

Part of Absolent Air Care Group



F Monitor 2 and 2+

Original Instructions

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Should you have any requirements not attended to by this manual, do not hesitate to contact our customer service team on (+44) (0) 1952 290500 or email sales@filtermist.com.

For the latest copy and alternative language versions of this user manual, plus films showing how to install and service our products please visit our website.

F Monitor 2 and 2+

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Introduction

Welcome to the user manual for your F Monitor 2 or 2+ device.

The F Monitor 2 is a monitoring device that measures airflow and time to indicate when your Filtermist unit needs servicing, or if there are any blockages in the extraction system which may be affecting performance. The 2+ includes a sensor which measures vibration and motor temperature in addition to airflow and time. F Monitor 2 units are supplied with an extra output source should this additional functionality be required.

A traffic light system of coloured LED lights shows the operating status of your Filtermist unit. A solid or flashing **green light** on airflow will show that the airflow is adequate (>55%), while a solid or flashing **amber light** means that the airflow is between 41-55%: time to arrange a service inspection. A **red light** indicates that immediate action is required, as the airflow is <41% of the original parameter set.

The device can be set for specific applications using our dedicated app which uses Bluetooth technology. The Bluetooth symbol is illuminated with a blue light when the F Monitor 2 is connected to the app. Both F Monitor models are sold as optional accessories and can be retro-fitted to the complete Filtermist range.

Parts List

Ensure that you have the following parts prior to attempting installation.

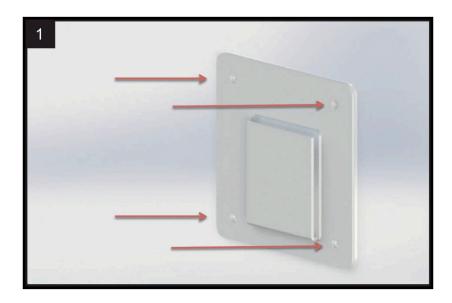
Figure 1. Parts required for installation. (1) F Monitor 2 or 2+ [x1]; (2) Mounting Plate [x1]; (3) Nozzle [x1]; (4) Motor Clip [x1]; (5) Three Metre Tube [x2]; (6) Sensor [x1]; (7) Three Metre Cable [x1]. The sensor (6) is an optional component which is only provided if you have purchased the F Monitor 2+.



Installation Procedure

<u>^</u>

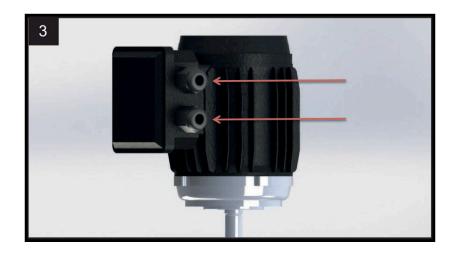
DANGER! Ensure the Filtermist unit is isolated from the electrical supply before installing the monitor.



Step 1. Fix the mounting plate into the desired position.



Step 2. The F Monitor slides into place on the mounting plate.



Step 3. Power to the F Monitor 2 is supplied via the motor terminal box.



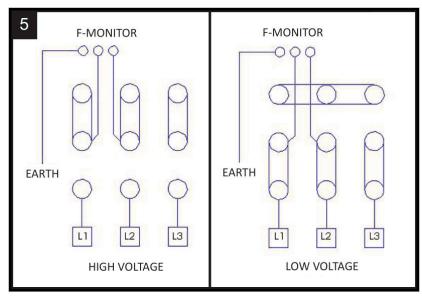
NOTE An additional cable entry hole may be needed, with a suitable cable gland fitted.



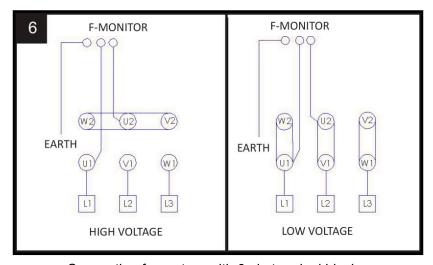
IMPORTANT! For a 0.18kw motor use an M16 cable gland, for a 0.55/1.1kw motor use an M20 cable gland and for a 1.5/2.2kw motor use an M25 cable gland.



Step 4. The F Monitor 2 comes with three metres of cable already prewired. If a longer length is needed, please ensure it is connected as shown here.

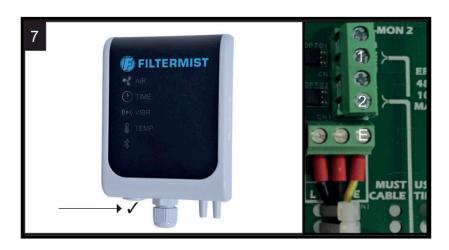


Connection for motors with 9 pin terminal blocks.



Connection for motors with 6 pin terminal blocks.

Step 5/6. Connect the motor cable to the motor terminal block; "Live" and "Neutral" can be connected to either terminal.



