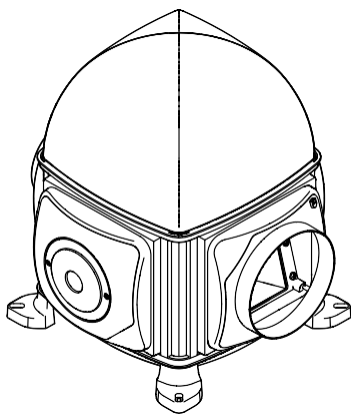
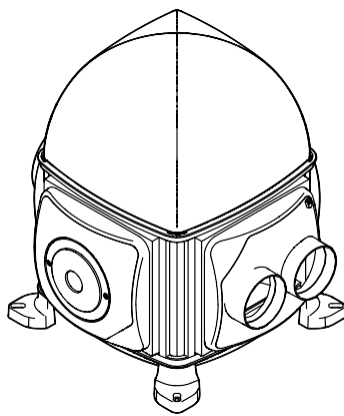




AXCO AIRSOURCE PIV
INSTALLATION AND USER GUIDE



Single Spigot



Twin Spigot



Safety

Read and understand these instructions before beginning installation. The unit should be installed by a competent person.

Location

Check there is space for the unit in your chosen location. The unit must not affect the operation of open-flue appliances. Consult local regulations or a qualified gas engineer. For inline units consider the external vent location in relation to open-flues from appliances e.g. boilers. You must ensure the vent is positioned a minimum of 300mm away in all directions.

The open sides of the diffuser must face a minimum 1m unobstructed path away from any smoke detectors. If the diffuser cannot be repositioned, up to two sides can be closed using the plastic blanking plates. In this configuration the open sides must face a minimum 1.5m unobstructed path away from any smoke detectors. If using the 100mm diffusers, no blanking plates are supplied and the diffusers must be repositioned.

In properties with a floor above 4.5m fire diffusers must be fitted a minimum of 1m away from the smoke detectors instead of the included plastic diffusers.


Partition walls between buildings must be complete with any breaks filled.

In properties with a floor more than 4.5m above ground level the unit must be wired into a smoke alarm (see page 16 for wiring information).

The appliance is considered suitable for use in countries with a warm damp equable climate, but may also be used in other countries.

Wiring Regulations

All wiring must comply with Building Regulations and the current IET Wiring Regulations (BS7671 in the UK) or equivalent standards for other countries. The final installation should be examined and tested by a competent person.

This product is not suitable for use with a Type AC RCD 

Electrical Connection

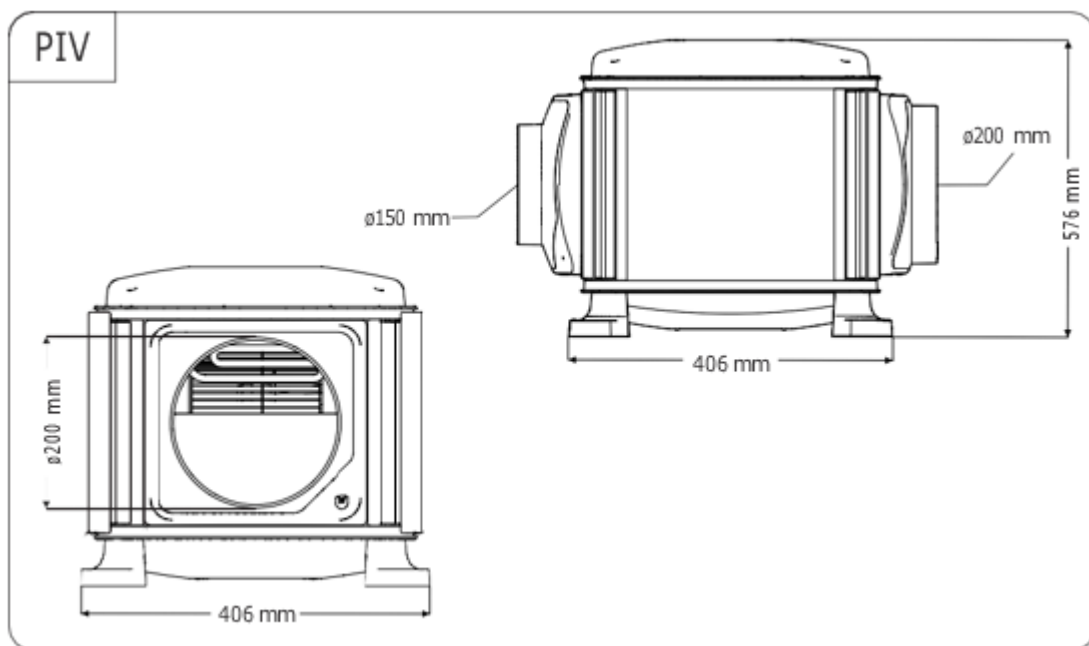
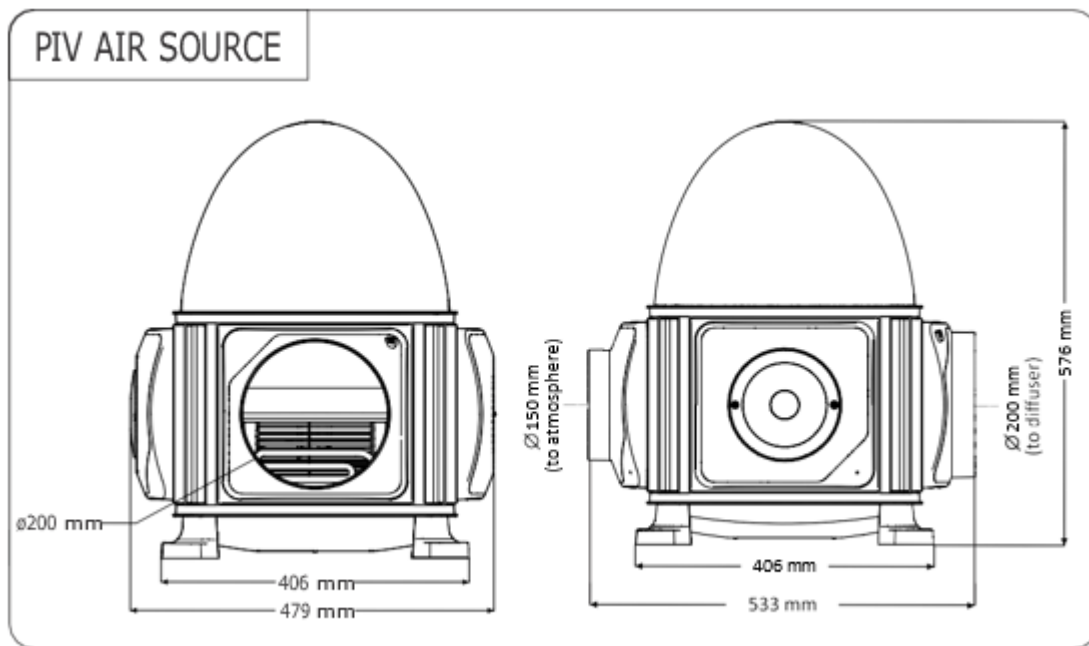
The unit requires a continuous electrical power supply through a residual current device (RCD) having a rated residual operating current not exceeding 30mA. Connection to the fixed wiring must be made outside the unit in a suitable location. The unit must be earthed and a double pole switch with a minimum contact separation of 3.0mm must be used to provide insulation for the unit. The unit must be able to be disconnected from the mains supply after installation. When wiring the unit, the included unswitched fuse spur should be incorporated in the fixed wiring.

