

INSTALLATION AND OPERATING INSTRUCTIONS

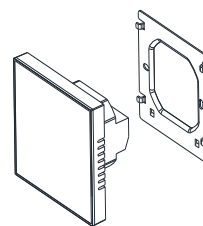
Controller

READ AND SAVE THESE INSTRUCTIONS

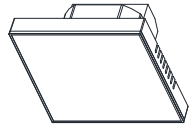
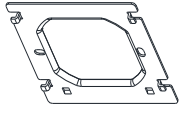
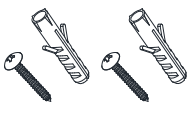
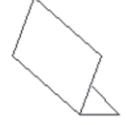
WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

1. Please use this product according to the installation and operating instructions. If you have any problem or question, please contact the manufacturer.
2. Switch power off and disconnect power source before installation or maintenance.
3. Installation and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
4. Do not install the product in a bathroom or any place where the humidity is >85%, and do not touch the product with wet hands to avoid electric shock.
5. Do not install this product where the temperature is above 104°F (40°C).
6. Do not install the product where flammable gas may leak or near flame.
7. Do not modify or repair the product as it may cause electrical shock or fire.
8. Stop operation of the unit and switch off the power if abnormal situations occur (burning smell and others). Continued operation may cause electrical shock or fire. Please contact your dealer or our contact center.



SUPPLIED ACCESSORIES

Part name	Appearance	Quantity
Controller		1
Metal mounting plate		1
Drywall Screw w/anchor (Ø 3.5x25)		2
Manual		1

INSTALLATION

1. First, select the location where the controller will be installed, and choose an appropriate height (standard height is approximately 5' above the floor) If attaching mounting plate directly to the wall, create a square opening on the wall with dimensions of 2.75" (70mm) in width and 2" (50mm) in height. Use screws with wall anchor
2. If a switch box is present, cutting an opening is not required. **The switch box must be mounted horizontally for this installation.** Secure the mounting plate to the horizontal switch box using two (Ø 3.5x25) screws. Ensure that the screws do not damage the controller wiring.
3. Insert the (16-24AWG) wires into the terminal block according to the wiring (Fig.B) below
4. Hang the controller onto the hooks on the metal mounting plate and push it downward until it clicks into place to complete the installation.

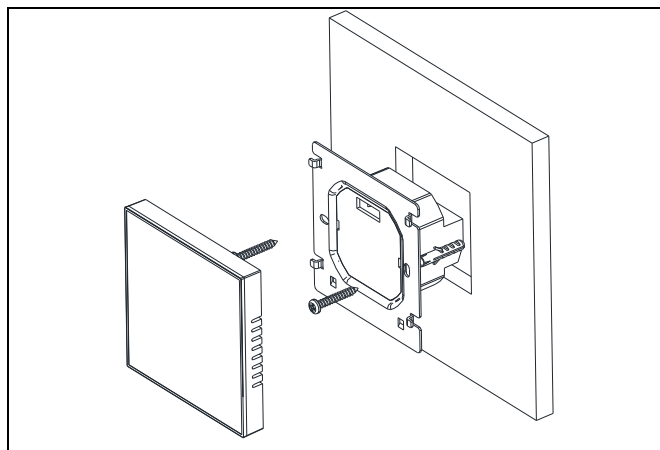


Fig. A

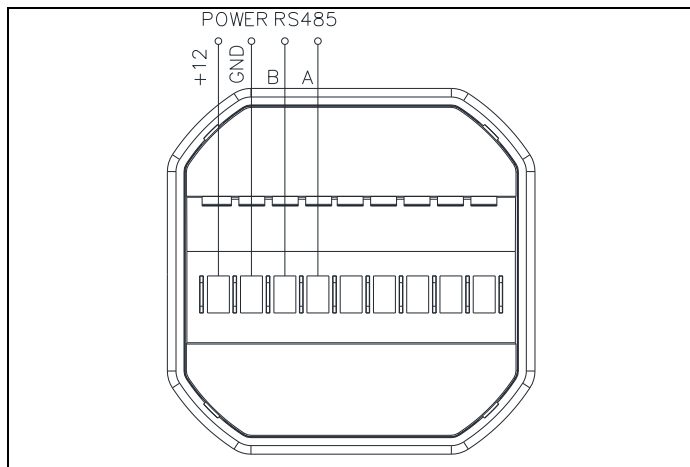
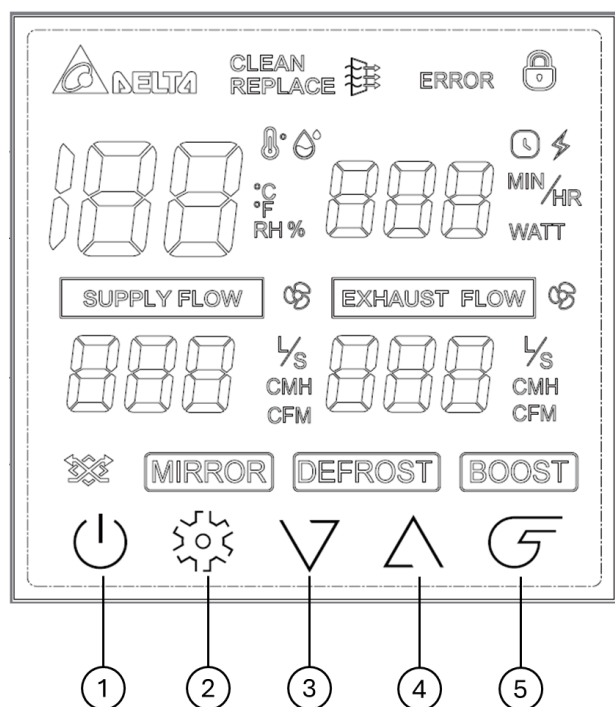


