homexpert™
by Honeywell

evohome
Wireless Radiator Zoning Kit

Installation & User Guide

Getting the most from your **evohome** system

Thanks for choosing an **evohome** Wireless Radiator Zoning Kit. By adding Wireless Radiator Zoning Kits to your **evohome** system you are creating smart zones which means more comfort, more control and savings of up to 40% on heating your home*.

Energy savings by smart zoning

Heating the whole house as one zone is like turning all your lights on from one switch. With an **evohome** Connected Pack and a Wireless Radiator Zoning Kit on each radiator you can divide your home into separate areas based on your lifestyle, so you only need to heat areas depending on when and where you spend time.

Working with zones

A zone can be one room or a number of rooms. For example you may want to group all of your bedrooms as one zone and control them together. Alternatively, if you have several radiators in a single room or open space, they can be grouped into a single zone so you don't need to control them individually.

*Source: Energy Saving Research Unit (ESRU), Strathclyde University 2013 & TACMA 2013 - Energy savings quoted were calculated using a 3 bedroom, 2 level home, located in the UK, modelling a family of 4 over a typical week's activity, comparing an evohome smart zoning system, with recommended settings, to a system comprising of a simple timer, single non-programmable room thermostat and no Thermostatic radiator valves. Individual Energy savings gained are dependent upon existing controls, environment and lifestyle.


TODAY
21.0°
22 : 30

Getting the most from your **evohome** system

Follow these instructions to learn more about smart zoning and set up your Radiator Controllers.

Before you start

Make sure you have an **evohome** Wireless Heating Controller installed and a Radiator Zoning Kit for each radiator in your home.

Icon Key

evohome Controller

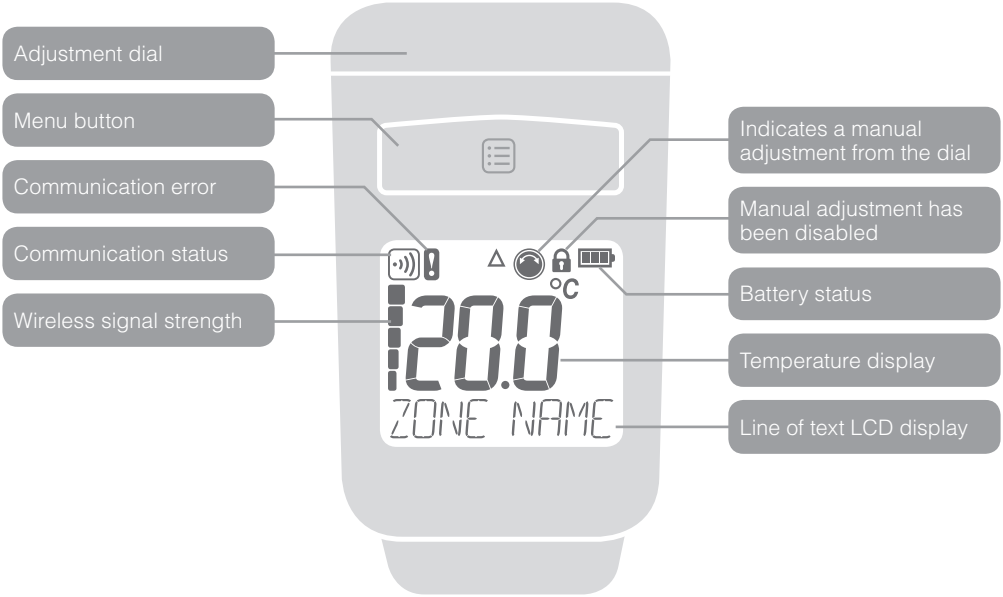
Radiator Controller

In this guide

What's in the box

1 x Wireless Zoning Radiator Controller
1 x Adaptor pack to fit the majority of radiator valves
2 x AA batteries

Radiator Controller overview



Set up your Radiator Controller

If you are adding one or more Wireless Zoning Radiator Kits to an **evohome** Connected Pack you need to power up the Radiator Controllers and then bind them to the **evohome** Controller using the 'Installation Menu'.