The power supply cable running into the unit must remain the supplied flexible cable (not a solid core lighting cable). If the power supply cable becomes damaged, it must be replaced BEAM, or a similarly qualified person in order to avoid a hazard. Do not remove or tamper with any electronic components inside the product.

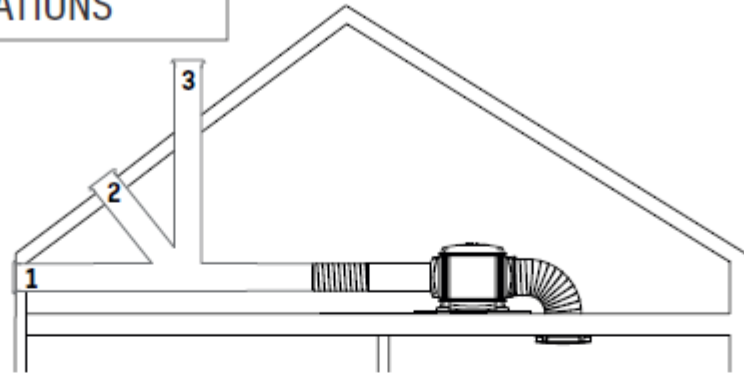
Users

The unit is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision and usage instruction by a person responsible for their safety. Children should be supervised to ensure they do not play with the unit. Cleaning and user maintenance must not be performed by children.

Diagrams



INLINE DUCT CONFIGURATIONS

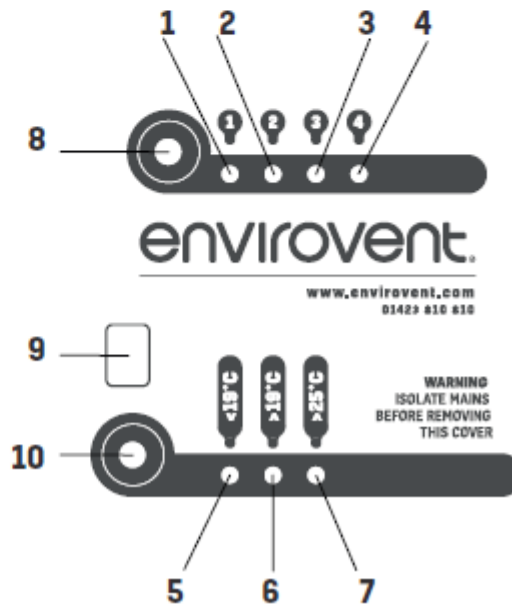


Use one of three options to connect the inline duct to the outside of the property (extra parts not supplied):

