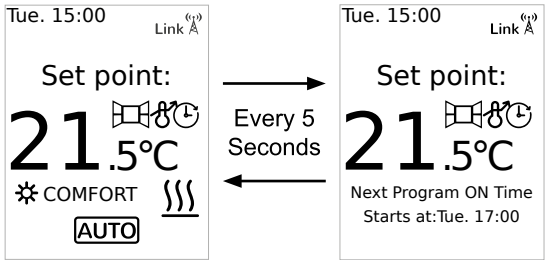
Once the program for the day is complete, it can be copied to other days in the week by selecting COPY from the programming screen.



The copy screen will appear and the day that is being copied from will not be available. (e.g. Tuesday)

Select the days to copy to and then move the underline to “OK” on the screen and press the OK button. The Screen will change back to the program menu. To Exit press CONFIG or leave the radiator and the display will revert to the current running mode

To make sure your program is running Press the OK/MODE button until AUTO is shown at the bottom of the screen.



The screen will change between the operation screen and the next time of operation.
At any time, the temperature can be changed with the +/- buttons.

BOOST

The Sun Ray RF heater has a built in Boost mode to allow the user to temporarily over-ride the current operating mode. The Boost button (short press of CONFIG) will immediately turn the heater on for 1 hour at 21ºC. as soon as the button is pressed.

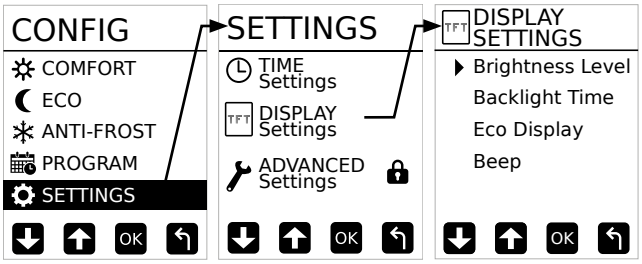
To adjust the temperature of the boost period, use the +/- buttons.
To adjust the duration, press the CONFIG button, the boos time setting screen will be displayed; adjust the time required between 1 hour and 24hours.

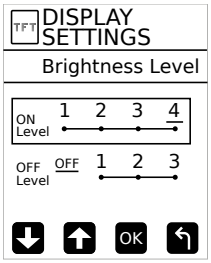
To return to the boost screen press CONFIG.
To return to normal operation from the Boost mode Press the OK button.

DISPLAY SETTINGS

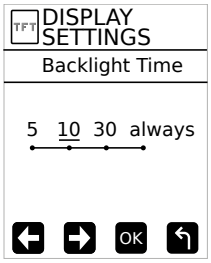
The Display menu on the Sun Ray RF allows the user to customise how the radiator looks whilst the screen is on and off, it also allows the button sound to be controlled.

To open the DISPLAY menu, press and hold CONFIG until the menu appears, select SETTINGS and press OK, finally select DISPLAY and press OK.

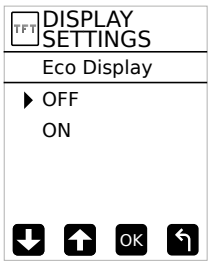




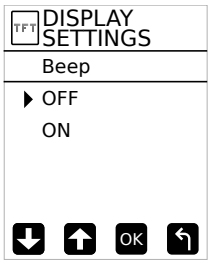
To Adjust the brightness of the screen, select Brightness level and press OK, the ON levels are between 1=25%, 2=50%, 3=75% & 4=100%. The OFF levels are Off, 1=3%, 2=10% and 3=20%. Chose the level required and Press OK.



To Set the time the screen stays on for after the last button press select Backlight from the DISPLAY menu and chose how many seconds are required. The factory default is 10s.



The Sun Ray RF features a “responsible consumption” Eco Display mode, this mode will show a coloured bar across the bottom of the screen to encourage the user to set an economical temperature.
This feature is turned on and off in the ECO DISPLAY menu.



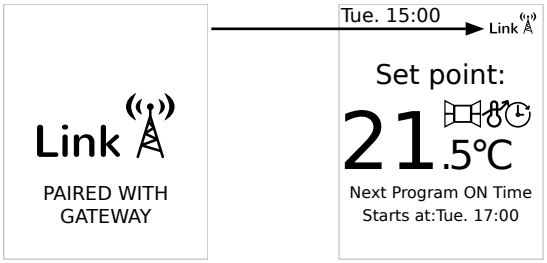
To de-activate the beep when each key is pressed enter the BEEP menu and select either On or OFF.