It may be easier to power up and bind the Radiator Controllers while they are close to the **evohome** Controller – you can install them in their assigned zones later.

When you bind a Radiator Controller to the **evohome** Controller it permanently stores the connection and there should never be a need to rebind them even after a power cut.

In this section

Step 1: Power up and bind the Radiator Controller

Enter the binding mode on evohome Controller

1. Press and hold Settings for 3 seconds
2. Press the green tick
3. Press ADD ZONE
4. Press the zone you want to add the Radiator Controller to
5. Rename the zone if required and/or press the green tick
6. Press RADIATOR VALVE
7. If you want to control the zone temperature with the **evohome** Controller (which needs to be located in that zone) press YES, otherwise press NO.

1

CONTINUED ON NEXT PAGE

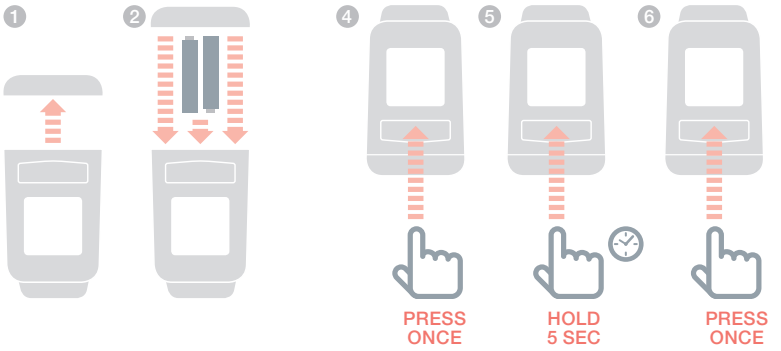
Synchronisation can take up to 4 minutes until the current room setpoint temperature is displayed on the Radiator Controller.

If BINDING is not successful, it is terminated automatically after approx. 10 minutes.
– or –

To cancel BINDING, select EXIT using the adjustment dial and confirm with the ☰ button.

Bind the Radiator Controller to the **evohome** Controller

1. Remove the adjustment dial
2. Open the battery clip and insert the AA batteries supplied
3. Close the clip and replace the adjustment dial
4. Press the ☰ button once – it should say UNBOUND
5. While UNBOUND is displayed press and hold the ☰ button again for 5 seconds – it should say BIND
6. Press the ☰ button once – it should say BINDING
7. You should receive a SUCCESS message on the **evohome** Controller (if not go back and re-bind)
8. The name of the allocated zone should appear on the Radiator Controller display when you press the ☰ button
9. Either press the green tick ✓ to add another Radiator Controller to the same zone, or press the red cross ✗ if you don't need to add another radiator to the zone.



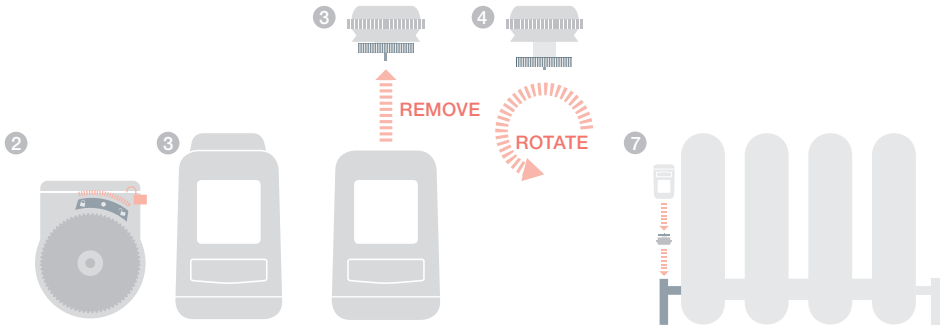
Step 2: Install the Radiator Controller

You may need to use one of the adaptors supplied with the Wireless Radiator Zoning Kit for your radiator valve:

1. Slide the adaptor onto the radiator valve and turn it until you feel it click into place.
2. If necessary, secure the adaptor in place with one of the screws provided.

