

Heating element SP1 / SP1CR - SP2 / SP2CR

RADIATOR TECHNICAL MANUAL

DEAR CUSTOMER

Thank you for choosing a Caleido product.

This manual contains all the necessary information concerning the correct installation, use and maintenance of the radiator.

Please read this manual carefully and keep it in a safe place. Remember that, in the event of transfer to another installation destination, it must accompany the radiator.

IMPORTANT WARNINGS

The appliance may be used by children over the age of 8 and by persons with reduced physical, sensory or mental capabilities, or a lack of experience or the necessary knowledge, as long as they are supervised or have received instructions on the safe use of the appliance and understand the dangers involved. Cleaning and maintenance to be carried out by the user must not be carried out by children. Children under the age of 3 must be kept at a distance and must not play with the radiator or its parts. Children between 3 and 8 years of age may only turn the appliance on/off if they have received instructions regarding its safe use and understand the dangers. Children between the ages of 3 and 8 years should NOT plug in, adjust or clean the appliance, nor should they carry out maintenance on it.

CAUTION - DO NOT use in small rooms when these are occupied by people who cannot leave the room alone, unless they are under constant supervision

CAUTION - The radiator may only be used to support towels or similar, and these must not exceed a total weight of 5 kg.

CAUTION - Only use the screws and plugs supplied or replace them with others which have the same or better mechanical properties. CAUTION - This appliance is only intended for heating textiles washed in water.

CAUTION - If antifreeze liquid leaks from the electric radiator, avoid contact with skin and eyes; avoid inhaling and swallowing.

CAUTION - Do not use this device in the immediate vicinity of a bathtub, shower or swimming pool. CAUTION - The device is not suitable for drying wet clothes, this would pose a serious safety risk to the user.



CAUTION

Some parts of this product can get **VERY HOT** and cause burns. Particular care must be taken where children and/or vulnerable persons are present.



CAUTION

To avoid overheating, do not cover the device.



CAUTION

Do not climb on the product.

ELECTRICAL CONNECTION

All the characteristics relating to the electrical part of the radiator, which has previously undergone various tests, are found on the label on the underside of the appliance, next to the power cable. We recommend that you read the above label.

CAUTION

The appliance must be disconnected from the electricity supply during installation, maintenance and cleaning.

Check the correct supply voltage, observing the values on the label on the radiator next to the power cable.

A multi-pole cut-off device must be installed. There must be a gap of at least 3 mm between the contacts. A multi-pole cut-off device must be installed. The distance between the contacts must be at least 3 mm.

Do not insert and do not try to pierce the plastic casing of the control electronics and/or use metal objects to tamper with it.

caleido

CALEIDO srl - via Pablo Neruda, 52/a - 25020 Flero (BS) - Italy
Tel +39 030 2530054 - Fax +39 030 2530533
caleido@caleido.it
caleido.it

0039 030 2530054

SPECIFICATIONS FOR INSTALLATION IN THE BATHROOM

Installation must comply with the standards and laws in force in the country of destination.

For electrical specifications and the IP electrical protection rating, please consult the label on the radiator and follow the warnings given below

CAUTION - the radiator must be positioned so that the switch or electronic controls are not accessible while the person is in the shower or in the bath.

CAUTION - if the power cable is damaged, it must be replaced in order to prevent any risk. **CAUTION** - for versions with an electrical resistance with a cable output, ensure that the connection is carried out properly, using a terminal compliant with EN 60998-1, which guarantees the same IP degree of protection as indicated in the manual of the resistance and on the label on the radiator bearing the specifications.