Fig. B

Wiring

AWG	Inch (mm ²)
Max~Min	Max~Min
16~24	0.5" ~ 0.008" (1.3~0.2)

OPERATION SECTION



① START/STOP button: Start/Stop the unit operation

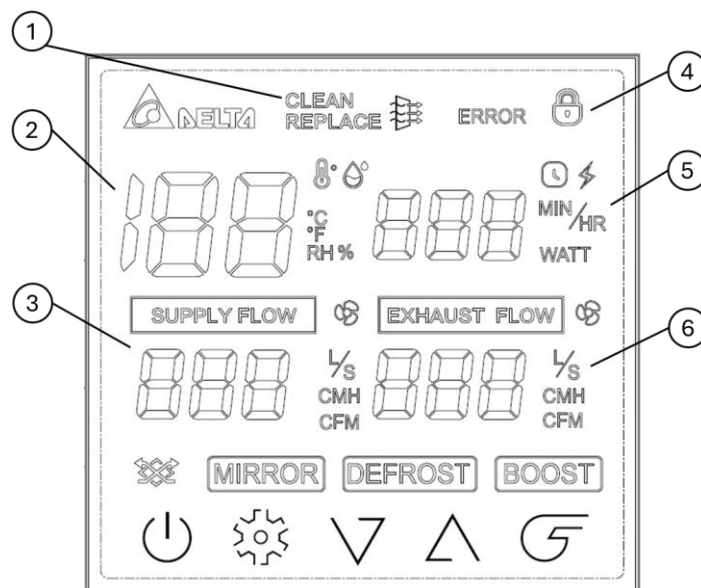
② FUNCTION button:

③ UP button: Increase the value

④ DOWN button: Decrease the value

⑤ BOOST button: boost the unit

DISPLAY SECTION



① Filter maintenance reminder

② Temperature and humidity value

③ Supply air flow value

④ Control lock

⑤ Power consumption/ Run time/ Error code

⑥ Exhaust air flow value

OPERATION INSTRUCTIONS

1. START/STOP Button:

When the ERV is in sleep mode or the screen is turned off, pressing the "START/STOP" button will power on the ERV and activate the display mode.

When the controller is already powered on, pressing the "START/STOP" button will turn off the ERV and enter Screen Saver mode.

2. Display Mode:

The screen displays humidity/temperature, power consumption (Watt), supply airflow, and exhaust air flow.

Humidity and temperature are shown alternately at 5-second intervals.

3. Mirror Mode:

The controller will detect when the ERV is in Mirror mode. If ERV is in Mirror mode, the display shows "MIRROR".



4. Boost Mode:

In display mode, press the "BOOST" button. The supply and exhaust air flow values will display the maximum airflow, and the

fan will run at maximum speed. The run time value will show 20, and the **"BOOST"** indicator will light up.

Use the **"BOOST"** button to adjust the BOOST mode run time. The run time value will cycle through 0, 20, 40, and 60 minutes. Both the run time value and the **"MIN/HR"** indicator will flash. Selecting 0 will exit BOOST mode.

After selecting the desired run time, if no button is pressed within 3 seconds, the selection is confirmed. The **"MIN/HR"** indicator will change from flashing to steady **"MIN"** and the run time will start counting down. When the countdown reaches 0, BOOST mode will end.