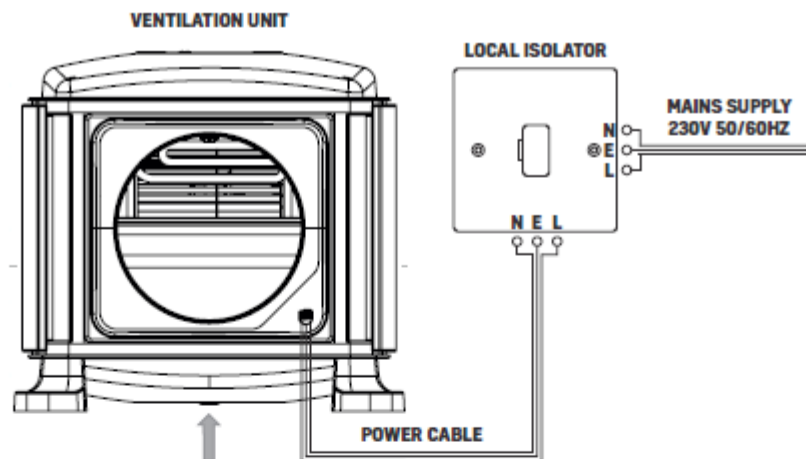
1. Straight duct to a wall mounted vent or grille.
2. Angled duct to a roof tile vent.
3. 90 degree bend duct to a straight roof vent.

KEYPAD

- 1 - Airflow 1
- 2 - Airflow 2
- 3 - Airflow 3
- 4 - Airflow 4
- 5 - Temperature $<19^{\circ}\text{C}$
- 6 - Temperature $>19^{\circ}\text{C}$
- 7 - Temperature $>25^{\circ}\text{C}$
- 8 - Top button
- 9 - Numeric Display
- 10 - Bottom button



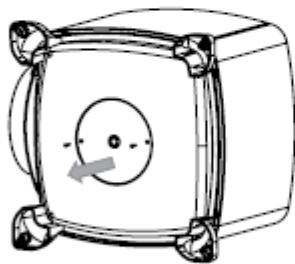
WIRING



TO CONNECT OPTIONAL 0-10V (RF AND APP UNITS ONLY) OR HEATER ENABLE CABLE SEE STEP 1 TO 4

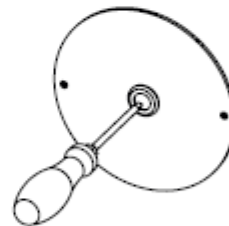
The local isolator must be connected to the mains as part of the fixed wiring. Connect the N, L and E cores of the power cable to the matching terminals on the local isolator.

1



Remove base cap (two screws)

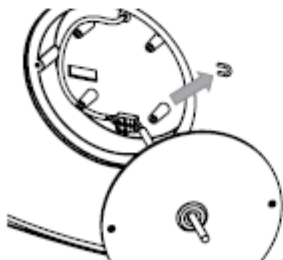
2



Make small hole in grommet and thread 2 core cable through

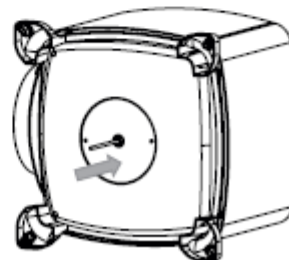
3

0-10V
Red=+V
Blue=0V



Remove link and wire in 2 core cable

4



Replace base cap (two screws)

PIV Air Source box contents

- 1x PIV Air Source unit
- 1x Loft Filter (not on air inline unit)
- 2x Flexible filter rods (not on air inline unit)
- 1x 150mm Inline filter
- 1x 200mm diffuser (+ 2x blanking plates)
- 1x Instruction guide
- 1x Diffuser mounting template
- 1x Flexible duct (1m x 200mm dia.)
- 1x Unswitched fuse spur
- 1x Remote control (**Applicable for remote Control units only**)
- 8x Foam pads
- 4x Washers
- 4x Screws 10g x 3"
- 4x Screws 10g x 1.5"
- 4x Screws 8g x 1.5"
- 4x Screws 8g x 1"
- 4x Plasterboard plugs
- 2x 200mm duct fixings
- 1x 150mm duct fixing

Pre - Installation Checklist

- Does the unit fit through the loft hatch?
- Check there are no obstructions in the hallway or landing where the diffuser is to be fitted and in the loft space above.
- Ensure the loft has adequate cross-flow ventilation to provide a supply of fresh air to the unit.
- Check that all partition walls are intact. Seek building advice if any are missing or broken.
- Check for flued appliances drawing air from the loft, the user should be made aware of any of these.
- Check that any flue passing through the loft is undamaged.
- Seek building advice if any are damaged or broken.
- Repair any ceiling gaps which allow air leakage into the loft.
- Ensure any loft water storage tanks are covered and sealed.

About PIV Air Source units

Positive Input Ventilation (PIV) and Multiple Input Ventilation (MIV) units create fresh and healthy living environments by supplying filtered air into a property at a continuous rate through ceiling mounted diffusers. The diffusers are normally installed in a hallway or landing area.