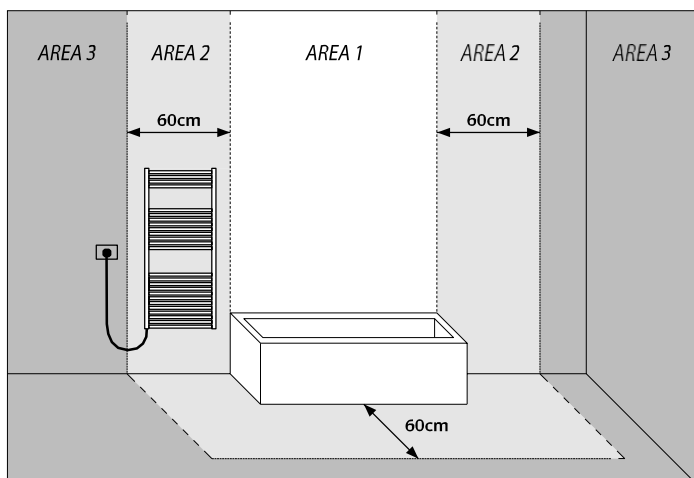
CAUTION - for versions with CLASS II electrical resistance and cable output, perform the connection in compliance with EN 60998-1 using a terminal that guarantees double insulation.

CAUTION - for versions with a resistance that require connection to the electricity mains with a plug, ensure that the socket is in AREA 3, as shown in figure 1 (page 3).

CAUTION - for versions with CLASS II electrical resistance, connect the radiator to a device that ensures the disconnection of the omnipolar mains, with a gap between contacts of at least 3 mm.

CAUTION - versions with CLASS II electrical resistance do NOT have to be earthed. **CAUTION** – for radiators installed in a bathroom, it is necessary to protect the power line with a high-sensitivity 30mA differential device.

A multi-pole cut-off device must be installed. There must be a gap of at least 3 mm between the contacts. Taking all of the above warnings into consideration, the radiator can be installed in areas 2 and 3, as shown in **Figure 1**



INSTALLING THE RADIATOR

The radiator must not be installed in a niche or under a socket.

Any element that could obstruct the proper distribution of heat must be placed at a minimum distance of 50 cm from the front of the radiator.

The ideal installation height is 30 cm from the floor.

CAUTION - To avoid posing a threat to very young children, this appliance must be installed so that the last heating element at the bottom is at least 600 mm above the floor.

CLEANING THE RADIATOR

CAUTION - disconnect the power supply before each cleaning operation.

CAUTION - cleaning operations must be carried out with the radiator switched off and cold.

CAUTION - do not use abrasive or corrosive products.

Clean the heating part using soapy water and rinse with a soft cloth. When cleaning plastic parts, only a dry cloth use and avoid contact with chemicals or alcohol.

MALFUNCTION

In the event of a malfunction, refrain from using the appliance, disconnect it from the power supply, and contact a qualified technician who is authorised to work on this type of product.

Repairs that require the liquid container to be opened must be carried out by the manufacturer.

The manufacturer accepts no liability for damage to persons, animals or property resulting from tampering with or improper handling of the radiator.

WARRANTY

The radiator body is guaranteed for 5 years; the electrical and electronic components are guaranteed for 2 years from the date of purchase of the radiator.

A document proving the date of purchase (tax receipt, invoice, till receipt) must be presented for the warranty to be valid.

CAUTION: For the guarantee to be valid, installation must comply with current standards and laws and be carried out properly.

Components subject to normal wear and tear or consumption, and damages occurring during transport are not covered by warranty.

THE ENVIRONMENT

The symbol attached to the appliance and illustrated opposite indicates that the product is subject to separate collection for electrical appliances.

At the end of its life, the appliance cannot be disposed of with normal household waste, it must be taken to a specific local collection point or returned to the distributor when a new appliance of the same type for the same use is purchased. The separate collection of electrical and electronic equipment is part of a policy to safeguard, protect and improve the quality of the environment and to avoid potential harmful effects on human health due to the presence of hazardous substances as classified by European directives.

CAUTION: Inappropriate disposal of the appliance will result in sanctions.



CHARACTERISTICS OF THE RADIATOR

IP CLASS: see the label on the radiator.

INSULATION CLASS: see the label on the radiator.

The radiator consists of a metal body which contains fluid for the internal transmission of heat consisting of a mixture of water and antifreeze specifically for this type of use.

SP1 / SP1CR - SP2 / SP2CR

SP1 / SP2 is an infra-red electric heater, equipped with remote control as standard. Heater with international **CE** certification.

Operating modes:

Comfort, Night, Antifreeze, Chrono, Stand-by, 2h Boost, Eco, Open window detection, Key lock.