The first press of any button will wake up the radiator any further button presses will activate the function required.

PROGRAMMING WITH APP

To programme your Sun Ray RF with a Sun Ray RF Gateway you must pair the radiator to the Gateway. First you must activate the pairing/ discovery mode in the Gateway, press Link button for 2 seconds. Details of this can be found in the Sun Ray RF Gateway instruction manual.

Once this is done, the way to pair the radiator is to press the **OK** button for 3 seconds while the radiator is in one of the main modes (OFF, AUTO, MANUAL).



Your Sun Ray RF radiator is now ready to accept programme instructions from the Gateway (you will need to complete Sun Ray RF web activation. http://tevolve.termoweb.net)

If the radiator has been linked to the Gateway and for some reason communication is lost, the Link icon disappears and the antenna starts flashing in red alternating with Link text.

KEYPAD LOCKING (ANTI-TAMPER)

The keypad can be locked to prevent any unauthorised person (children, people in public places, nurseries, offices, hotels etc.) altering the settings of the radiator.

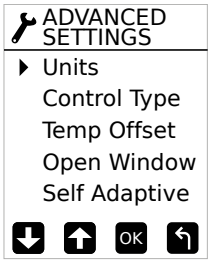
A Password is required to lock the keypad (0 0 0 0 by default), See Password Settings Chapter for further details on changing passwords.

To Lock the radiator Press and hold the + and – buttons until the lock screen appears. Enter the password on the screen and press Ok. The screen will change to show the Lock screen and any button presses will be ignored and the locked screen displayed.

To unlock the keypad press and hold the + and - until the unlock screen appears. Enter the password and press OK. If the incorrect password is entered “INVALID CODE” will be displayed.

When the keypad is locked the radiator will still receive communications from the Sun Ray RF Gateway.

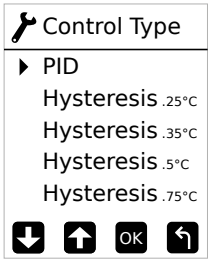
ADVANCED SETTINGS



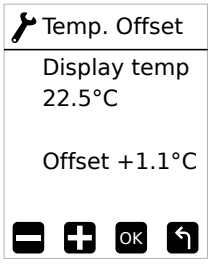
The Advanced settings menu is password protected to prevent any inadvertent changes to the factory settings.

To access the Advanced settings, enter the password (default 0 0 0 0). It is recommended to set a custom password once installation is complete. (For more information See password section).

The units menu allows the main temperature units of the radiator to be chosen between Celsius (°C) and Fahrenheit (°F).



The Control Type menu allows two types of control of the temperature control setting. PID will calculate the best switching point for the heater depending on previous room readings. Hysteresis is the amount of difference between the detected temperature and the setpoint. It is not recommended to change these settings.

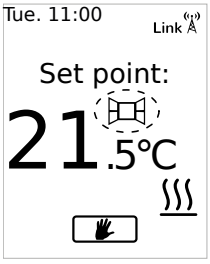


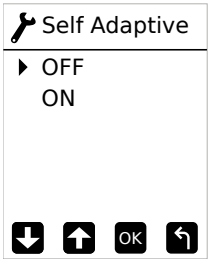
The temperature offset menu allows the display temp to be adjusted by ± 3. Adjusting this setpoint will affect the operation of the thermostat setpoints, changing this setting is only recommended if the displayed temperature is noticeably different from another sensor in the space.

The Open window setting will turn the heating of the radiator off if the unit detects a rapid drop in temperature over a short period of time.

To reactivate the heating once the open window function has activated press any button the radiator. If the temperature rises above the minimum detected temperature then the heater will reactivate and turn the open window function off.

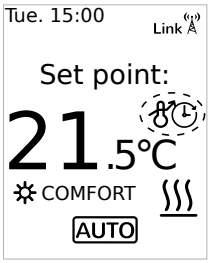
If this function comes on frequently e.g. in an area where there is an external doorway, it is recommended to turn the open window function off.