Install the Radiator Controller on the radiator

1. Locate the room (zone) for the radiator controller
2. Slide the locking mechanism to the unlock position
3. Remove the adaptor from the bottom of the Radiator Controller
4. Unscrew the black wheel fully anticlockwise
5. Remove any existing control from the radiator valve
6. Screw the white end of the adaptor on to the radiator valve
7. Push the Radiator Controller fully on to the adaptor with the screen facing towards you
8. Slide the locking mechanism to the locked position



Steps 1 and 2 need to be repeated for each new zone you are adding to the heating system.

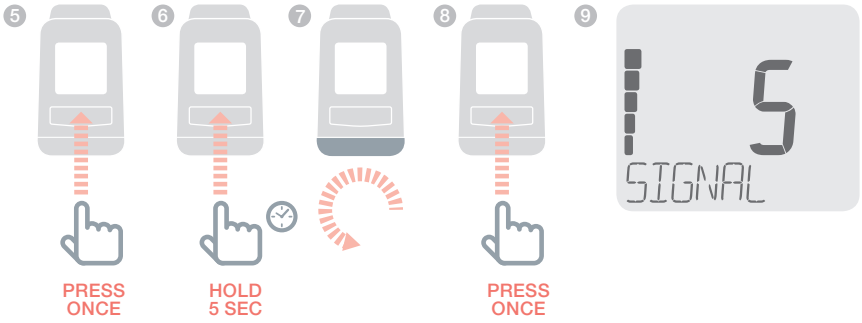
Step 3: Wireless Signal Test

Check the wireless signal strength

Check the wireless signal strength between the Radiator Controller and the **evohome** Controller (the **evohome** Controller should be placed in its normal location).

On the Radiator Controller for the selected zone

5. Press the ☰ button - the zone name is displayed
6. While the zone name is displayed press and hold the ☰ button again for 5 seconds
7. Turn the dial to display RF CHECK
8. Press the ☰ button again - the display should say CHECKING
9. Press the ☰ button again to send a test signal to the **evohome** Controller - The Radiator Controller will display a signal strength bar and a rating from 1 (poor) to 5 (excellent) – 0 means the Radiator Controller has not received a test signal back from the **evohome** Controller.
10. To exit test mode turn the dial to exit and press the ☰ button. It will exit automatically after 10 minutes.



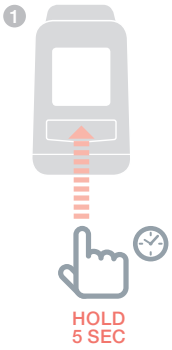
Advanced settings

Settings menu

The Radiator Controller has 12 basic settings (parameters) that can be adjusted if required.

To enter the settings menu

1. Press the ☰ button for approximately 5 seconds until LANGUAGE is displayed
2. Turn the adjustment dial to select the desired parameter (left-hand digit will flash).
3. Press the ☰ button to edit the parameter (right-hand digit will flash)
4. Use the adjustment dial to set the desired setting and confirm with the ☰ button
5. To exit the menu, select exit using the adjustment dial and confirm with the ☰ button