Upon exiting BOOST mode, the **"BOOST"** indicator will turn off, and the fan will return to the originally set speed.

During the countdown, pressing the **"BOOST"** button will set the run time to 0. Repeated presses will cycle through 0, 20, 40, and 60 again. If no button is pressed within 3 seconds, the selection is confirmed.



5. Filter Maintenance Reminder

When product accumulated run time reaches 3 months, the display will show **"CLEAN"**. Press the **"UP"** or **"Down"** buttons to close the warning.

When the product accumulated run time reaches 6 months, the display will show **"REPLACE"**. Press the **"UP"** or **"Down"** buttons to close the warning and reset the timer.

If wanting to reset the timer forcibly, press **"UP"** and **"Down"** buttons for 3 seconds to reset the timer and the icon flashes for 5 seconds.



6. Activating Control Lock

To activate the **Control Lock**, press and hold the **"UP"** and **"FUNCTION"** buttons simultaneously for more than 2 seconds. Once activated, the Control Lock icon will turn off, and all buttons except the power button will be locked. The Control Lock function remains active even when the device enters screen saver mode. After powering on, the user must unlock the Control Lock to access other functions.

Deactivating Control Lock:

Press and hold the **"UP"** and **"FUNCTION"** buttons simultaneously for more than 2 seconds. The Control Lock icon will turn off, and all buttons will return to normal operation.

7. Defrost Mode

When the ERV enters Defrost Mode, the controller will display three stages according to the operating status of the ERV, as follows:

Stage 1 – Ventilation:

The controller's **"DEFROST"** indicator light turns on. Both the supply air and exhaust air zones show a scrolling display (running light) effect.

Stage 2 – Exhaust Defrost:

The **"DEFROST"** indicator remains on, while the  indicator turns off. The supply air volume display shows **"—"**, and the exhaust air zone displays a marquee effect.

Stage 3 – Standby Mode:

Both the supply air and exhaust air volume displays show **"—"**.

Upon completion of the defrost cycle, the **"DEFROST"** indicator turns off, the  indicator turns on, and the supply and exhaust air volumes return to their previous set values.

During defrost operation, the **BOOST** function is disabled; all other settings remain active and functional.

8. Screen Protection Mode

This device features a Screen Protection Mode to conserve power and prevent unintended operations.

- If there's no activity for over 30 seconds, the display will turn off completely, except for the Power button. All other buttons will become inactive.

Disabling Screen Protection Mode

To turn off Screen Protection Mode, press and hold the **"START/STOP"** button and the **"Up"** button simultaneously for 2 seconds. The screen will flash twice, indicating that Screen Protection Mode is now off. Your screen will no longer turn off automatically after 30 seconds, but you can still press the Power button to manually turn it off.

Restoring Screen Protection Mode

To re-enable Screen Protection Mode, press and hold the **"START/STOP"** button and the **"Down"** button simultaneously for 2 seconds. The entire button area will flash twice, confirming that Screen Protection Mode is restored. The screen will now turn off automatically after 30 seconds of inactivity.

9. Program Setting Mode

(This mode is intended for Installation professionals only.)

In **Program Mode**, you can configure the following parameters:

- Supply And Exhaust Air Flow
- Run Time Settings
- Filter "Clean/Replace" Timer Settings
- Unit Settings (°C / °F, L/s / CMH / CFM)

Program Settings Mode:

While in standby mode, press and hold the **"Function"** and **"Down"** buttons simultaneously for more than 2 seconds to enter Program Settings Mode.

Exiting and Saving Settings:

During any setting adjustment, press and hold the **"Function"** button for 2 seconds to save the current settings and exit Program Mode.

Air Flow Setting:

While the supply air flow digits are flashing. Use the **"Up"** and **"Down"** buttons to adjust the air flow. Press the **"Function"** button to confirm.

Next, While the exhaust air flow digits are flashing, use the **"Up"** and **"Down"** buttons to adjust the air flow. Press the **"Function"** button to proceed to the Run Time settings.

Run Time Setting:

After switching to Run Time setting, the run time digits and the **"MIN/HR"** indicator will flash. Use the **"Up"** and **"Down"** buttons to adjust the value within the range of 0 to 60, with increments of 5. Press the **"Function"** button to confirm and proceed to the Filter Cleaning Time setting mode.

Filter Cleaning Time Setting:

After switching to Filter Cleaning Time setting, the filter icon, clock icon, **"HR"** indicator, and run time digits will flash. The run time digits display the current time value (the cleaning countdown in hours equals the time value × 10). Use the **"Up"** and **"Down"** buttons to adjust the value within the range of 70 to 880, with increments of 10. Press the Function button to confirm and proceed to Unit Settings mode.