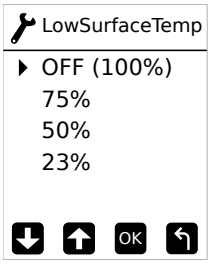




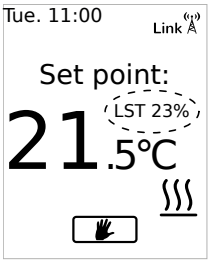
The Self Adaptive setting will allow the radiator to calculate the optimum time to start the heating cycle when running in Program mode.

If this setting is turned on it will be shown in the Notification area and the heating will come on prior to the programmed starting time so that the room is at the correct temperature at the programmed starting time.



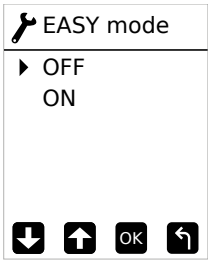


The Low Surface Temperature (LST) menu will allow the output of the heater to be limited to a lower setting to prevent the surface of the heater becoming too hot. If a surface temperature of less than 43°C is required use the lowest setting.

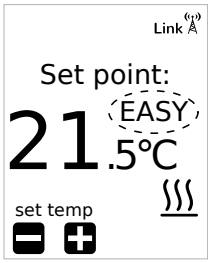


It is recommended that if the LST function is activated then the radiator should be locked with a non standard password after activation.

(See Password Section)



EASY Mode is a simple mode of operation where by only the + and – buttons on the radiator operate to increase or decrease the temperature. The OK button is deactivated. To turn the radiator on or off use the Main power button on the side of the heater.



When running in Easy mode the Screen will show EASY in the notification area to let the use know that the mode is active.

To exit EASY mode press and hold the CONFIG button for 10 seconds, then select “off”.

Runback: See Runback Section on page

Password: See Password Section on page

Resetting the radiator will return all settings to the factory defaults and will also delete any ‘pairing’ with a Sun Ray RF Gateway.

To activate the RESET feature select with arrow buttons OK, and press the OK button.

The first press of any button will wake up the radiator any further button presses will activate the function required.

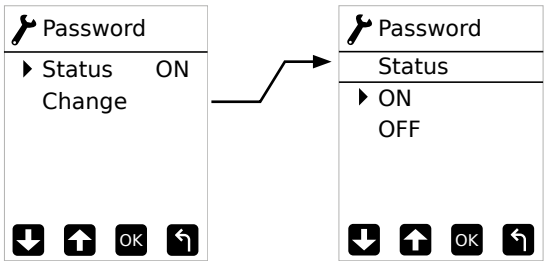
PASSWORD

The Password Function of the Sunray RF Radiator serves a number of functions; Keylock, Advanced menu access and also Runback access when the runback is activated. The Default password from the factory is four Zero's (0 0 0 0), however it is strongly recommended that once installation is complete that an alternative code is set.

To access the password function enter the ADVANCED SETTINGS menu and then select PASSWORD.

The password can be turned on or off and changed.

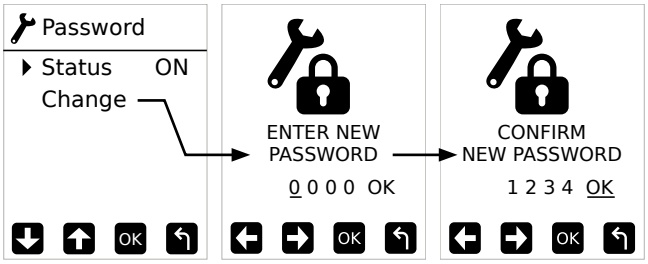
To Turn the password on or off, Select Change and press OK.



Select either ON or OFF and press OK. If you are reactivating the password then the Enter New password screen is shown (The password will always default back to 0 0 0 0).

If the password is turned off, the Keylock, Advanced Settings menu and Runback controls are accessible without entering a password.

To Change the password code when the password is active select Change from the password screen and press OK.



Enter and confirm the new password and press OK.

RUNBACK MODE

The Sunray RF Heater comes with a runback mode for use when the heater will be installed in areas where restricted user control is required.