Parameter list

Parameter	Description	Available Settings
1 LANGUAGE	**Display language** Sets the language of the interface on the display	1 … 6 **2 = English***
2 BACKLIGHT	**Display backlight** Sets whether or not the display backlight comes on when the adjustment dial is turned or the button is pressed	0 = Disabled **1 = Enabled***
3 WIN TIME	**Auto window open duration** When an open window or door is detected the radiator valve will be closed for this period of time	0 = Inactive **30 = Minutes*** 90 = Minutes
4 WIN DEC	**Auto window open temperature fall rate** Rate at which the room temperature decreases before Auto Window Open function closes the radiator valve	0.2 … 2.0 **0.8 = 0.8°C per min***
5 WIN INC	**Auto window open temperature rise rate** Rate at which the room temperature rises before Auto Window Open function opens the radiator valve	0.2 … 2.0 **0.2 = 0.2°C per min***
6 STROKE	**Valve stroke range** Sets the stroke range to suit the radiator valve	**0 = Standard stroke*** 1 = Full stroke
7 ROOMTEMP	**Temperature display** Displays either the programmed set temperature or the measured room temperature	**0 = Set temperature*** 1 = Room temperature
8 CALIBRATE	**Temperature offset** Adjusts the measured temperature to compensate for the location of the radiator controller	-3 … 3 **0 = 0°C offset***
9 BATTERY	**Battery type** Sets the battery type used in the radiator controller - Alkaline / Lithium / NiMH	**0 = Alkaline*** 1 = Lithium 2 = NiMH
10 VALVE POS	**Valve position display** Briefly displays if the valve is open or closed when enabled	**0 = Disabled*** 1 = Enabled
11 WIN TYPE	**Auto Window Open function** Automatic window open detection	0 = Disabled **1 = Enabled***
12 FULLRESET	**Factory reset** Resets all parameter settings to factory default (does not reset the stored binding data)	0 = Disabled **1 = Full reset***
13 EXIT	Press ☰ to exit the settings menu	

***recommended settings**

Using your Radiator Controller

The Radiator Controller will operate your smart zone according to the programmed settings from the **evohome** Controller and you shouldn't need to make many adjustments at the radiator.

There are however some basic adjustments and display information you can do on the Radiator Controller.

In this section

Manual temperature override

Manually override a room's scheduled temperature

The sheduled temperature for the room can be changed by turning the adjustment dial. This remains active until the Radiator Controller receives the next scheduled temperature change from the **evohome** Controller.

The symbol on the display shows that the temperature was changed manually and remains until the next scheduled temperature change.

Turn the radiator OFF

By turning the adjustment dial anticlockwise until OFF is displayed, the valve will be closed permanently.

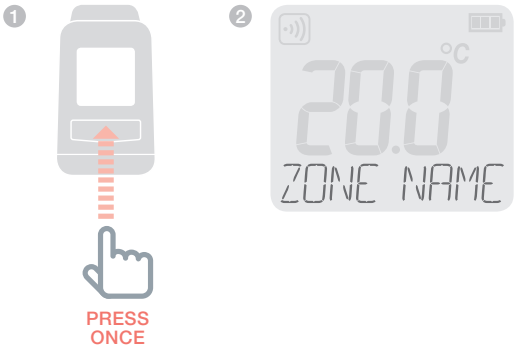
With the Radiator Controller set to OFF it will no longer follow the programed schedule from the **evohome** Controller. It will still operate according to the frost protection setting and will still run its valve cycle to prevent the valve seizing.

To resume the heating schedule you need to set a temperature on the Radiator Controller. When the next set temperature is received from the **evohome** Controller the Radiator Controller will then follow the programmed schedule.

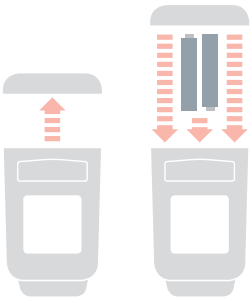
Display the room (zone) name

To display the room (zone) name on the Radiator Controller

1. Press the ☰ button
2. The name of the room (zone) associated will the Radiator Controller will be displayed for a few seconds



Replacing the batteries



Automatic monitoring functions

Window open function

In order to save energy, if a window or door gets opened and causes a sudden temperature drop in the room, the Radiator Controller closes the radiator valve.

WINDOW is displayed on the Radiator Controller and the symbol is displayed on the **evohome** Controller for that room.

When the temperature begins to rise again the Radiator Controller will reopen the radiator valve after 30 minutes (default).

Valve protection

To prevent the radiator valve from seizing, if the valve has not been fully opened within a period of two weeks the Radiator Controller will cycle the valve open and closed. This will happen on the Monday after the two week period has been detected.

CYCL is displayed on the Radiator Controller during the valve cycle.

Frost protection

To prevent the water in the heating pipes from freezing, if the room temperature drops below 5°C the Radiator Controller opens the radiator valve and closes it again when the temperature rises to 6°C. It will maintain this cycle until the room temperature rises above the frost protect level.

