

accurasee mechanical

MADE IN CANADA

PORTABLE HEAT RECOVERY VENTILATOR

Model MINI

User Manual

We aim to provide our customers with exceptional niche products that are superior to alternative options.

Our products are handcrafted and built with respectful cognizance of sustainability and quality.

Please, kindly contact us if there are any issues or errors in the User Manual.

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Introduction

The User Manual concisely presents the information that is needed to correctly install and operate the product. Failure to strictly follow the instructions in the User Manual nullifies the Terms and Agreements of the manufacturer.



Warning

Please, observe the following warnings:

- Failure to comply with the warnings may result in fire, property damage, electric shock, injury, or death.
- To prevent suffocation, electric shock, injury or death, the customer is responsible to ensure that children shall NOT access the product.
- The product shall not be modified, disassembled, or serviced.
- The product shall be shut down if the outdoor air temperature exceeds 35°C or 95°F.
- The supply and exhaust vents shall NOT be blocked.
- The product comes with pre-installed supply and exhaust ducts and their orifices shall NOT be blocked.
- The enclosure shall not be opened when the product is powered.
- The product operates using 12V DC and shall NOT be directly connected to the electrical mains. An AC-to-DC power adapter that is rated for 12V DC power supply (2A/3A) is recommended.
- As soon as possible, the power adapter cord shall be safely disconnected from the electrical mains if liquid spills on or around the product.
- The power adapter shall only be connected to an electrical receptacle that is permanently installed in a space.
- The electrical parts of the product (i.e., power switch, power connector, fan controllers, and fans) shall not be handled.
- There shall be no connection of any external devices to the product.
- The cables in the product shall not be disconnected, changed, or modified.
- To maintain the calibration of the product, the fan controllers shall not be adjusted.

NOTE

The manufacturer provides four wall-mounting brackets and four M5 × 10mm self-tapping screws.

NOTE

The manufacturer provides a 2.1mm × 5.5mm DC power connector and an AC-to-DC power adapter for 12V power supply.

NOTE

The DC power connector, AC-to-DC power adapter, brackets, and screws are third-party goods and not products of the manufacturer.

NOTE

A strip of paper tape is attached to the fan controllers on a parallel axis to the calibrated position of the controller knob.

Product Description

The product is a portable heat recovery ventilator which is housed in an attractive polymer enclosure. The heat recovery ventilator performs three functions. First, it supplies fresh air to a space (**ventilation**). Secondly, the fresh air that is supplied to the space is purified with filters while pollutants such as germs, molds, excess moisture, CO₂, radon, odors, and particulates are expelled from the space (**purification**). Thirdly, the supplied fresh air is passively heated or cooled depending on the outdoor conditions (**comfort**). The product is visually depicted in **Figure 1**.

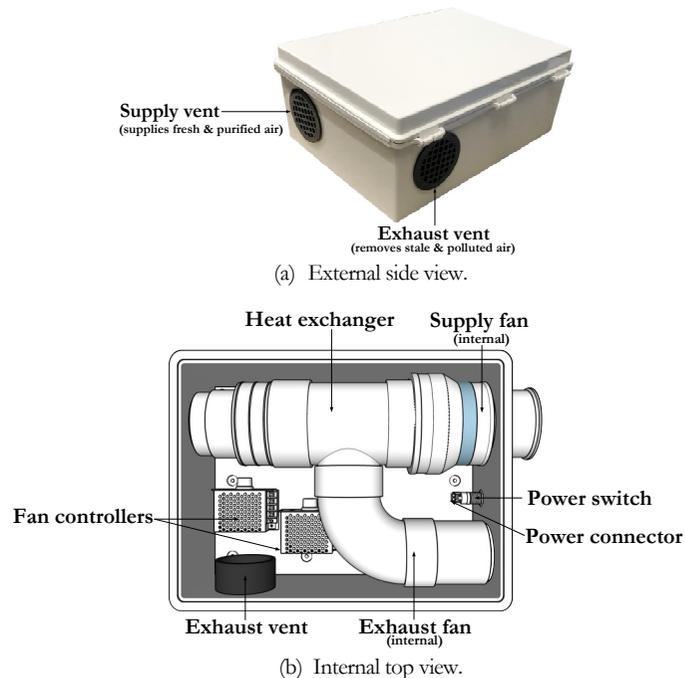


Figure 1. The (a) external side and (b) internal top views of the portable heat recovery ventilator. The approximate external dimensions of the product are 16" × 12" × 6".