When Runback Mode is active it allows the user to set the radiator to run for a specific pre-set amount of time and temperature. It is also possible to set a maximum temperature (Max Temp) above the Runback setting to allow the user to increase the temperature within the limits allowed.

Before activating Runback mode it is strongly recommended that an alternative password is set and activated and the comfort mode temperature setpoint is set to 35°C. When the password is activated the user will have no access to the radiator settings without the password.

NOTE: Any Display settings will be used in RUNBACK mode, eg. Backlight time and intensity, Eco mode etc.

After the runback time period ends the room temperature will return to off (7°C minimum) until the runback is restarted.

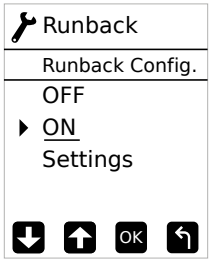
It is also possible to set a minimum temperature to be maintained (Setback) outside of the runback mode; when setback mode is activated the room temperature will only fall as low as the Setback temp and be maintained at this point until runback is restarted.

ACTIVATING RUNBACK MODE

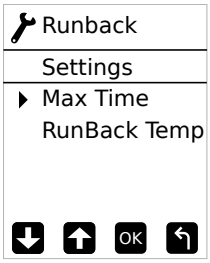
Runback mode is activated from the Advanced settings menu.

The main runback screen has 3 options:

- Runback Config
- Setback Config
- Max Temp



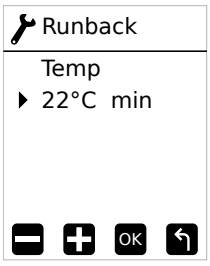
Set Runback to ON to activate the mode.



The Default time for Runback to operate is 30 minutes, this can be increased in ½ hour sections up to 8 hours (480 mins) by using the + & - and OK.

0 → 30 → 60 → 90 → 120 → 150 → 180 → 210 → 240 → 270 → 300 → 330 → 360 → 390 → 420 → 450 → 480 →0

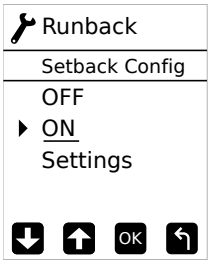
The time can be limited to any of the above values, when the user activates the Runback timer, they can choose any of the times up to the maximum set on installation.



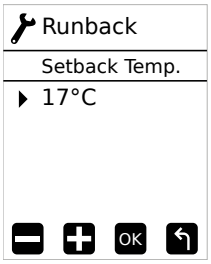
The temperature that the radiator runs at when runback is activated is set in the Runback Temp menu. Use + & - to Set the temperature and Press OK.

Please note that the Runback temperature cannot be set higher than the Comfort setting in the main menu.

SETBACK

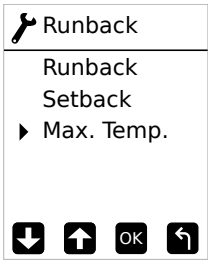


The setback mode can be used to limit the temperature that the area where the heater is installed can fall to outside of the Runback operation. This temperature can be set between 7°C and 0.5°C less than the Runback temperature.

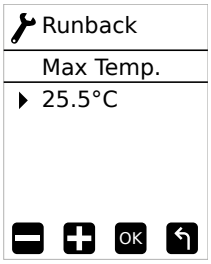


When Setback is operational, the screen will show setback and the setpoint.

MAX TEMPERATURE

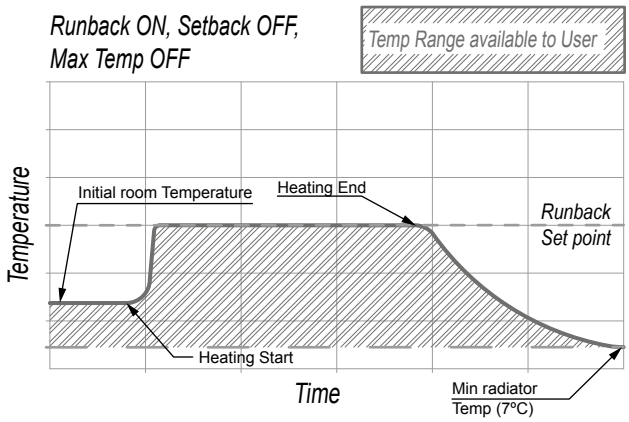


The Max Temperature mode allows the installer to set a temperature higher than the Runback temperature to give the user some leeway in the temperature of the room. Typically this is set 1-2°C higher than the runback setting.