FROST is displayed on the Radiator Controller during the frost protection period.

The heating system must be switched on for the frost protection function to operate.

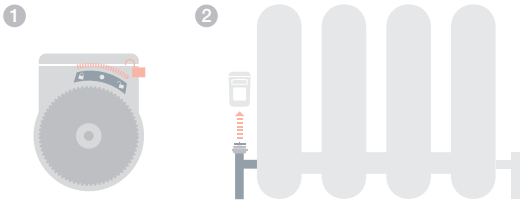
Emergency operation

Manually opening the radiator valve will only heat the radiator if the boiler is actively providing heat to another room in your heating system.

Emergency radiator valve operation

If the Radiator Controller is not functioning (i.e. exhausted batteries) you can manually open and close the radiator valve.

1. Slide the locking mechanism to the unlock position
2. Remove the Radiator Controller from the radiator valve adaptor
3. Manually operate the radiator valve by turning the black wheel on the adaptor:
   Anticlockwise = open the valve
   Clockwise = close the valve
4. Replace the batteries or faulty Radiator Controller as soon as possible to return your smart zoning heating system to its full energy efficiency



Troubleshooting

Problem/Display	Possible Cause	Remedy
	Batteries exhausted	Replace the batteries.
 Icons are flashing	Wireless communication error	Check the wireless communication between the Radiator Controller and the **evohome** Controller (Step 3: Wireless Signal Test). Repeat the binding procedure. Check the power supply to the **evohome** Controller and the Radiator Controller.
NO SYNC	Wireless communication interrupted	Check the wireless communication between the Radiator Controller and the **evohome** Controller.
E1 SENSOR	Radiator Controller defective	Replace the Radiator Controller.
E2 VALVE Motor cannot be moved	Improper installation of Radiator Controller Seized radiator valve	Check the Radiator Controller is properly installed on the radiator valve and adaptor. Check that the valve can be manually opened and closed (see Emergency operation on page 17). Remove the blockage or replace seized valve.
The radiator stays hot	The radiator valve not closing fully	Check the Radiator Controller is properly installed on the radiator valve and adaptor. Check that the valve can be manually opened and closed (see Emergency operation on page 17). Remove the blockage or replace seized valve. Change the valve stroke parameter to full-stroke mode (Parameter 6).
Motor does not move	Locking mechanism on the Radiator Controller not in the locked position	Slide locking mechanism to the locked position
The Radiator Controller does not accept scheduled temperature changes from the **evohome** controller	Radiator Controller has been manually set to OFF OFF is displayed	Use the adjustment dial to set the room temperature to the desired value. When the next scheduled temperature change is received from the **evohome** Controller the Radiator Controller will resume following the programmed schedule.
BLOCKED	Local override of the Radiator Controller has been disabled by the **evohome** Controller	Enable local override for that zone in the Installation Menu of the **evohome** Controller

Technical & Safety information

Type	THR92H1002
Protection class	IP30
Radio communication	ISM (868.0...870.0MHz)
RX Class 2	Range: typically 30m within residential buildings
Supply voltage	Battery type LR6, AA, AM3 Alkaline: 2 x 1.5V Lithium: 2 x 1.5V NiMH: 2 x 1.2V
Connection to the radiator	M30 x 1.5
Ambient temperature	0...50°C
Dimensions	96 x 54 x 60mm
Ambient conditions	For living area, business and commercial areas as well as small businesses
Humidity	10...90% relative humidity

Disposal

WEEE directive 2002/96/EC
Waste Electrical and Electronic Equipment directive

- At the end of the product life dispose of the packaging and product in a corresponding recycling centre.
- Do not dispose of the unit with the usual domestic refuse.
- Do not burn the product.
- Remove the batteries.
- Dispose of the batteries according to the local statutory requirements and not with the usual domestic refuse.

Declaration of Conformity

Hereby Honeywell declares that this Radiator Controller is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.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20.5°
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