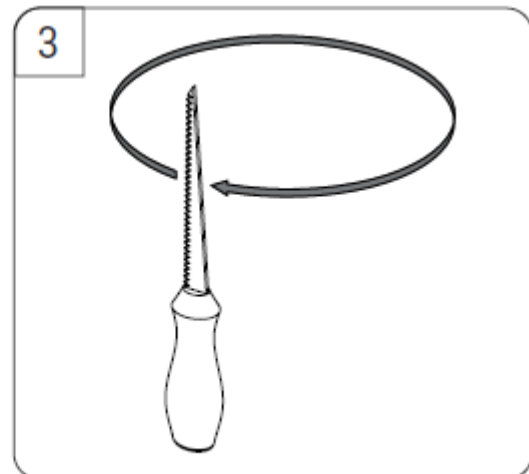
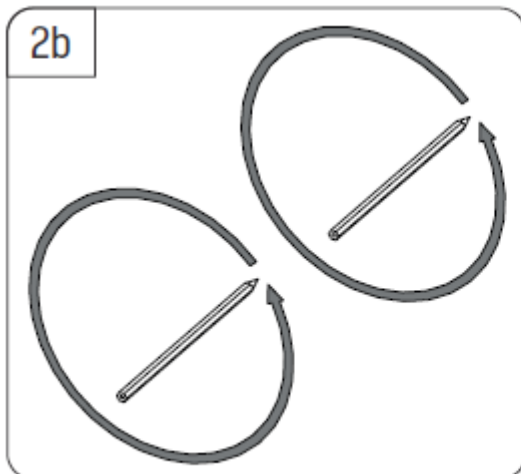
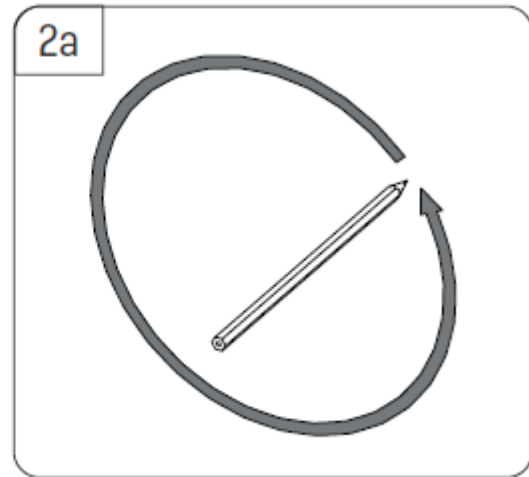
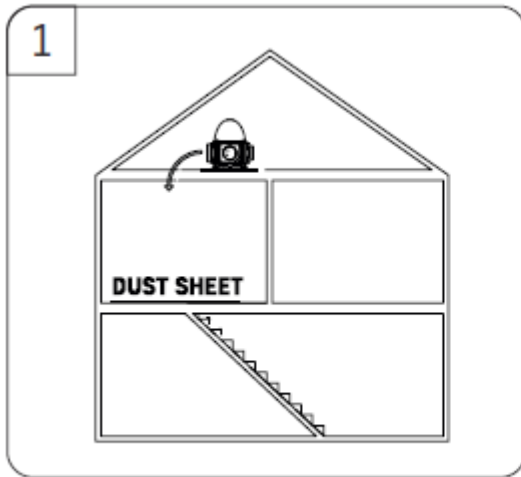
The units have been developed to improve indoor air quality and resolve condensation and mould problems and are designed to operate for 5 years with no requirement for maintenance other than replacement of the filter. It is recommended that the filters are replaced after 5 years usage.

In conditions between 19°C - 25°C the units will increase air flow rate by 10%. In hot conditions above 25°C the units will temporarily switch off to avoid bringing hot air into the property from the loft space.

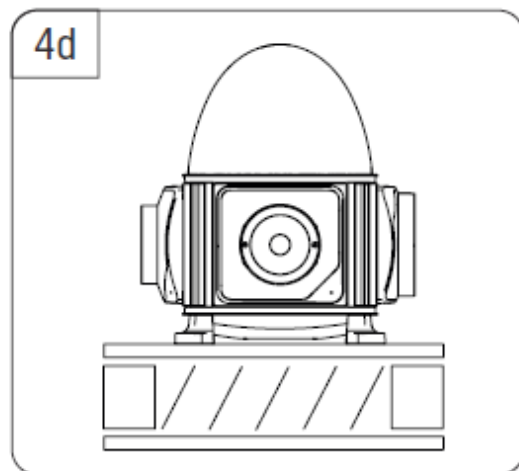
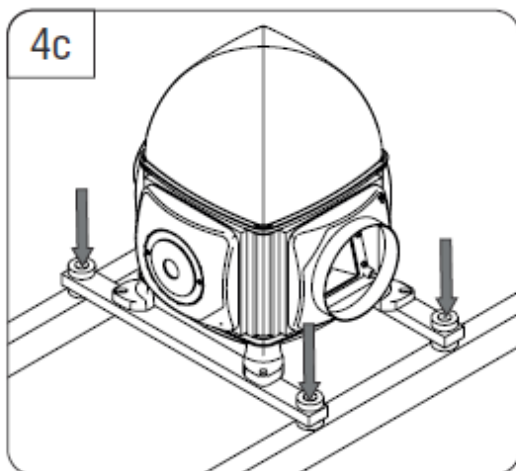
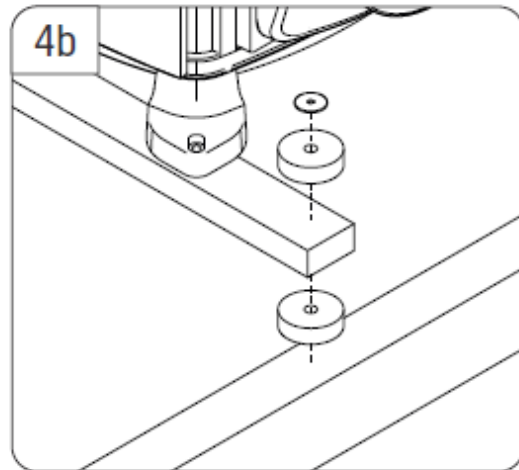
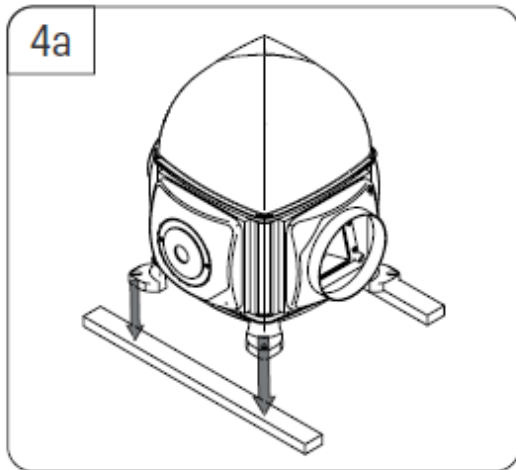
The PIV unit uses a single 200mm diffuser to provide air into a hallway or landing area.

