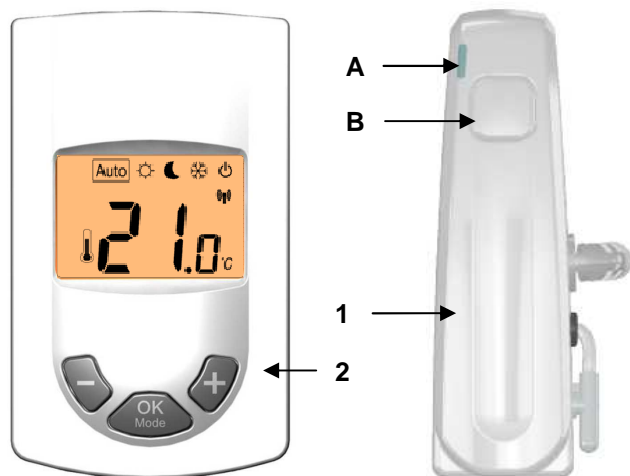


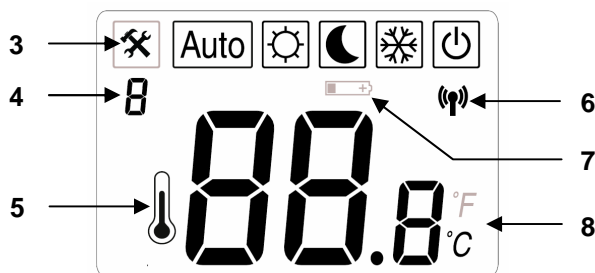
Operation of Radio Frequency Thermostat 868 MHz

V1UK/0217



Presentation

This radio frequency room thermostat (868 MHz) is designed to bring you comfort and energy savings. It allows you to operate your radiator by remote control. By using radio frequency, it can control multiple devices over a maximum distance. It allows you to regulate room temperature to a desired temperature (temperature setting).



A. Radiator activity LED B. Radiator On/Standby button	1. Thermostat 2. Remote	3. Operating mode 4. Installer menu tab 5. Measured temperature indicator	6. Radio Frequency transmission indicator 7. Low battery indicator 8. Measured temperature / temperature set point
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Getting started with the installation

IMPORTANT: The thermostat “1” must never rest on the floor. Always use wedges during installation to support the radiator.

1. Thermostat

Connect your radiator to the electrical installation. Press button “B” on the thermostat (located at the bottom of the radiator) to switch it on. There will be an audible beep, and LED “A” will light up in accordance with the below table:-

Operating mode	LED status - radiator paused	LED status - radiator heating
Standby	Off	-
Comfort	Solid green	Solid red
Reduced	Flashing green	Flashing red-green
Frost protection	Slow flashing green	Slow flashing red-green
Sensor default or measured T°C > 35°C	Flashing red	-
In pairing mode	Slow flashing orange	-
Waiting for signal from remote	Rapid flashing orange	-

The thermostat has an autonomous control system that memorises status (on/off) information and temperature settings. Storing the last setting makes it possible to regulate even when the remote is off or if the batteries are dead.

IMPORTANT: Your radiator will not follow the orders from the remote when the thermostat is in “Standby” mode (turned off).

2. Remote

Remove the battery protection strip. When powered on for the first time, or after a long battery change (longer than 15 minutes), the appliance starts in Auto mode Auto.

NOTE:

The remote is only used to adjust the temperature set points for the different modes, and to tell the thermostat which mode to operate in.

The measured temperature displayed on the screen is only there to give an indication of the room temperature, acting like a thermometer. The temperature that the remote is subjected to has no effect on the operation of the radiator. The thermostat on the radiator has a built in temperature sensor that it uses to measure the room temperature.

To establish communication between the remote and thermostat (pairing)

- Press and hold button “B” on the thermostat for 5 seconds until LED “A” flashes orange slowly. This puts the thermostat into pairing mode. It will stay in pairing mode for 2 minutes unless it is successfully paired during this time.
- Set the remote to “Auto” mode Auto.
- Press and hold the “+” and “-” buttons on the remote simultaneously for 5 seconds to access the installer menu, where the “✘” symbol will appear.
- Press the “OK” button twice so that “rF” appears.
- Press the “-” button on the remote to show “rFU”, where “U” blinks.
- LED “A” should now change to either solid red or solid green. Communication between the remote and the thermostat of the desired radiator is established.
- Repeat steps 1 to 6 for all of the radiators that you would like to pair with the same remote.

Once all thermostats have been paired, press the “OK” button 3 times until “End” appears, then press either the “+” or “-” button. This takes you out of the installer menu and back to the main screen, in “AUTO” mode Auto, and displaying the measured temperature.

The remote can be paired with as many radiators as desired. They will all then receive the same orders. Ideally, all radiators that are paired to the same remote should all be in one room.

The thermostat must be installed away from splashing water, direct sunlight, and any heat disturbances such as lamps, televisions, central heating pipes, drafts from doors or windows, etc.

Description of thermostat modes

Use the “OK” button on the remote to switch from one mode to another (press repeatedly).

AUTO temperature operating mode Auto

While in this mode, none of the set points can be altered.

In this mode, the remote transmits the order to follow the commands of a wired programmer to all thermostats paired with that remote. The thermostats then use the stored set point temperature for their own individual regulation.

