



# AIROVENT RF MEV WH4H CONTROLLER – BASIC

Installation and Operating Guide



## Introduction

The AIROVENT RF MEV WH4H CONTROLLER - BASIC was especially developed for the AIROVENT RF MEV WH4H Central Extract Unit. Radio Frequency (RF) control means that the central extract unit can be switched remotely and wirelessly by one or several remote controls, up to a maximum of 20. The RF control signal is received by a receiver on the printed circuit board (PCB) inside the central extract unit. The remote control has 6 buttons for selecting the required position or mode: absent (away), low, medium, high, automatic and timer (refer to Control Buttons Explained on overleaf).

The remote control is intended for exclusive use with Airflow AIROVENT RF MEV WH4H Central Extract Units. If bought separately, the remote control must be connected for the first time to the Airflow ventilation unit by the installer.

Technical Data	
Power Supply	3V Battery (Type CR2032)
Dimensions (mm) (W x H x D)	83 x 80 x 18.3
Weight	125g
RF Frequency	868.3 MHz
Min/Max Ambient Temp.	0 - 40°C
RH Level	0 - 90% non-condensing
IP Rating	IP30

## Safety Information and Guidance



**IMPORTANT!**

**Read these instructions carefully before installing this controller.**

This manual covers the operation of the AIROVENT RF MEV WH4H CONTROLLER - BASIC only. It must therefore be read in conjunction with the relevant AIROVENT RF MEV WH4H Central Extract Unit Control Manual.

### Storage and Transportation

Controllers should be stored in their original packaging in a dry environment, protected from the weather, and are suitable for storage temperatures of between 0°C and +40°C.

Care should be taken when re-packaging any controllers to ensure the packaging is suitable for the required form of transport.

Installation of this controller must be carried out by a qualified and suitable competent person and carried out in clean, dry conditions where dust and humidity levels are at minimum.

Damage due to improper transportation, storage or installation is not covered under warranty. Dropping or sharp blows to the controller can cause damage. Any damage to the controller or packaging should be inspected by a suitably qualified person or returned to Airflow Developments Ltd for inspection before use.

## Mounting

The remote control can be separated from the mounting base opened via the push button (see figures 2 and 3), which is located on the underside. The wall frame can then either be mounted with the 2 supplied screws and plugs or be stuck in place with suitable adhesive. Please note: "UP" is marked on the inside of the controller cover above the battery. When mounting make sure that the "UP" is at the top.

Keep enough space free around the underside so that the push button can be easily accessed from below. It is recommended that the remote control is installed at a height of 1.5m on a vertical, flat surface. Never install the remote control near large metal objects and keep the remote control out of the reach of children. If there is any doubt, contact Airflow Developments Ltd for advice at [info@airflow.com](mailto:info@airflow.com) or Tel: +44 (0)1494 525 252.

## Device Start-up

When the device is connected to the voltage supply: during start up, the LED on the receiver PCB in the AIROVENT WH4H Central Extract Unit (figure 1) flashes alternately red, green, red.

Then the LED on the receiver PCB turns green for 3 minutes, during which time the device is in learning mode and can be linked to a remote control or CO2 sensor.

### Pairing

Two RF remote controllers are available, a basic controller (Part No: 90001489) and a controller with built in CO2 sensor (Part No: 90001490). Each WH4H unit must have at least one RF Controller. Each unit can be paired with up to 20 controllers. A mixture of controllers can be used to suit application.

Before pairing the unit should be isolated from the electric supply for a minimum of 5 seconds.

The LED on the controller will flash red then green.

When electric power to the unit is re-installed the LED on the PCB will flash red and green then remain green for 3 minutes. In this time the RF controllers can be paired to the unit.

**Note:** Ensure controller has a battery fitted.

**Pairing the controller(s) to one unit** is done by pressing the "1" and "auto" buttons, on the controller simultaneously, while the unit PCB LED is green, until the LED on the controller flashes red – green - red. To show the pairing is complete the LED on the unit PCB and the LED on the controller will flash green ten times. Also, the unit will run for a short period at a high speed.

**Alternative pairing procedure.** Leave the unit connected to the electric supply. Remove the white top cover from the unit. Briefly press the push button on the units PCB.

**CAUTION!!** Risk of Electric Shock. Do not touch other parts of the PCB as they remain live. After which the LED will remain green for 3 minutes. In this time the controller can be paired to the unit by pressing the "1" and "auto" buttons on the controller as previously stated.

**Pairing controller(s) to Several Units.** To do this follow the alternative pairing procedure except push buttons "2" and "auto" on the controller simultaneously for 3 x seconds.

To replace a basic controller, all controllers must be un-paired from the AIROVENT RF MEV WH4H units PCB, then any controller(s) needed must be re-paired to the units PCB.

**Un-Pairing Controllers.** Remove the white top cover from the unit. Press the push button on the units PCB. (See Fig. 1) for 15 seconds until the LED is simultaneously red and green (orange). Release the push button, the LED will flash red, green, red. All connections to controllers are now cut.

### Timer Mode

In the timer mode, the device operates in the high position for the required time, after which the device returns to the last selected position. Pressing once causes the device to operate in the high position for 15 minutes, pressing twice 30 minutes, and pressing three times 60 minutes. The timer can be cancelled by selecting another button.

## Auto Mode

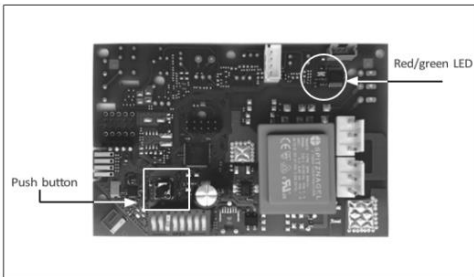
In auto mode the device operates in accordance with signals from the integrated humidity sensor.