Unit Settings:

The units setting cycle is in the following order: Temperature → Supply Air Flow Unit → Exhaust Air Flow Unit. Press the **"Function"** button to switch between these settings.

Use the **"Up"** and **"Down"** buttons to select the desired unit. During selection, the displayed number will convert accordingly, and both the number and unit will flash simultaneously, indicating the current setting.

- Temperature: °C / °F
- Supply (Exhaust) Air Flow Units: L/s / CMH / CFM

Press the **"Function"** button to confirm and exit Engineering Mode.

10. Error Code:

When the ERV encounters a malfunction, the **"ERROR"** indicator will light up. The power display will show the corresponding error code instead of numerical values. See table below.

All buttons except the power button will be disabled during this state.

Code#	Descriptions
E01	Supply airflow abnormal
E02	Exhaust airflow abnormal
E03	Temperature sensor failure
E04	Temperature too high / Low
E05	Communication failure
E06	Wall control failure

MAINTENANCE

- Stop operating and switch off the power if there is an abnormal situation during maintenance.
- To clean the ERV, wipe the inside using a damp cloth and mild detergent, then wipe with a dry cloth.
- Never use petrol, benzene, thinner or any other such chemicals for cleaning the product.

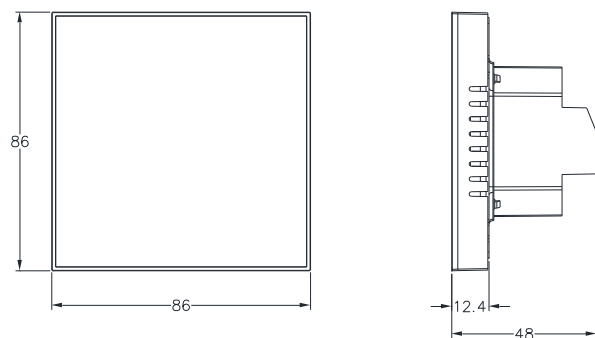
TROUBLESHOOTING

Problem	Cause	Solution
The controller cannot be turned on	1. No power source. 2. Incorrect wiring.	1. Check the ERV's power source. 2. Check wiring of terminal 1 & 2
The panel displays abnormally, and finally displays E5	1. Wiring connection fail. 2. Incorrect wiring.	1. Use another wire to connect terminals 3 and 4 on the ERV, and make sure the function is working properly. 2. Check wiring of terminal 3 & 4

If the product still does not work, please contact your dealer or our contact center (1-888-979-9889).

SPECIFICATIONS

Model	VFRU-HERV-01LS
Dimension (HxWxD)	86x86x48 mm (3-3/8" x 3-3/8" x 1-7/8")
Weight	200g (7 oz)
Operating temperature	-10°C ~ 40°C (14°F ~ 104°F)



Unit: mm

DELTA ELECTRONICS ONE YEAR LIMITED WARRANTY

Delta Electronics Inc. ("Delta Electronics") warrants to the original consumer purchaser in the USA and Canada that the Breez ventilation fan products will be free from defects in material or workmanship. This warranty is limited to ONE (1) year from the original date of purchase.

Limitations and Exclusions

1. During the warranty period, a replacement for any defective product will be supplied free of charge for installation by the consumer. The warranty provided herein does not cover charges for labor or other costs incurred in the troubleshooting, repair, removal, and installation service.

2. All returns of defective parts or products must include the product model number and must be made through an authorized Delta Electronics distributor. Authorized returns must be shipped prepaid. Repaired or replacement products will be shipped by Delta Electronics F.O.B. shipping point.

3. Delta Electronics shall not be liable for any indirect, incidental, consequential, punitive, or special damages arising out of or in connection with products use or performance, regardless of the form of action whether in contract, tort (including negligence), strict product liability or otherwise.

4. The warranty does not cover if user does not comply with manufacture's installation manual.

5. To qualify for warranty service, you must notify Delta Electronics at the address or telephone number below.

6. Delta Electronics shall have no liability to the original owner-user with respect to any defect caused by abuse, misuse, neglect, improper transportation or storage, improper testing, improper installation, improper operation, improper use, improper maintenance, improper repair, improper alteration, improper modification, tampering or accident of products or parts thereof, or unusual deterioration or degradation of products or parts thereof due to a physical environment beyond the requirements of products' specifications.

Address: 46101 Fremont Boulevard, Fremont, CA 94538

US Toll Free Number:

1-888-979-9889 – Technical Support

1-877-685-4384 – Customer Sales Support

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