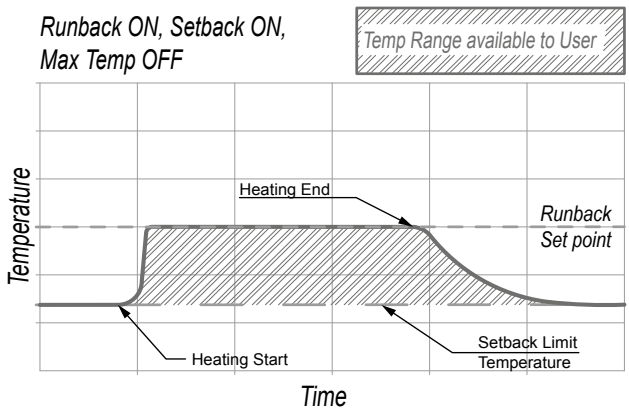
Both the Setback and Max temp are set with the +&- buttons from their respective menus.

The graphs below show typical scenarios for each of the settings.



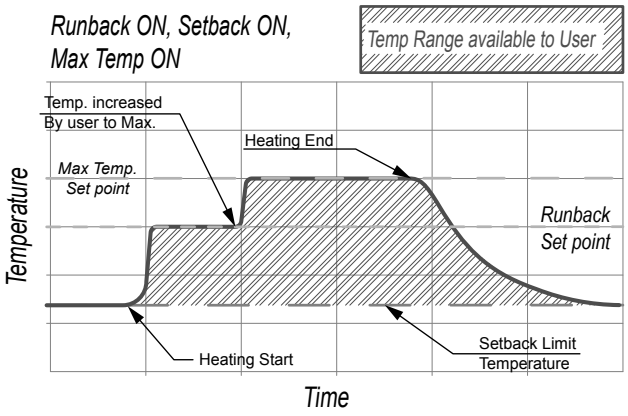
When Setback and Max temp is OFF, the user has a choice between the minimum radiator temperature of 7°C and the Runback temp setting.

Outside of the Runback period the temperature will fall as low as 7°C if the radiator is not re-activated.



When Runback and Setback are activated then the user has a limited choice of temperature between the Setback setting and the Runback setting.

Outside of the Runback period the temperature will fall to the Setback temperature if the radiator is not re-activated. (Building Fabric Protection)



When all 3 settings are activated then the user has a choice between Setback as a minimum and the Max temp setting as a maximum.

The Radiator will always come on at the Runback set point.

In the example above the user has activated runback and then increased the temperature to the Max Temp set point after a time.

ERROR CODES

The Sun Ray RF Radiator continuously checks te ensure that it is working correctly all the time, however in some cases the radiator may display an Error code on the screen.

In the case of an error code please contact Technical@ATC.ie for support

TROUBLESHOOTING

If the power of the Lithium battery drops, in every active screen a small icon will remind the user that the battery is flat. The time and date is not retained if the radiator main switch is disconnected.

If the radiator is paired with an internet connected gateway the time and date are always updated when the radiator reconnects to the gateway.

When a radiator has been paired with a Gateway, the text “Link” and an antenna with flashing waves appears on the top right of the screen.

When the Gateway is not powered or it is too far away from radiator, the Link text alternates with a red antenna without waves to alert the user that the radiator cannot comunicate with the gateway.

If radiator is paired with a gateway, and the internet connection is lost the heating system is not accessible from the app. However the running schedule remains in the radiator memory and continues with the last user setting if the lithium battery is not flat.

