

User Guide

HEAT RECOVERY VENTILATOR HRV100i

Model #: 41202

Model #: 41200 (HRV with ports on top) (HRV with ports on sides)





PLEASE READ AND SAVE THESE INSTRUCTIONS.



These products earned the ENERGY STAR® by meeting strict energy efficiency guidelines set by Natural Resources Canada and the US EPA. They meet **ENERGY STAR requirements** only when used in Canada.

Congratulations!

You have made an excellent choice! The operating principle of your Heat Recovery Ventilator will give you personal comfort you have never known before

We have prepared this User Guide especially for you. Please read it carefully to ensure you obtain full benefit from your unit. Over the coming months, you will increasingly appreciate the feeling of living in a more comfortable house.

Please take note that this manual uses the following symbols to emphasize particular information:

⚠ WARNING

Identifies an instruction which, if not followed, might cause serious personal injuries including possibility of death.

CAUTION

Denotes an instruction which, if not followed, may severely damage the unit and/or its components.

NOTE: Indicates supplementary information needed to fully complete an instruction.

We welcome any suggestions you may have concerning this guide and/ or the unit and we would appreciate hearing your comments on ways to better serve you. Please forward all correspondence to us at the address indicated on the product registration card included with this guide.

CAUTION

Make sure at all times that the outside hood is free from any snow during the winter season. It is important to check your unit during a big snow storm, so it does not draw in any snow. If this is the case, please operate the unit in the recirculation mode (if available) or turn it OFF for a few hours.

Do not use your HRV during construction or renovation of your house or when sanding drywall. This type of dust may damage your system.

Since the electronic control system of the unit is incorporated with a microprocessor, it may not operate correctly because of external noise or very short power failure. If this happens, unplug the unit and wait approximately 10 seconds. Then, plug the unit in again.

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1. Defrosting Mode

When the outside temperature is below -5°C [23°F], recovery (of heat or energy) creates frost in the core.

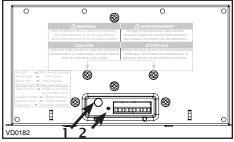
To maintain its proper operation, the unit is programmed to defrost the recovery core. The defrost frequency varies according to the outside temperature.

During the defrost cycle, the unit shifts to maximum speed and the dampers close. After defrosting, the unit returns to the operating mode selected by the user.

2. Controls

2.1 Integrated Control

All units are equipped with an integrated control, located under the unit, in front of the electrical compartment. Use the push button (1) to control the unit. The LED (2) will then show which mode the unit is in.



Refer to the table below to see how to operate the unit using its integrated control.

Press on Push Button	LED Color	RESULTS	
Once	Amber	UNIT IS ON LOW SPEED	
TWICE	Green	UNIT IS ON HIGH SPEED	
THREE TIMES	No Light	Unit is OFF	

If a problem occurs during the unit operation, its integrated control LED (2) will blink. The color of the blinking light depends on the type of error detected. Refer to *Section 4 Troubleshooting* on pages 11 and 12 for further details.

BOOT SEQUENCE

The unit boot sequence is similar to a personal computer boot sequence. Each time the unit is plugged in after being unplugged, or after a power failure, the unit will perform a 30-second booting sequence before starting to operate. During the booting sequence, the integrated control LED will light GREEN or AMBER for five seconds, and then will shut off for two seconds. After that, the LED will light RED for the rest of the booting sequence. During this RED light phase, the unit is checking and resetting the motorized damper position. Once the motorized damper position is completely set, the RED light turns off and the booting sequence is done.

NOTE: No command will be taken until the unit is fully booted.

2. Controls (cont'd)

2.2 Optional Main Controls

2.2.1 Deco-Touch Main Wall Control

BACKLIGHT

If the backlight is not illuminated, the first button pressed (no matter which button) shall turn on the backlight. The backlight remains illuminated for 10 seconds after the last button pressed.



OPERATING MODES



To change the operation mode of the ventilation unit, press the UP or DOWN arrow button. Operating mode label will then scroll up or down on LCD screen.



OFF

Put the unit on standby mode, so it will only respond to auxiliary controls (if present). On LCD screen, only the House is visible showing the control is powered on. This is the factory default mode.



RECIRC

Air is recirculated inside the house at high speed.