Step 7. Signal Connection Guide (Optional)

An optional signal switch can be connected to a control panel or traffic light system to provide an additional signal indicating the F Monitor 2's status.

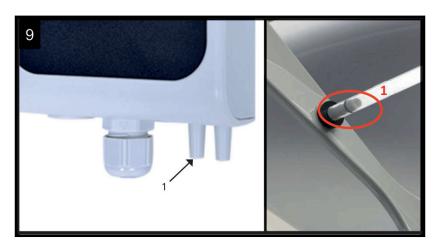
To access the two optional signals, remove the plug on the base of the F Monitor 2, as shown in the image. There are two options for the volt-free relay error signals, which are available as shown via the image on the right:

- Option 1 is a "General Error" Signal: Indicates an error if any of the channels (air, time, vibration, and temperature) turn red. This is the recommended output, if used.
- Option 2 is a "Vibration-Only Error" Signal: Indicates an error specifically for the vibration channel turning red.

The alarms on the F Monitor 2 are normally open (NO) volt free error signals, which close when there is an alarm. The relay can handle 230VAC/5A or 30VDC/5A, allowing for a substantial connection load.



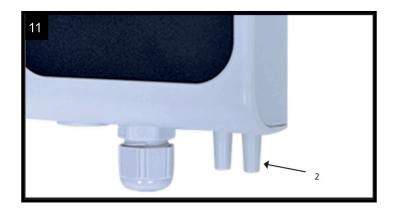
Step 8. Connect the monitor to the Filtermist unit, then connect the nozzle to the diaphragm. If there is no hole in the diaphragm (for instance, the unit may be an older version), refer to **Steps 12 and 13** in order to drill the hole in position.



Step 9. Fix spigot one - the left of the two spigots - to the nozzle.



Step 10. Attach the motor clip to the motor vane and clip tube two into position (the tube should point vertically upwards).

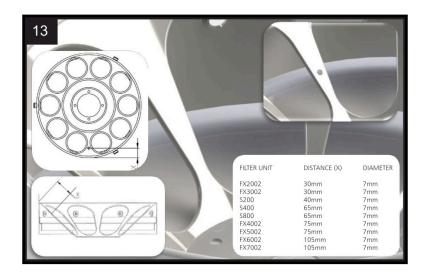


Step 11. Connect tube two to the F Monitor spigot two (the right of the two spigots).

- **IMPORTANT!** Ensure the hoses are not pinched or trapped as this will affect the function of the F Monitor.
- **IMPORTANT!** When fitting the monitor to units already installed, ensure that the unit is serviced and the ducting and extraction point are clean, allowing the monitor to record maximum airflow. Failure to do this may result in incorrect readings from the monitor.



Step 12. If your unit is an older version with no hole in the diaphragm, you will need to drill a hole. First, remove components of the unit to gain access to the diaphragm.



Step 13. Then, drill a hole in position for the nozzle to be placed as per the above requirements, and then follow the connection instructions as per image 9.



Step 14. Optional, for F Monitor 2+ units only: Use the hole on the side of the motor to attach the sensor; ensure that the sensor is secure and rigid - there must be a gap between the motor and the sensor. It should not be loose, otherwise the vibration reading will not be correct.



A demonstration film showing how to use the app to set parameters for the F Monitor 2 and 2+ can be watched by scanning the QR code above. Alternatively this film can be found on our website www.filtermist.com and YouTube channel. You may also follow the instructions below.

Apple (iOS) Settings





Step 1. Make sure the Filtermist unit is running. Download the "Filtermist" app from the Apple app store and click to open.





Step 2. Click 'scan' and select the code showing on the app that matches the code on the side of the F Monitor 2 you want to set-up.



Step 3. Enter the pin (located inside the unit box).



Step 4. Select airflow ("Air"), press calibrate and save.



Step 5. Leave default setting (as shown) or alter limits as required and then press save.



Step 6. Same for maintenance.

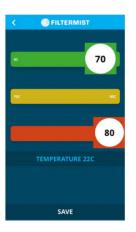






Step 7. Select "Tools" then "Pair Sensor", enter the MAC number located on the side of the sensor and press save. If successful, the lights for vibration and temperature will turn on (these lights are optional for the F monitor 2+).



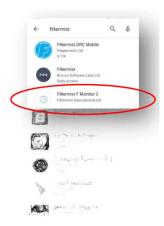




Step 8. You may leave the default setting (as shown) or alter limits as required and then press save.

Step 9. Maintenance time can now be switched off.

Google (Android) Settings



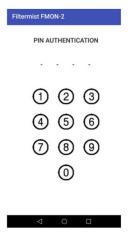
Step 1. Make sure the Filtermist unit is running. Download the "Filtermist F Monitor 2" app from the Google Play store.



canning ... [20:80:83:00:00:16] # [-35]

Filtermist FMON-2

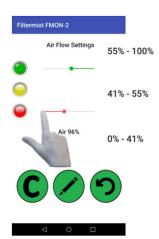
Step 2. Open the app. Click 'scan' and select the code showing on the app that matches the code on the side of the F Monitor 2 you want to set-up.