The actual product that is received by the customer may slightly differ from the images in Figure 1.

ICON KEY

⚠ Warning

📝 Note

† Caveat

Installation

Please, observe the following instructions when installing the product:

NOTE

The product shall not be installed at a location where there is probable contact with liquids.

NOTE

The product shall be carefully positioned such that it may not trip and cause property damage or bodily injury.

NOTE

The product shall not be installed at a location where there is excessive heat or exposure to direct sunlight.

NOTE

The ports of the ventilation kit shall be 3" (~7.6 cm).

NOTE

The product is calibrated to an air flow rate of ~15 CFM.

NOTE

The power consumed by the product is nominally 10W.

- The product shall not be installed near hazardous or toxic materials.
- The product shall only be installed in either vertical or horizontal orientations and shall not be positioned at an oblique angle.
- For vertical orientation, the supply vent shall face upwards.
- There is no restriction on the horizontal orientation of the product.
- The product can be sited on a table / floor or attached to a wall.
- The vents and ducts shall NOT be connected to external appliances such as dryers, fans, furnaces, etc.
- The product shall be installed in a space where the temperature and relative humidity of air are within the range of 22°C – 24°C and 35% – 50%, respectively.
- The product shall not be powered until the ducts are installed.
- A ventilation kit, which is not provided by the manufacturer, is needed to install the ducts that simultaneously supply fresh air and remove stale air from a space.
- The ventilation kit can interface with the outdoors through a window, door or wall as illustrated in **Figure 2**. If the product is vented through a wall, the customer is responsible for complying with all applicable codes.
- To power the product, connect the plug of the power adapter to the electrical mains. Afterwards, connect the free end of the power adapter to the power connector port and press the power switch until it latches.
- To shut down the product, press the power switch until it unlatches, disconnect the power adapter cord from the power connector port, and disconnect the plug of the power adapter from the electrical mains.

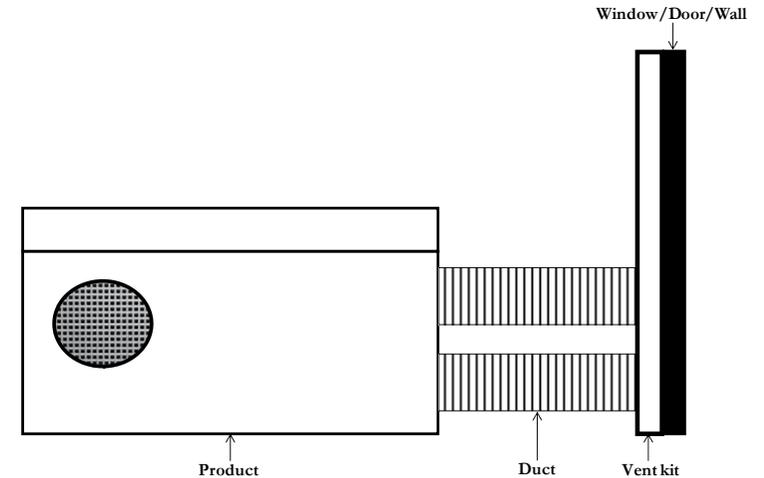


Figure 2. Installation of the product using a vent kit.

RECOMMENDATIONS

- The product may be installed in a space with a floor area of up to 500 ft².
- Screens (not bundled with the product) may be attached to the ports of the ventilation kit to prevent encroaching animals from damaging the product or constituting hazard to the space.
- When installing the product, a minimum separation distance of 1 ft is recommended between the supply and exhaust ducts.
- The ducts should be installed without any bends that may impede the flow of air.
- The ducts may be insulated to minimize energy losses to the space.



Maintenance

NOTE

The heat exchanger shall not be washed.

The product is designed to operate with minimal maintenance. However, a few activities may be performed during the course of using the product.

The product shall be shut down before any maintenance activity is performed.