Comfort mode:

The thermostat maintains the room temperature at the value set by the user.

Night mode:

The thermostat keeps the temperature at a lower value than the "Comfort" temperature.

Antifreeze mode:

The thermostat keeps the room temperature above 7°C.

Chrono mode:

The control works according to a daily programme repeated on a weekly basis, that can be set by the user.

Stand-by mode:

The heating element is switched off but the electronic control remains active.

2h Boost mode:

The system activates the heating element for 2h regardless of the temperature set, but it will still be regulated not to exceed 32°C. At the end of the 2h, the thermostat returns to the previous mode.

Eco mode:

The system reduces the temperature set by 3°C independently of other settings in order to reduce energy consumption.

Key Lock mode:

By blocking the use of buttons, the user can prevent accidental use of other modes.

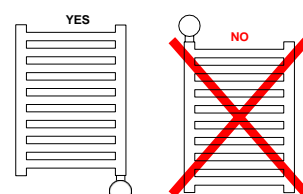
Other information:

- Remote control for infra-red signal control and transmission.
- The temperature can be set from 10°C to 30°C or 7°C in "Anti-Freeze" mode.

Risk of death from electric shock!
Always ensure that the power supply is disconnected before working on the heating element.

INSTRUCTIONS TO BE READ CAREFULLY BEFORE USING THIS DEVICE

- This device is designed exclusively for use on towel warmers.
- This thermostat is used to heat the liquid inside a towel warmer in combination with a heating element. Every other use is forbidden.
- Before use, check that the mains voltage is the same as that of the thermostat (see technical specifications).
- The heating element may only be replaced by the manufacturer.
- If the power cable is damaged, switch off the device and do not tamper with it. Damaged power cables may only be replaced by the manufacturer or an authorised service centre. Failure to do so may compromise the safety of the system and invalidate the warranty.
- Only store and transport the heating element in its protective packaging.
- Disconnect the power supply before cleaning or maintenance.
- The device may be used by children over the age of 14 and by persons with reduced physical, sensory or mental capabilities, as long as they are supervised. Cleaning must not be carried out by children.
- The heating element may only be replaced by the manufacturer.



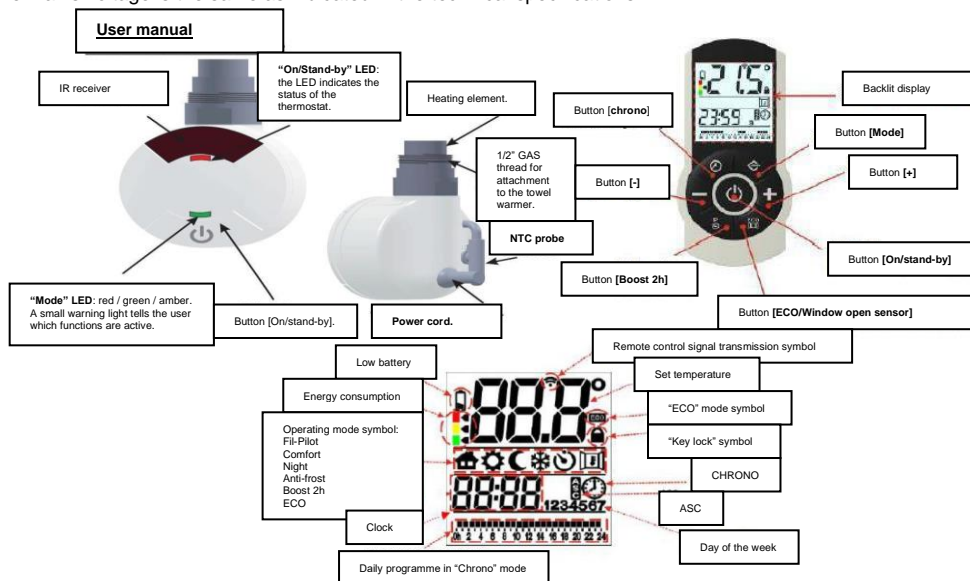
- Disconnect the appliance from the mains before installation or maintenance.
- Protect the device with a 30mA residual current device (RCD).