20 MIN/H

The ventilation unit exchanges air intermittently on a one-hour cycle as follows: OFF for 40 min. (or recirculation on high speed for 40 min., see next page) and then exchange air during 20 min. on low speed. Repeat cycle after the 20 min. of air exchange.



MIN

Air is exchanged with the outside on low speed.



MAX

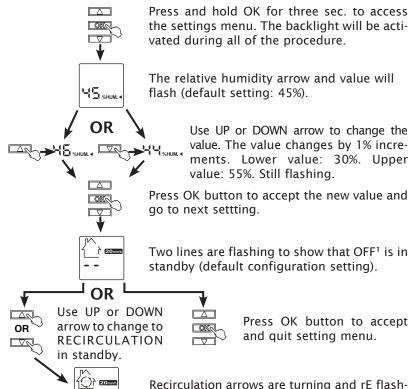
Air is exchanged with the outside on high speed.

2.2 Optional Main Controls (cont'd)

2.2.1 Deco-Touch Main Wall Control (cont'd)

HOW TO SET THE RELATIVE HUMIDITY (RH) LEVEL AND CHOOSE BETWEEN OFF IN STANDBY OR RECIRCULATION IN STANDBY

Setting the relative humidity level allows you to select the maximum desired indoor humidity level (in percentage). This value will be used to start the dehumidistat override (air exchange in high speed).



es to show that $RECIRCULATION^2$ is in standby.

Press OK button to accept and quit setting menu.

OFF in standby: On 20 min/h mode, the ventilation unit is OFF for 40 minutes and exchanges air with the outside on low speed during the remaining 20 minutes of the hour. This is the default value.

²RECIRCULATION in standby: On 20 min/h mode, the ventilation unit recirculates the inside air for 40 minutes on high speed and exchanges air with the outside on low speed during the remaining 20 minutes of the hour.

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2. Controls (cont'd)

2.2 Optional Main Controls (cont'd)

2.2.1 Deco-Touch Main Wall Control (cont'd)

DEHUMIDISTAT OVERRIDE SELECTION

In the operating modes MIN, MAX, 20 $_{
m MIN/H}$ and RECIRC, the user can select a dehumidistat override so that if the relative humidity (RH) in the house exceeds the RH setting previously stored, the ventilation unit will exchange in high speed until the target indoor RH setting is reached.

An air exchanger is not a dehumidifier, but it can change the indoor relative humidity by bringing in drier or more humid air from outside during non-heating season. The dehumidistat override function is useful to reduce indoor RH when the outdoor air is cool and dry during the heating season. Select a target RH between 30% and 55% according to your comfort. When outdoor relative humidity is high (e.g. in summer), turn off the override by pressing OK until the RH display disappears.



When the dehumidistat override is activated, the AUTO indicator will appear on LCD screen to show that the actual mode is being overridden. Also, the relative humidity appears (if it was not shown, see example beside). Once the target humidity level is reached, the unit goes back into its original operating mode and AUTO disappears from LCD screen.

NOTE: If the actual mode is MAX, only the relative humidity level appears on screen; AUTO label will not appear.

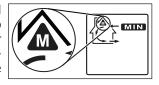
To engage the dehumidistat override, press OK. The actual indoor RH and the %HUM label appear on LCD screen.

NOTE: If the actual RH is less than 20%, then the humidity indicator will display "LO", and if the actual RH is greater than 80%, then the humidity indicator will display "HI".

To turn off the dehumidistat override, press OK again. The RH and %HUM display will disappear from LCD screen.

MAINTENANCE INDICATOR

The maintenance indicator is represented by an M in a rounded triangle, at the top of the house (see beside). If this indicator is flashing, perform the semi-annual maintenance, and if it is not flashing, perform the annual maintenance (refer to Section 3).



Resetting Maintenance Indicator: Press simultaneously on both arrow buttons, Maintenance indicator will disappear from LCD screen.



Power Failure

After a power failure, the wall control returns to its original operation mode. All settings are kept in memory.

2. Controls (cont'd)

2.2 Optional Main Controls (cont'd)

2.2.2 Lite-Touch Main Wall Control

Activate the push button; the color of the indicator shows the unit operating mode.