If the Pilot Wire is connected to a wired programmer, the Reduced mode set point will not be used, and only the Comfort temperature set point is used. When the Pilot Wire signal is present (signalling a low heat requirement) the Comfort set point temperature will be lowered by 3.5°C.


COMFORT temperature operating mode

This is the desired temperature while the room is being used. It takes several hours for the temperature in the room to stabilise. Press the “+” or “-” buttons to define the comfort temperature, but it must be higher than the reduced temperature.

The measured room temperature  re-appears after 8 seconds.


While in this mode, the radiator will only regulate around the Comfort set point temperature, and it will not follow the orders of the wired programmer.

Note: After the Comfort set point temperature has been changed, the radiator could take several minutes to respond.


Note: The Comfort set point temperature can only be higher than the Reduced set point temperature. If you try lowering it below the Reduced set point temperature, the  symbol will flash once each time you press the “-” button.

REDUCED temperature operating mode

This is the desired temperature while the room is not being used. Press the “+” or “-” buttons to define the reduced temperature.

The measured room temperature  re-appears after 8 seconds.

While in this mode, the radiator will only regulate around the Reduced set point temperature, and it will not follow the orders of the wired programmer.


Note: The Reduced set point temperature is limited to a maximum of 19.0°C, and can only be lower than the Comfort set point temperature. If you try raising it above the Comfort set point temperature, the  symbol will blink once each time you press the “+” button.

FROST PROTECTION operating mode

This mode prevents the installation from freezing. It maintains a minimum temperature during a prolonged period of absence. Press the “+” or “-” buttons to define the Frost Protection temperature.

The measured room temperature  re-appears after 8 seconds.

While in this mode, the radiator will only regulate around the Frost Protection set point temperature, and it will not follow the orders of the wired programmer.



Note: Regardless of the mode, the remote displays the room temperature by default ( symbol displayed). To view the current temperature setting, press the “+” or “-” button, once if the orange LCD screen back light is on, and twice if the back light is not on.

1 Temperature Calibration – Thermostat (optional)

It should not be necessary to alter this setting, but if required, please consult the user manual that was supplied with the product (default value 0.0°C).

2 Room Set Point Temperature Limit (optional)



Limits the maximum temperature that the Comfort set point can be adjusted to.

- 1 – Set the remote to “Auto” mode .
- 2 – Press and hold the “+” and “-” buttons on the remote simultaneously for 5 seconds to access the installer menu, where the  symbol will appear.
- 3 – Press the “OK” button once so that the maximum value in degrees Celsius is displayed on the screen.
- 4 – Adjust the value by pressing the “+” or “-” buttons (default 30.0°C).
- 5 – Confirm by pressing “OK”.

5 Temperature Calibration – Remote (optional)

If for any reason the temperature displayed on the remote control does not correspond to the temperature measured by your own (very accurately calibrated) thermometer, the remote control can be calibrated.

To calibrate the sensor in the remote, follow the steps below:-

- 1 – Set the remote to “Auto” mode .
 - 2 – Press and hold the “+” and “-” buttons on the remote simultaneously for 5 seconds to access the installer menu, where the  symbol will appear.
 - 3 – Press the “OK” button 3 times so that “NO” is displayed on the screen.
 - 4 – Adjust the temperature value by pressing the “+” or “-” buttons.
 - 5 – Confirm by pressing the “OK” button, then “YES” should be displayed on the screen.
- To undo your adjustment, while “YES” is displayed, press and hold the “+” and “-” buttons on the remote simultaneously for 1 second, at which “NO” will be displayed.

8 Software Version – Remote

For information only.

9 Exit Installer Menu

While in the installer menu, keep pressing the “OK” button until “End” is displayed, then press either the “+” or “-” button to exit the installer menu.

Maintenance

Before performing any maintenance, be sure to turn the device off. To ensure your device has a long life through simple maintenance, we recommend following these tips:-

- For maintenance on the outer surface of the radiator, do not use an abrasive or corrosive product. Instead, use lukewarm soapy water.
- For the control unit housing, use a dry cloth (without solvent).

Replacing the batteries in the remote

When the low battery indicator is on, the batteries must be changed soon. Press the clip on the bottom and pull the front panel. Replace batteries with 2 AAA/LR03 1.5V alkaline batteries.

NOTE 1: You have up to 15 minutes to change batteries. After this period, if all segments light up when powering on again, you will have to reprogram your thermostat (calibration, safety temperature).
NOTE 2: In the event of a power cut, it is not necessary to repeat the steps of pairing the appliances. Likewise, the thermostat will keep the last operating modes received when the device is powered on again. The order change will take effect at the next transmission.

Specifications

Temperature measurement accuracy:	0.1°C
Temperature regulation accuracy:	+/- 0.15°C
Temperature setting increments:	0.5°C.
Temperature setting range	
• Comfort mode:	5.5°C – 30.0°C (can only be higher than the Reduced set point)
• Reduced mode:	5.0°C – 19.0°C (can only be lower than the Comfort set point)
• Frost Protection:	0.5°C – 10.0°C
Electrical Protection:	
• Thermostat:	Class II - IP44
• Remote:	Class III - IP31
Batteries (remote) 2 x AAA/LR03 1.5V alkaline batteries	
Operating temperature (thermostat):	-10°C to 50°C
Storage temperature (thermostat):	-20°C to 50°C
Relative humidity:	90% max. at 25°C
Radio signal transmission frequency:	868 MHz
Transmission range (remote to thermostat):	30m