Installation

1. Place a dust sheet below the required ceiling diffuser position and check the ceiling below and loft space above are unobstructed.
2. (a) For PIV units mark a 222mm diffuser hole using the template.
2. (b) For MIV units mark two 105mm diffuser holes (see page 9 for positioning information).
3. Wearing a dust mask and eye protection, cut out the hole/s.



4. a) Screw the feet of the unit onto two 25mm x 50mm wood battens using the four 10g x 1.5" screws. (Battens not supplied).
4. b) Position the unit with anti-vibration pads and washers onto the loft ceiling joists as in the diagram.
4. c) Screw the unit to the ceiling joists using the four 10g x 3" screws.
4. d) If the loft insulation sits above the joists and impedes the unit, create a raised wooden platform to mount onto.

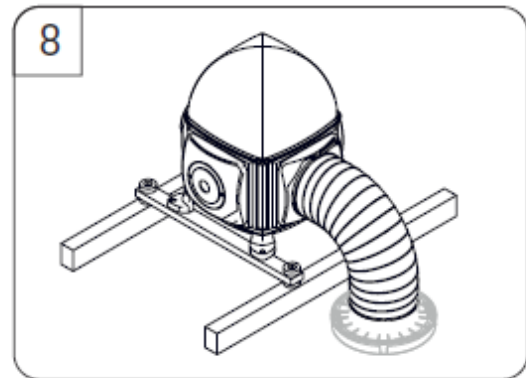
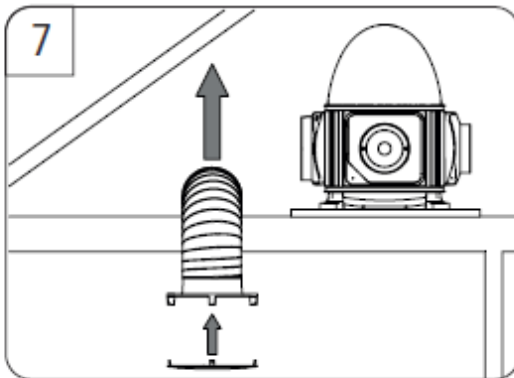
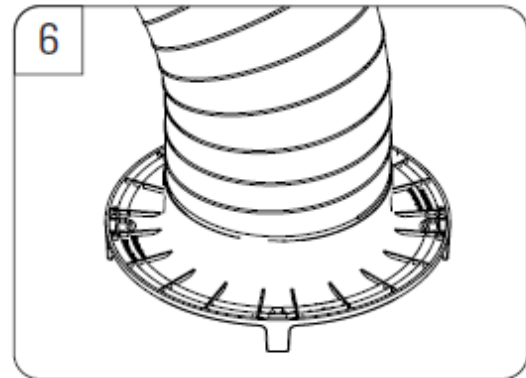
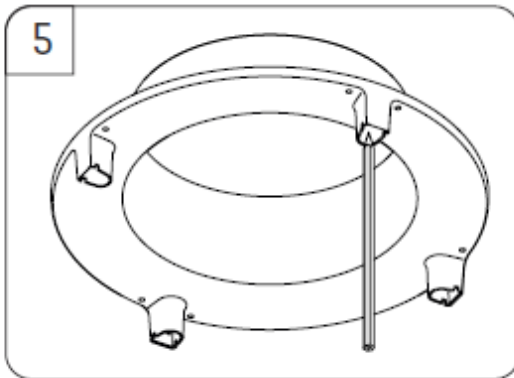


5. Insert the diffuser spigot into the ceiling hole so that the diffuser outlets face towards the walls then mark the four fixing holes.

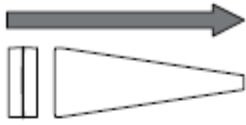
6. Attach the duct to the spigot of the diffuser and seal the connection using the fixings supplied.

7. Insert the diffuser spigot into the hole then fix it in place. Use the four plasterboard plugs and four 8g x 1.5". Then clip the diffuser cover into the diffuser spigot.

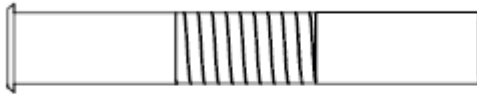
8. Attach the flexible duct to the spigot on the unit and ensure it is pulled taught. Seal the connection tightly using the fixings supplied. Cut the duct to length if required.