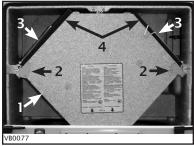
Color	Mode	Suggested Use
Green	Intermittent	Select this mode when you are away from the house for a few days. Also, when you deem the inside air is too dry in heating season, or too humid during cooling season. In this mode, the unit is OFF for 40 minutes per hour and ventilates at minimum speed the remaining 20 minutes of the hour.
Yellow	Min Speed Ventilation	For normal daily operation.
Red	Max Speed Ventilation	For excess pollutants and humidity (parties, odors, smoke, etc.).

. Maintenance

⚠ WARNING

Risk of electric shock. Before performing any maintenance or servicing, always disconnect the unit from its power source. When cleaning the unit, it is recommended to wear safety glasses and gloves.

Since this guide covers HRV units, top and side ports, the illustrations shown in the maintenance procedures are typical; core appearance may vary. Refer to pictures below to identify the inner parts of your unit.

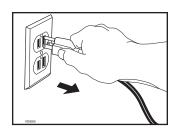


1) HRV core

3) Foam filter brackets 2) Core retainers 4) Foam core filters

3.1 Semi-annual Maintenance

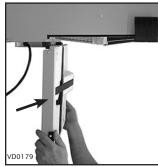
1. Unplug the unit.



\triangle WARNING

Be careful before opening the door; water or small debris could fall

2. Unlatch the door and open it. Clean the inner side of the door with a damp cloth, then wipe with a dry one. Disengage the door from its hinge by sliding it from left to right and set aside.



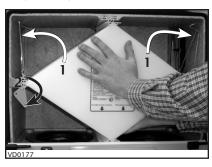
3. Maintenance (cont'd)

3.1 Semi-annual Maintenance (cont'd)

∧ WARNING

Always hold the core when rotating the two core retainers; failure to do so will cause the core to fall out.

3. Lift both foam filter brackets (1) and remove the foam filters from the core. While holding the core, rotate the two core retainers (2) and slide out the core from the unit.



- 4. Clean the inside walls of the unit with a clean damp cloth, then wipe with a clean dry one.
- 5. Wash the two core filters under hot water with mild soap. Rinse thoroughly and let dry completely before re-installing on the core.
- 6. Remove the dust on the core using a vacuum cleaner and a soft brush attachment.

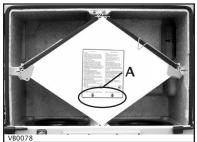
WARNING

Once the core is re-installed in the unit, always rotate both core retainers to their initial position; failure to do so will cause the core to fall out.

7. Slide the core into the unit. Secure the core by rotating both core retainers to their initial position.

VD0178

NOTE: Once the core is re-installed in the unit, the arrows (A) on its sticker label must be pointing towards the unit motors.



- 8. Re-install both foam filters and secure them to the core by pulling down the two foam filter brackets. Re-install the door.
- Close the door and plug the unit.
 NOTE: The unit will return to its previous setting after a 30-second delay for boot sequence.

3.2 Annual Maintenance

Do the same operations as the Semi-annual Maintenance (Section 3.1). Then, clean the exterior hood(s).

4. Troubleshooting

If the unit does not work properly, reset the unit by unplugging it for one minute and then plug it in again. If it is still not working properly, refer to table below.

Type of Problem	Solution		
On Deco-Touch main wall control, error code E1 or E3 appears on screen.			
2. Nothing works.	Check if the unit is plugged in.Check if the unit is receiving power from the house circuit breaker.		
3. Condensation on windows (inside air too humid).	pugue to the pugue		
4. Inside air too dry.	See Controls Section on pages 4 to 8.Temporarily use a humidifier.		
5. Air too cold at the air supply grille.	Check if the exterior hood is blocked.See Controls Section on pages 4 to 8.Install a duct heater.		
6. The LED of the integrated control is blinking RED.	 a) The door is open and the unit is not unplugged. Close the door and press once on the integrated control push button to reset the unit. b) There is a problem with the exhaust motor. The unit is OFF. Contact your Installer. 		
7. The LED of the integrated control is blinking GREEN.			