(Lithium battery CR2032 life is around 5 years from date of manufacture, this life can be decreased depending storage conditions)

DEFAULT VALUES

Default mode: OFF
Type of control: PID
Temperature offset: 0ºC
Open window detection: disabled
Autoadaptive: disabled
Programming in one hour intervals, all hours in antifrost mode
Setpoint temperatures:
- Anti-freeze 7ºC
- Eco 18ºC
- Comfort 21ºC
- Manual temperature: 21ºC
- Boost mode temperature: 21ºC
- Boost mode time: 1h

Low Surface Temperature: disabled
Password status: activated
Password: 0000
Units: ºC
Keyboard: unlocked
Easy mode: disabled

Runback mode: disabled
Setback: disabled
Runback temperatures:
- Antifreeze: 7ºC
- Eco: 18ºC
- Comfort: 21ºC
- Max. Temperature of Runback: 21ºC
- Max time of Runback: 30min

Screen brightness on: max (4)
Screen brightness on: min (OFF)
Screen time on: min (5s)
Beep: disabled
EcoDisplay: disabled
DST: enabled
Default date: 01-01-2019 (Tuesday)

ECODESIGN TABLE

Models	**Sun Ray RF 350**	**Sun Ray RF 500**	**Sun Ray RF 750**	**Sun Ray RF 1000**	**Sun Ray RF 1250**	**Sun Ray RF 1500**	**Sun Ray RF 1800**	**Neptune RF 950**	**Neptune RF 1425**
Heat output									
Nominal heat output (P_{nom})	0.350 kW	0.500 kW	0.750 kW	1.000 kW	1.250 kW	1.500 kW	1.800 kW	0.950 kW	1.420 kW
Maximum continuous heat output ($P_{max,c}$)	0.350 kW	0.500 kW	0.750 kW	1.000 kW	1.250 kW	1.500 kW	1.800 kW	0.950 kW	1.420 kW
Auxiliary electricity consumption									
In OFF mode (P_0)	0.00 W	0.00 W	0.00 W	0.00 W	0.00 W	0.00 W	0.00 W	0.00 W	0.00 W
In standby mode (P_{sm})	0.40 W	0.40 W	0.40 W	0.40 W	0.40 W	0.40 W	0.40 W	0.40 W	0.40 W
In idle mode (P_{idle})	0.40 W	0.40 W	0.40 W	0.40 W	0.40 W	0.40 W	0.40 W	0.40 W	0.40 W
In network standby (P_{nsm})	0.70 W	0.70 W	0.70 W	0.70 W	0.70 W	0.70 W	0.70 W	0.70 W	0.70 W
Standby mode with display of information or status	no	no	no	no	no	no	no	no	no
Seasonal space heating energy efficiency in active mode ($\eta_{s,\,on}$)	96.0%	96.0%	96.0%	96.0%	96.0%	96.0%	96.0%	96.0%	96.0%
Type of heat output/room temperature control:	TW, Electronic room temperature control plus week timer								
Other control options:	With open window detection With distance control option With adaptive start control, Working time limitation								

ATC Electrical and Mechanical

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MAINTENANCE AND CARE

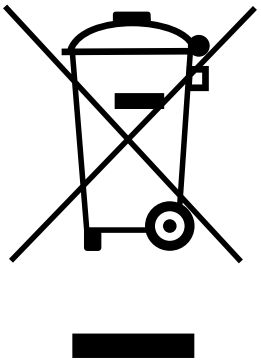
Sun Ray RF radiators require very little maintenance.

The surfaces of the radiator must not be cleaned with an abrasive product or those containing granular substances.
We recommend regular cleaning with PH neutral products.
In order to clean the radiator, it is recommended that the electric power is switched off. Failure to keep the SunRay Radiators clean may result in dust becoming burnt and depositing on the wall above the heater in the form of dark streaks or patches. This type of marking is expressly due to failure to keep the heater and surrounding area clean. ATC take no responsability for any such damage caused

GUARANTEE

Your appliance is guaranteed for 20 years for the aluminium and 3 years electric and electronic components from the date of purchase – during this period we will repair or exchange, at our discretion, any faulty or defective parts providing the appliance has been used in accordance with the operating & installation instructions and has not been misused or mistreated in any way.
Any unauthorised repair or attempted repair will invalidate the guarantee. You may be asked to return the product to our workshop for inspection to establish whether the fault is covered under the guarantee. The guarantee is valid in the UK and Ireland only.
This guarantee is additional to your statutory rights.
In the unlikely event of a problem with your appliance please contact your supplier.

CORRECT DISPOSAL OF THIS PRODUCT



(**W**aste **E**lectrical & **E**lectronic **E**quipment)
(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed of with other household wastes at the end of its working life.
To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

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