Filter

NOTE

Filters shall not be installed in the exhaust vent.

It is recommended to change the filters in the supply vent at least once a year depending on the outdoor air quality. The procedure for changing the filters is presented accordingly.

- To remove the supply vent:
 - Shut down the product;
 - Unlock the enclosure;
 - Locate and hold the heat exchanger firmly with one hand;
 - Carefully twist and pull out the supply vent with the other hand.
- Carefully observe how the filters are stacked in the supply vent.
- Remove the filter in the supply vent and replace it with a sheet of an MERV4 air filter pad that is cut to 5" × 4" (~12.7 cm × ~10.2 cm).
- Carefully attach the supply vent to the product.

Duct

NOTE

The length of a newly installed duct shall not exceed 5" (~12.7 cm).

A damaged duct can be replaced by using a similar duct with a diameter of 3" (~7.6 cm). The following steps can be followed when changing a duct:

- Shut down the product;
- Loosen the nuts of the clamp of the damaged duct using an 8-mm nut driver;
- Remove the damaged duct and attach a new duct;
- Tighten the nuts of the clamp.

NOTE

Do not apply excessive force when tightening the clamp.

Electrical Parts

An electrical part shall only be replaced if it is faulty. In this situation, the product shall be shut down and the manufacturer shall be consulted for further instructions.

Caveat

The electrical parts of the product are deemed to be certified to ensure customer safety. Notably, the product operates on the load side of a Class 2 power source in accordance with Canada Electric Code Rule 16–222 and US National Electric Code Class 2 Article 725–41. The product is also subject to the exemption(s) outlined in Federal Communications Commission Section 15.103(d). Consequently, the manufacturer is not liable if additional approval is required by the Authority Having Jurisdiction where the product is purchased and/or installed.

Terms and Agreements

The product is protected by intellectual property and shall not be reverse-engineered, imitated, and copied except under an approved licensing agreement with the manufacturer.

Return Policy

NOTE

The manufacturer provides a warranty for the product that is subject to a Disclaimer.

- Please, check the return policies of the online merchant(s) and store owner(s) from whom the product was purchased. All sales are final for products that are purchased from our website. In the exceptional case that there are manufacturing defects in a product, please send us an email within 24 hours of receiving the product.
- The Return Policy is not applicable to products that are supplied by the manufacturer but sourced “as is” from third parties (i.e., any persons or organizations other than the manufacturer).
- The Return Policy is not applicable to products that are purchased directly from the manufacturer. A direct transaction is hereby defined as when the customer purchases a minimum of 20 units from the manufacturer.

Disclaimer

- The warranty does not apply to defects that are caused by normal wear and tear, normal corrosion, and normal failure that ensue from the operation of electrical or mechanical devices.
- The warranty does not extend to products that have been subject to misuse, neglect, abuse, alteration, testing, improper installation, improper storage, improper maintenance, improper handling during shipping, unauthorized attempts to repair, accident, fire, lightning or other hazard, and damage by current, temperature, physical stress, and deviation from the environmental specifications of a conditioned space that is stated in the User Manual.
- The warranty does not extend to products that have been modified, disassembled, serviced, or reassembled by a third party.
- The warranty is exclusive and in lieu of all other warranties, expressed or implied, including, without limitation, any warranty of merchantability or fitness for a specific purpose. Without limiting the generality of the foregoing, the manufacturer disclaims any other claim against the manufacturer (whether arising by operation of law or otherwise), including any claim or liability for special, indirect or consequential damages of any kind relating to or arising out of the product or any part thereof.

- The manufacturer’s obligation is limited to repair or replacement, at the option of the manufacturer, of any product determined to be defective in workmanship or material during the applicable warranty period, subject to the fact that the warranty:
 - Covers the electrical parts for a maximum period of one year from the date of purchase by the customer;
 - Covers the heat exchanger for a maximum period of one year from the date of purchase by the customer;
 - Does not cover the enclosure;
 - Does not cover goods and services that are sourced from third-party and sold or delivered to the customer “as is”.
- The manufacturer neither assumes nor authorizes any person to assume for it any other liability in connection with the manufacture, sale, shipping, delivery, installation, and operation of the product or any part thereof except as aforesaid.