4. Troubleshooting (cont'd)

Type of Problem	Solution		
8. The LED of the integrated control is blinking AMBER.	 There is a problem with the motorized damper. The unit is OFF. For a 12-hour period, the unit will try to reset the damper at every 20 to 30 minutes. After 12 hours, if the problem is not solved, the unit stops trying to reset damper. Contact your Installer. 		
9. The integrated control push button does not work.	· The 30-second boot sequence is not com-		

If the problem is still not solved, call your Installer or the nearest approved Service Center. Also, you can reach the Customer Service Department at the following phone number:

1-866-4-VENMAR (1-866-483-6627)

REPLACEMENT PARTS AND REPAIR

In order to ensure your ventilation unit remains in good working condition, you must use the Manufacturer's genuine replacement parts only. The Manufacturer's genuine replacement parts are specially designed for each unit and are manufactured to comply with all the applicable certification standards and maintain a high standard of safety. Any third party replacement part used may cause serious damage and drastically reduce the performance level of your unit, which will result in premature failing. Also, the Manufacturer recommends to contact a certified service depot for all replacement parts and repairs.

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- 2. Payment. Except to the extent credit terms are expressly agreed in writing by Seller, Buyer shall pay invoices, without setoff, 1% 10 / net 30 days from date of invoice, in the currency specified on the invoice. If Buyer fails to make any payment or pay any invoice according to its terms, or upon such credit terms as expressly agreed to in writing by Seller, then, in addition to all other rights and remedies available to Seller: (a) Buver is responsible for any and all commercially reasonable charges, expenses commissions incurred by Seller in stopping
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- 3. Changes. Seller may revise prices, dates of delivery, and warranties upon acceptance of requests by Buyer for modifications to Products or Services. If Buyer rejects proposed changes to made-to-order Products deemed necessary by Seller to conform to the applicable specification, Seller is relieved of its obligation to conform to such specification to the extent that conformance may be affected by such objection in the reasonable opinion of Seller.
- **4. Shipment and Delivery**. Deliveries of Products, title (subject to any lawful reservation of Seller's security interest) and risk of loss pass to Buyer FOB Seller's

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- **Inspection and Acceptance.** Unless 5. otherwise agreed in writing signed by Seller, Buyer shall inspect Products upon receipt at the first delivery destination. Buyer's failure to inspect Products and give written notice to Seller of any alleged defects or non-conformity within ten (10) days after receipt at first delivery shall constitute destination Buver's irrevocable acceptance of Products delivered. Notice of any latent defect must be delivered to Seller in writing within ten (10) days of start-up.
- 6. Limited Warranty. Unless otherwise agreed in writing signed by Seller warrants: (i) All Seller: (a) Products (excluding software and spare parts) manufactured by Seller and conform to the specifications submittals provided by Seller and will be defects in material workmanship ("Defects") for 12 months following start-up or 18 months following ship date, whichever occurs first, under normal use and regular service and maintenance, if installed and maintained pursuant to Seller's instructions. warranty purposes, start-up occurs when the equipment (or any portion thereof) is started for operation regardless of when the building may be ready for operation.

Products that include required start-up by Seller will not be warranted hereunder unless Seller (or authorized ite representative) performs the start-up. If Seller requires a completed start-up form and such form has not been received by Seller within six (6) months from shipment, then start-up will be deemed to have occurred on the ship date. spare parts will be free of Defects for 12 months following ship date. Buyer must notify Seller of any Defect promptly upon discovery and if such notification occurs within the applicable warranty period. Seller shall remedy such Defect by, at Seller's option, adjustment, repair or replacement of Products or any affected portion of Products, or providing a refund of the portion of the purchase price attributable to the defective portion of the Product. Buyer assumes all responsibility and expense for removal, reinstallation and freight charges (both for return and delivery of new parts). Buyer must grant Seller access to the premises at which Products are located at all reasonable times so that Seller can evaluate any Defect and make repairs or replacements on site. Repaired or replaced portions of Products are warranted until the later of the end of the warranty period applicable to the defective portion of Products repaired or replaced; or 30 days following the completion of the repair or ship date of the replacement parts; and (ii) Services will be of workmanlike quality. Buver notifies Seller of nonconforming Services within 30 days after Services are completed, Seller shall re-perform, if able to be cured, those Services directly affected by such failure, at its sole expense. Buyer's sole remedy for such nonconforming Services is limited to the cost of re-performing the Services.