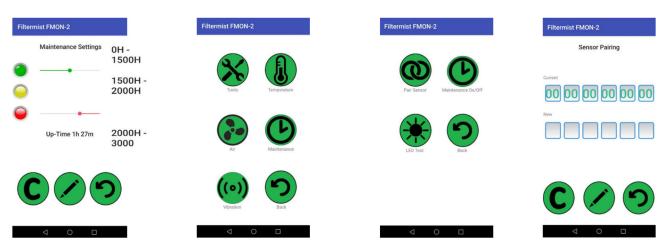
Step 3. Enter the pin (located inside the unit box).



Step 4. Select airflow ("Air" with the fan image), press calibrate ("C") and save (pen image).

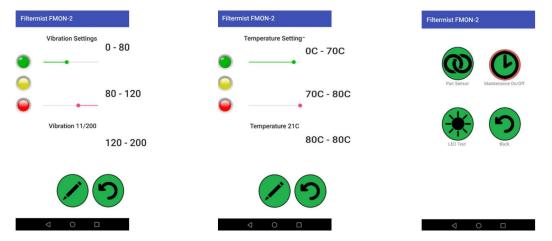


Step 5. You may leave the default setting(s) (as shown) or alter limits as desired.



Step 6. The same is true for maintenance settings (the clock image). Please note that the "C" letter in maintenance settings are for clearing maintenance time, NOT calibration.

Step 7. Now, select "Tools" then "Pair Sensor", enter the MAC number located on the side of the sensor and press save (pen image). If successful, the lights for vibration and temperature will turn on (these are optional, located on the F Monitor 2+).



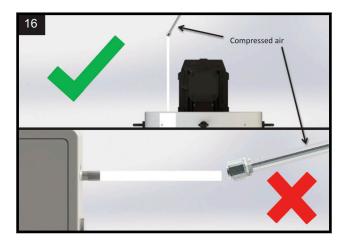
Step 8. Leave default setting (as shown) or alter limits as required and then press save (pen image).

Step 9. Maintenance time can now be switched off.

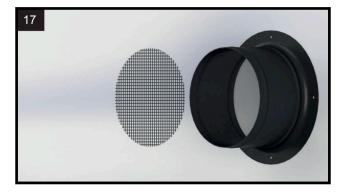
Troubleshooting



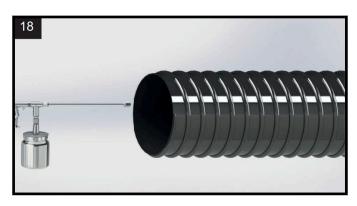
When a RED light shows on airflow, check for a blockage before calling for a service.



Step 1. Remove hoses from the sensor and blow compressed air down the hose towards the nozzle - not towards the monitor.



Step 2. Ensure the wire mesh has no blockages.



Step 3. Make sure the ducting has no blockages.



Step 4. Ensure the afterfilter is not blocked by removing it from the filter unit and checking.

EU Declaration of Conformity

EU Declaration of Conformity

We

Company Name: Filtermist Limited

Postal address: Telford 54 Business Park, Nedge Hill

City: Telford

Postcode: TF3 3AL

Telephone Number: 01952 290500 E-mail address: sales@filtermist.com

Declare that this DOC is issued under the sold responsibility of the manufacturer.

Product: F Monitor Essential, F Monitor 2 and 2+

Type: N/A Batch: N/A

Serial Number: See Unit

Brand: Filtermist

Object of the declaration

Monitoring device for Filtermist units. To be fitted to S and FX Series Filtermist units to monitor performance.

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

Low Voltage Directive (2014/35/EU), Radio Equipment Directive (2014/53/EU), RoHS Directive (2015/863/EU)

The following harmonised standards and technical specifications have been applied (title, date of standard/specification):

EN IEC 62368-1:2020+A11:2020, EN 55032:2015+A1:2020, EN 55035:2017/A11:2020, EN 61000-4-2:2019, EN 61000-4-5:2014+A1:2017, EN 61000-3-2:2019+A1:2021, EN 61000-3-3:2013, EN 61000-4-4:2012

Additional Information:

The technical file has been compiled in accordance with Part A of Annex VII of the Machinery Directive 2006/42/EC.

The relevant authorised person undertakes to transmit, in response to a reasoned request by the national authorities, relevant information on the machinery. This information will be transmitted by: (email, post).

Person authorised to compile the technical file, based in the European community is: Absolent AB

Address: Staplaregatan 1, SE-531 40 Lidköping, Sweden

Signed for an on behalf of:

Place of Issue: Name, Function and Signature: yyyy-mm-dd: Filtermist Limited, Telford 54 Busi-2025-01-01 Craig Haynes, Head of Engineering ness Park, Nedge Hill, Telford, Shropshire, TF3 3AL, England

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