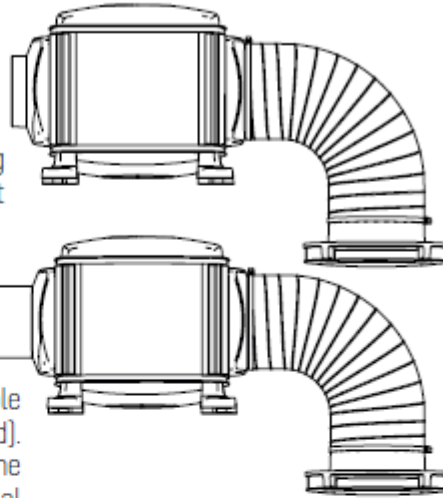
9a. INLINE FILTER (all units)



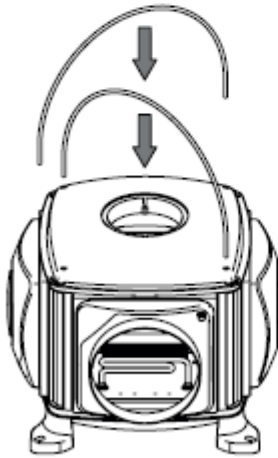
1. Insert the inline filter into a 350mm long section of rigid 150mm diameter duct (not supplied) on the inlet side of the unit.



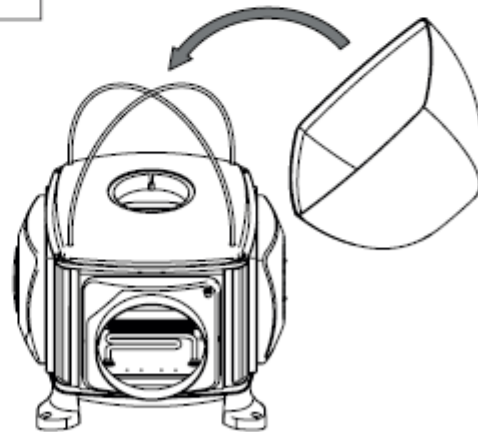
2. Connect to the filter with a section of flexible duct approximately 300mm long (not supplied). The connection must be removable, to allow the filter to be replaced. Connect this to an external vent (see page 5 for examples).



9b. LOFT FILTER (Air Source only)



1. Insert the two flexible filter rods into the holes in the lid so they cross in the middle.

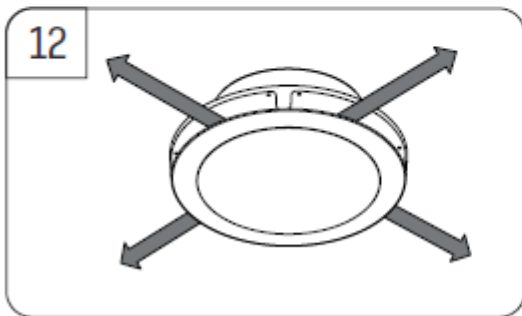
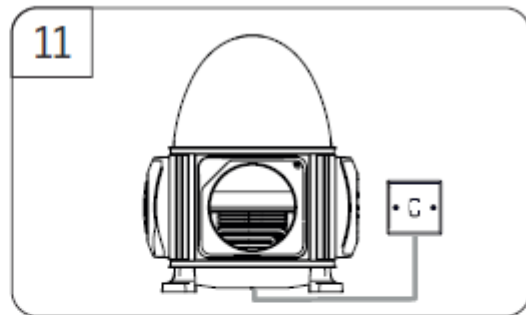
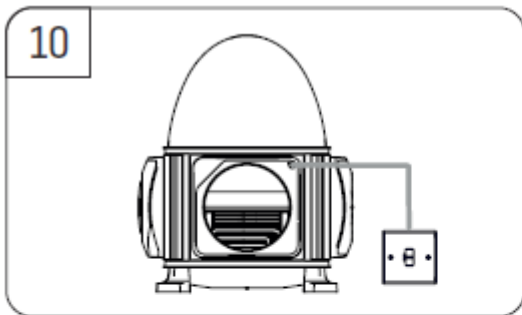


2. Attach the loft filter over the rods. Line up the Velcro edge on the filter with the matching Velcro edge on the lid and ensure it is attached all the way round.

10. With the mains supply isolated, wire the power cable into the unswitched fuse spur then wire the unswitched fuse spur into the mains supply (see wiring diagram on page 6). Use two of the 8g x 1" screws to attach the spur to a loft joist.

11. Non remote control units can be wired to a heater enable switch (not included). Connect it to the heater enable cable and fit it in an accessible area. Use two of the 8g x 1" screws to attach the switch to the wall.

12. Reconnect the mains supply at the local isolator. After a few seconds air will begin to flow from the diffuser (see page 17 for air flow rate settings).



Fire Safety

Smoke Kits

For installations with a floor more than 4.5m above ground, fire rated ceiling valve should be fitted. These are available from the Beam online store, part number: 940522.