(b) Buyer is responsible for disassembly and re-assembly of non-Seller supplied products. Seller does not warrant and shall have no obligation with respect to any Products that: (i) have been repaired or altered by someone other than Seller or Seller's authorized representative; (ii) have been subject to misuse, abuse, neglect, intentional misconduct, accident, Buyer or third party negligence,

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- 9. Excuse of Performance. Seller has no liability for non-performance due to acts of God; acts of Buyer; war (declared or undeclared); terrorism or other criminal conduct; fire; flood; weather; sabotage; strikes, or labor or civil disturbances; governmental requests, restrictions, laws, regulations, orders, omissions or actions; unavailability of, or delays in, utilities or transportation; default of suppliers or other inability to obtain necessary materials; embargoes or any other events or causes beyond Seller's reasonable control (each, a "Force Majeure Event"). Deliveries or

other performance may be suspended for an appropriate period of time or canceled by Seller upon notice to Buyer in the event of a Force Majeure Event, but the remainder of the Agreement will otherwise remain unaffected as a result of the Force Maieure Event. If Seller determines that its ability to perform the Services or the total demand for Products is hindered, limited or made impracticable due to a Force Majeure Event, Seller may delay delivery of Products and Services and allocate its available supply of Products (without obligation to acquire other supplies of any such Products) among its customers on such basis as Seller determines to be equitable without liability for any failure of performance. In the event of a Force Majeure Event, the date of delivery will be extended by a period equal to the delay plus a reasonable time to train and resume production, and the price will be equitably adjusted to compensate Seller for such delay and related costs and expenses.

Laws and Regulations. Compliance with any federal, state, provincial or local laws, regulations and directives ("Laws") relating to the installation, operation or use of Products or Services is the sole responsibility of Buyer. In addition, Buyer shall comply with all applicable laws, rules, regulations and orders related to antibribery or anti-corruption legislation (including without limitation the U.S. Foreign Corrupt Practices Act of 1977 and all national, state, provincial or territorial anti-bribery and anti-corruption statuses) and, as such, will make no offer, payment or gift, will not promise to pay or give, and will not authorize, directly or indirectly, the promise or payment of, any money or anything of value to any government official, any political party or its officials, or any person while knowing or having reason to know that all or a portion of such money or item of value will be offered, given or promised for the purpose of influencing any decision or act to assist Seller or Buyer or otherwise obtaining any improper advantage or benefit. Agreement is governed by the laws of the State where Seller's principal office is located, without giving effect to its conflict

of laws rules, and the parties consent to the exclusive jurisdiction and venue of the federal and state courts located in such State. The application of the United Nations Convention on Contracts for the International Sale of Goods does not apply.

- 11. Drawings. Any designs, manufacturing drawings or other information submitted to the Buyer remain the exclusive property of the Seller. Buyer shall not, without Seller's prior written consent, copy such information or disclose such information to a third party.
- Cancellation. Buyer may cancel 12. orders only upon reasonable advance written notice and upon payment to Seller of cancellation charges which include: (a) all costs and expenses incurred by Seller, and (b) a fixed sum of 10% of the total price of Products to compensate for disruption in scheduling, production and other indirect administrative costs.
- 13. Export Control. Certain Products may be subject to export controls under the Laws of the US and other countries. Buyer must comply with all such Laws and not export, re-export or transfer, directly or indirectly, any such Product except in compliance with such Laws.
- 14. General Provisions. The Agreement constitutes the entire agreement between the parties and supersedes all other communications between the parties relating to the subject matter of the Agreement. Seller's quotations are offers that may only be accepted in full. No conditions, usage or trade, course of dealing or performance, understanding or agreement purporting to modify, vary, explain, reject, or supplement the Agreement shall be binding unless made in writing and signed by both parties, expressly and specifically referencing the Agreement, and no modification or objection shall be caused by Seller's receipt, acknowledgement, or acceptance of purchase orders, shipping instruction forms, or other documentation containing different or additional terms to those set forth herein. No waiver by either party with

respect to any breach or default or of any right or remedy and no course of dealing, shall be deemed to constitute a continuing waiver of any other breach or default or of any other right or remedy, unless such waiver is expressed in writing signed by both parties, specifically referencing the Agreement. Nothing in the Agreement confers upon any person other than Seller and Buyer any right or remedy under or by of this Agreement. typographical or clerical errors made by Seller in any quotation, acknowledgement or publication are subject to correction.

BUYER conditions	accepts	these	terms	and
Signature:				
Print Nam	e:			
Date:				