## Away Mode

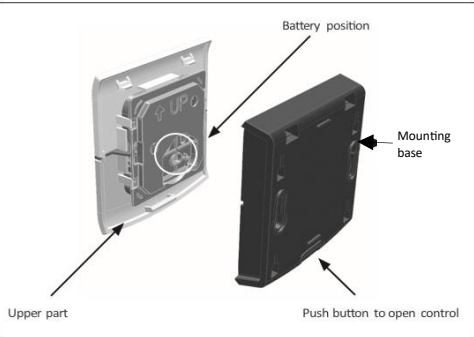
In the Away Mode the device runs in an extra energy-efficient low position and does not respond to signals from sensors.

## Battery replacement

If the LED indication on the remote-control flashes orange once or does not react when you operate one of the control buttons, the cause is probably a low battery. To replace the battery, click in the push button on the wall frame (See Fig. 3) of the remote control to remove the upper part of the wall frame of the remote control. Remove the old battery from the remote control. Insert the new battery with the positive side facing you (see figure 4 on overleaf). Replace the protective cover and click the upper side shut on the wall frame with a hinge movement. In normal use, a new battery has a service life of about 6 years.



**Fig. 1** - Receiver PCB located inside the AIROVENT RF MEV WH4H central extract unit.



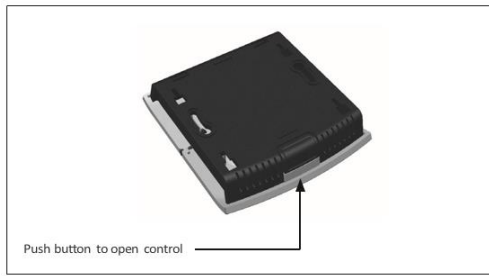
**Fig. 2** - RF Controller exploded view.

**LED Indicator Explanation**

When operating the controller, input will be read by the controller and an LED light located between button '2' and the 'Auto' button will provide feedback.

Timer LED Indicator notifications can be found under **Control Buttons Explained**.

- 1 green flash – Device OK, message received.
- 10 green flashes – Successful connection with MEV unit.
- 3 red flashes – RF communication problem.
- 2 red flashes – Message received but problem in device.
- 1 orange flash – Low battery.
- 2 orange flashes – Remote control reset carried out.



**Fig. 3** – Back of RF Controller



**Fig. 4** – Battery holder

**End of Life**

The controller front over and mounting base are manufactured from plastic. Inserted inside is a silicone-based PCB. Controllers and parts used in it that are end of life due to wear and tear, corrosion, fatigue and or other effects that cannot be discerned, must be disposed of in the correct manner conforming to local and/or international guidelines and regulations.



**Important Environmental Information:** This symbol indicates that disposal of this unit after its life cycle could harm the environment. The unit should be disposed of by a specialised company for recycling. If in doubt, contact your local authority about waste disposal guidelines and regulations.

**Control Buttons Explained**

**1, 2 & 3 Buttons:**

By pressing one of these buttons, you can manually choose the units ventilation rate. Note: speed two (2) should be the everyday running rate. Speed three (3) should be the boost rate which can be used to remove air contaminants quickly. Airflow rates should follow the calculations and methods specified in Building Regulations Part F. When one of the three speed buttons are pressed, it will override any automatic functions set such as humidity from the sensor in the unit, or if a CO2 Controller is being used (90001490).

**Timer Button:**

When the timer button is pressed the ventilation rate will run at speed three (3). The time the unit will stay at high speed is dictated by how many times the timer button is pressed.  
 Press **once** for 15 minutes. (LED flashes green once)  
 Press **twice** for 30 minutes. (LED flashes twice)  
 Press **three times** for 60 minutes. (LED flashes three times)  
 This can be cancelled by pressing any other button on the controller.

Has not been connected to an unsuitable electrical supply.  
 Has not been subjected to misuse, neglect, or damage.  
 Has not been modified or repaired by any person not authorised by Airflow Developments Ltd.

**Warranty**

Airflow guarantees the AIROVENT RF MEV WH4H CONTROLLER - BASIC in these instructions for 1 year from date of purchase against faulty material or workmanship. Applicable to units installed and used in the UNITED KINGDOM. Warranty covers the controller and not the reinstallation if required. In the event of any defective parts being found, Airflow Developments Ltd reserves the right to repair, or at our discretion replace without charge, provided the unit has been installed in accordance with the fitting and wiring instructions supplied with each unit and the following clauses on Page 15:

**Control Buttons Explained Cont'd**

**Auto Button:**

Pressing the Auto button enables sensors being used in the system to control the unit's ventilation rate. This can be cancelled by pressing any other button on the controller.

**Absence Button:**

Once this button is pressed the system runs at speed one and is not affected by any sensors in the system (humidity, CO2 sensor if controller with CO2 sensor installed). NOTE: this ventilation rate may not be correct for the everyday use of the property. Air contaminants may not be extracted at the rates specified in Building Regulations Part F. This can be cancelled by pressing any other button in the controller.

If you should have any problems, please contact Airflow Developments Ltd at [info@airflow.com](mailto:info@airflow.com) or Tel: +44 (0)1494 525 252.

Has been installed by a person who is recognised as a competent person.  
 Has only been used with Airflow Developments approved accessories.

Airflow Developments Ltd shall not be liable for any loss, injury, or other consequential damage, in the event of a failure of the equipment, arising from, or in connection with, the equipment excepting only that nothing in this condition shall be construed as to exclude or restrict liability for negligence. Full details at [airflow.com/terms](http://airflow.com/terms).

**This warranty does not in any way affect any statutory or other consumer rights.**



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