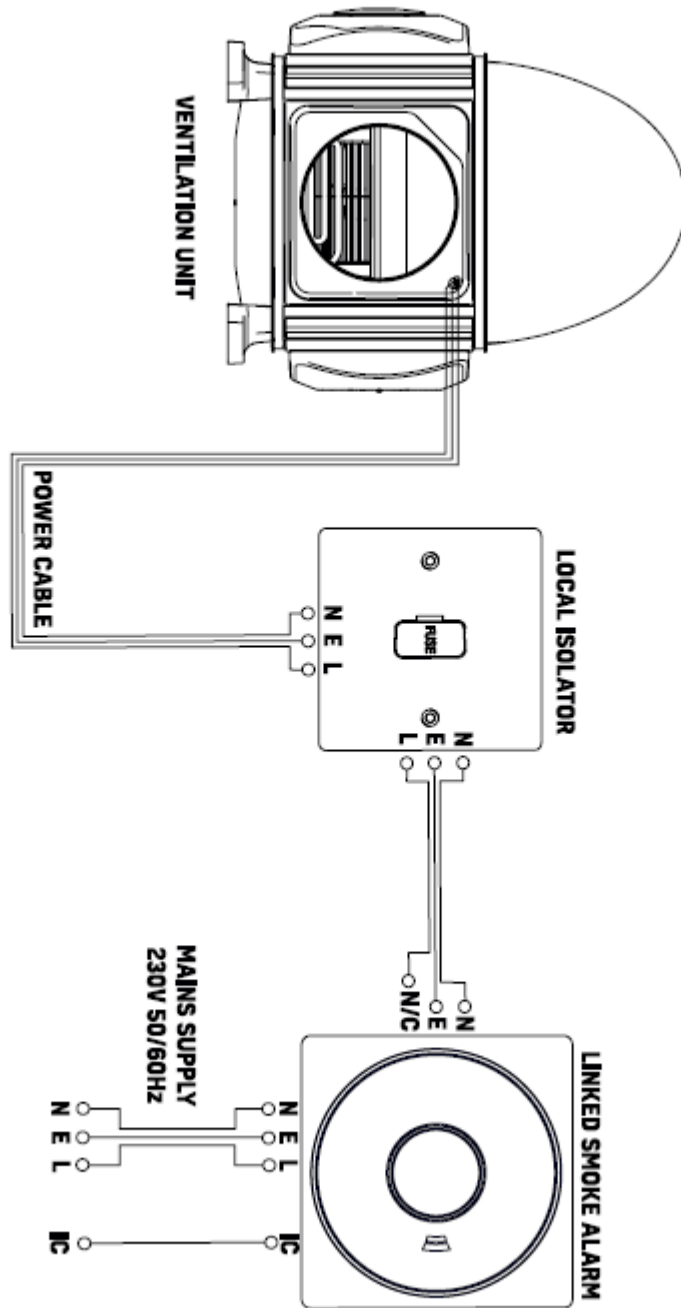
Smoke Alarms

For installations with a floor more than 4.5m above ground, the unit must be wired into a smoke alarm in order to switch the unit off upon the detection of smoke.

The unit can be wired into an existing smoke alarm (check compatibility with the smoke alarm manufacturer). All wiring should be completed by a competent person.

To test the installation, press the TEST button on top of the smoke alarm and keep it pressed until the PIV unit switches off (LEDs on the board go out).

SMOKE ALARM WIRING



Keypad Settings

If you have wireless remote control unit version only.

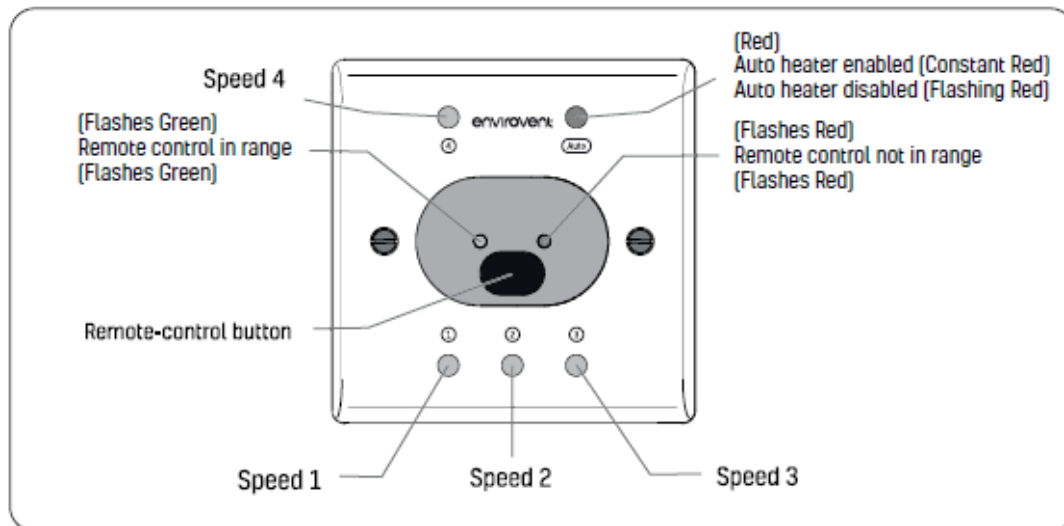
Top button

- Press to show the current air flow setting.
- The corresponding LED will illuminate on the keypad.
- Further presses scroll through the air flow rate settings 1,2,3 and 4 on a loop.
- Adjust this according to the size, type and occupancy of the property.

Bottom button

- Press to show the total running time.
- The numeric display will illuminate to show the total amount of time the unit has been running e.g. '1234' (hours).

Wireless Remote Control



To indicate the current status of the unit:

- Press the remote-control button once and the LEDs will light up according to the current status of the unit.