INSTALLATION INSTRUCTIONS

1. The device must not be placed in front of a power socket.
2. Prevent the device from being hit by water jets.
3. When installed in rooms with a bath or shower, observe the “protection zones” for insulation class IP 44 (in the UK according to IEE wiring regulations).
Also, observe all local regulations.
4. When connecting the electrical wiring, the brown wire is live (L), the blue wire is neutral (N) and the yellow/green wire must be connected to earth.
5. It must be protected with a 30mA residual current device (RCD).
6. Ensure that the mains voltage is the same as indicated in the technical specifications.

USER MANUAL

1. The device must not be placed in front of a power socket.
2. Prevent the device from being hit by water jets.
3. When installed in rooms with a bath or shower, observe the “protection zones” for insulation class IP 44 (in the UK according to IEE wiring regulations).
Also, observe all local regulations.
4. When connecting the electrical wiring, the brown wire is live (L), the blue wire is neutral (N) and the yellow/green wire must be connected to earth.
5. It must be protected with a 30mA residual current device (RCD).
6. Ensure that the mains voltage is the same as indicated in the technical specifications.



USER GUIDE

On/stand-by

Press the (On/Stand-by) button on the remote control or thermostat to switch on or activate the “Stand-by” mode. When the device is switched on, it emits a 0.5-second sound; when “Stand-by” mode is activated, it emits two 0.5-second sounds. Switching on directly from the thermostat attached to the towel warmer activates “Comfort” mode with a set temperature of 20°C. The remote control must be used to change the temperature or activate other functions.

Comfort mode

“Comfort” mode maintains the room temperature at the value set by the user. Press the (mode) button until the “Comfort” icon appears on the display. Use the (+) and (-) buttons to set the desired temperature. In “Comfort” mode, the mode LED is red.

Night mode

In “Night” mode, a lower temperature value than “Comfort” mode is set. This mode is activated by pressing the (mode) button until the desired icon appears. Set the desired temperature with the (+) and (-) buttons. In “Night” mode, the Mode LED is green.

Antifreeze mode







In “Antifreeze” mode the heating element switches on when the room temperature falls below 7°C. This mode is activated by pressing the (mode) button until the desired mode icon appears. In “Antifreeze” mode, the Mode LED is flashing green.

2H Boost mode

The heating element switches on to reach a room temperature of 32°C and stops automatically after 2 hours. This mode is activated by pressing the button (2h Boost); the “2h” icon appears on the display. To exit this mode, press the 2h Boost button, the On/Stand-by button or the mode button. In 2h Boost mode, the Mode LED is flashing red.

Chrono mode:

This mode allows you to set a daily programme repeated on a weekly basis. This mode is activated by pressing the mode button until the “Chrono” icon appears. In “Chrono” mode, the On/Standby LED is amber. The Mode LED is green during the “Night” period and red during the “Comfort” period.

				2h			ECO
Fil-Pilot	Comfort	Night	Anti-freeze	2H timer	Chrono	Window open sensor	Eco

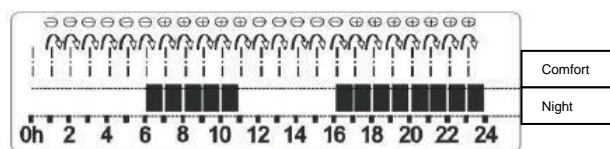
CHRONO MODE PROGRAMMING

a) Set time and day

- The flashing number indicates the day of the week: press the (+) and (-) buttons to set the correct day, press (mode) to confirm. "HOURS": use the (+) and (-) buttons to set the hour and press (mode) to switch to the minutes setting. "MINUTES": repeat the same procedure and confirm with the (mode) button.

b) Set the weekly operating programme

Programming starts from day 1; to set the hours, press the (+) and (-) buttons. The (+) button sets the "Comfort" temperature indicated by a solid bar, the (-) key sets the "Night" mode and is indicated by an empty bar. To programme all 24 hours, press the (+) and (-) buttons, once one of the two buttons is pressed the programme moves on to the next hour.



FIL-PILOT PROGRAMMING

This is the mode in which the towel warmer is controlled from a remote control unit.

1. Press the (mode) button until the corresponding icon appears on the display.
2. Select the desired temperature with the (+) and (-) button. The operating mode will be selected by the File-Pilot control unit.

The device recognises the more advanced six-order "File-Pilot" system, which allows the use of the following functions:

1. **Standby:** switches off the heating element, thermostat stays on.
2. **Comfort:** maintains the "Comfort" temperature set by the user.
3. **Eco:** maintains the ambient temperature 3.5° C below the "Comfort" temperature.
4. **Anti-freeze:** maintains the ambient temperature at 7°C.
5. **Comfort-1:** maintains the ambient temperature 1°C below the "Comfort" temperature.
6. **Comfort-2:** maintains the ambient temperature 2°C below the "Comfort" temperature.

NOTES: By activating this mode in versions without fil-pilot, the thermostat operates in Comfort mode. Using the "Fil-pilot" function, the thermostat can be remotely controlled by a control unit that supports this system.

The electrical connection is as follows: The brown wire is live (L), the grey wire is neutral (N), and the black wire is the Fil-Pilot signal



DO NOT CONNECT THE BLACK WIRE TO EARTH

KEY LOCK

This function allows the user to lock the keypad in order to prevent accidental changes. All keys except the thermostat key (On/Stand-by) are locked.

To activate the key lock function, press the (mode) and (+) buttons simultaneously for 3 seconds. To deactivate the function, repeat the procedure.

ECO MODE

This mode reduces the set temperature by 3°C regardless of the other settings of the towel warmer. This function allows the reduction of consumption.

To activate/deactivate the function, press the dedicated button (ECO).

In (ECO) mode, the Mode LED is amber.

OPEN WINDOW SENSOR FUNCTION

Press the (ECO) and (-) buttons simultaneously for more than 3 seconds to activate the "open window sensor" function. To exit this function, repeat the procedure.

The control can sense whether a window has been opened by detecting a rapid drop in room temperature.

If this happens, the radiator will switch off for 30 minutes, after which the towel warmer will resume operation in the previously set state.

OPERATING DIAGRAM OF THE UPPER "ON/STAND-BY" LED

Green LED: red Stand-by mode LED on: the thermostat is active

Amber LED: thermostat active in chrono mode.

OPERATING DIAGRAM OF THE LOWER "MODE" LED

Comfort:	red
Night:	green
Antifreeze:	flashing green
ECO:	amber
2h Boost:	flashing red
Fil-Pilot:	the colour depends on the mode selected by the Fil-Pilot (see other modes).

NOTES

- 1. When the thermostat is switched on again after a power failure, it returns to the last mode set, with the exception of 2h boost mode and Chrono. The status of the thermostat is saved a few seconds after the last function activated.
- 2. To indicate that the remote control signal has been received, the device emits a beep by way of a beep.
- 3. The device may not detect the opening of a window.
This can happen when the thermostat is in an isolated location away from draughts or close to a heat source other than the device, or if the change in ambient temperature is too slow.
- 4. Mode LED flashing amber: Probe failure, the device is deactivated.
- 5. When the lower LED is red, the radiator is in operation (heating up); when it is green, it is not heating up.
- 6. With the CHRONO function, it is important to set daytime temperatures to maximum and night-time temperatures to minimum.
- 7. The CHRONO function cannot be activated at the same time as the COMFORT/NIGHT functions.

DISPOSAL

This appliance is NOT normal household waste. It must be disposed of through the appropriate recycling points. In the event of replacement, it can be returned to your distributor.

This end-of-life management will enable us to preserve our environment and curb the consumption of natural resources.

This symbol applied to the product indicates the obligation to deliver it to a special waste collection centre for disposal in compliance with Directive 2002/96/EC (WEEE).



The manufacturer reserves the right to make any changes it deems necessary to improve its product at any time without prior notice.
Repairs must be carried out by authorised personnel to avoid invalidation of the warranty

caleido®

CALEIDO srl. - via Pablo Neruda, 52/a - 25020 Flero (BS) - Italy
Tel +39 030 2530054 - Fax +39 030 2530533
caleido@caleido.it
caleido.it

0039 030 2530054