To modify the air flow rate:

- Press the remote-control button once
- Further presses will then cycle the unit through each of the air flow rate settings – 1, 2, 3, 4
- Further presses will cycle back through the same settings

To enable/disable the automatic comfort heater function:

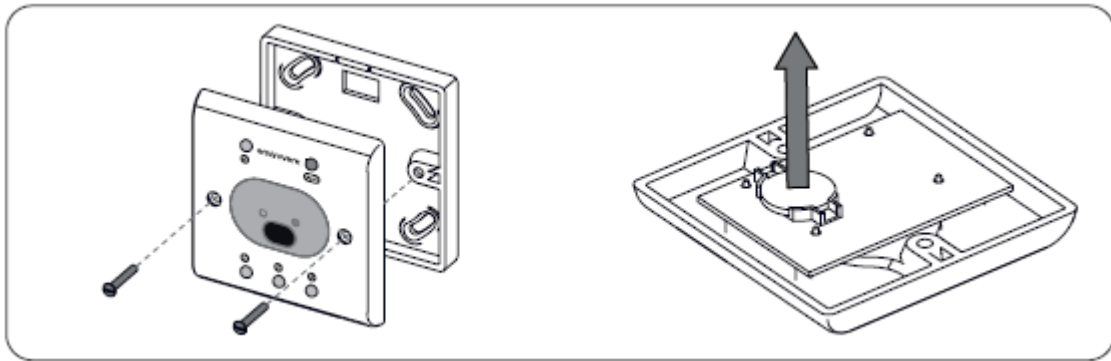
- Press the remote-control button once.
- Press again for 5 seconds to disable comfort heater function.
- AUTO LED will flash red for 5 seconds.
- Press again for 5 seconds to enable comfort heater function.
- AUTO LED will light constant red for 5 seconds.

Pairing an additional remote-control:

1. Turn the unit off at the isolation point.
2. Restore power; for 20 seconds from restart the unit will be in pairing mode.
3. Press the remote-control button once within the 20 seconds and the control will pair to the unit.
4. Successful pairing is indicated by a green light on the remote.

Remote-control batteries

When the battery needs to be replaced, unscrew the switch front cover. The battery is located on the back of the cover. Battery type 3V Lithium CR2032. The switch will remain paired with the unit after battery replacement. Ensure the new battery is inserted with correct polarity, and the removed battery is safely disposed of.



Wired comfort heater enable/disable

A switch to enable/disable the heater function can be connected up to 3 metres away from the unit. This must be a volt free contact. Do not wire the cable or switch into the Mains. When the switch is pressed on, the comfort heater function is enabled and the system will maintain the incoming air temperature at 10 °C. When the switch is pressed off, the automatic comfort heater function is disabled.

Performance Figures - PIV AIR SOURCE

House size setting	Max air flow rate [l/s] ^a	Power usage [Watts] ^b
1.	22	3
2.	29	4
3.	35	5
4.	43	8

Performance Figures - PIV INLINE FILTER

House size setting	Max air flow rate [l/s] ^a	Power usage [Watts] ^b
1.	28	2.7
2.	38	3.8
3.	46	5.4
4.	56	8.3

^a Diffuser installed without blanking plates fitted.

^b Power usage shown with heater function disabled.

^c Figures calculated at incoming air temperature below 19 degrees C.

Maintenance

The Air Source PIV units are designed to operate for 5 years before requiring a full service.

It is recommended that the filters are replaced after 5 years usage.

If there are very high amounts of particulate matter in the air and loft space, the filter will need to be replaced more frequently.

The unit should be isolated from the mains when replacing or cleaning filters.

Spares/Accessories

Item Description	Order Code
Replacement coarse particle filter	FILTERMIVAS-COARSE
Filter - (PIV/MIV AIR SOURCE, PIV/MIV INLINE)	1ACFILTASSY150
200mm diffuser	1DIFPIV
100mm diffuser	1DIFEVLSML1
Fixing kit	FIXINGKITEVL-R
Heater switch	SWHHEATER
Smoke alarm	1ACSMOKEALARM-KIT

GUARANTEE

The AXCO positive ventilation unit is covered by a full **2 year warranty** which will benefit the occupier over many years. The unit will be set according to the size of the property and will operate continuously. There is no requirement for any maintenance within the 2 year period.

What should I do if I have a problem?

If, after thoroughly reading this booklet, you feel that your unit is not working correctly, you can telephone the number shown at the bottom of this page (operational from 9:00am to 5:00pm Monday to Friday), and ask for technical assistance.

Serial number of the unit: _____

We appreciate you choosing this quality product, which is designed and manufactured to the highest specification. We are confident that you will be delighted with the performance of the system and the resulting improvement in air quality in your home after the installation of the unit.

However, it is important that you register your purchase. This will ensure the prompt and efficient handling of any communication in the event that your unit requires attention during the 2 year warranty period.

Your warranty covers any defect or break down that arises due to faulty materials or construction.

WARRANTY CONDITIONS AND EXCLUSIONS

- The system must be correctly installed and operated according to the instructions contained in the user guide supplied.
 - The warranty will be rendered invalid if the system has been serviced, maintained, repaired, taken apart or tampered with by any person not authorised by Beam Vacuum & Ventilation.
 - The warranty does not cover accidental damage, misuse or abuse.
 - The warranty is in addition to your statutory or legal rights
-



Providing Clean Indoor Air for Life©



Please read carefully to ensure simple installation
and a long trouble-free life for the user.

AFTER INSTALLING PLEASE PASS ONTO END USER – DO NOT THROW AWAY

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