Advanced controller functions

Locking the controller

To lock/unlock the controller press and hold the Adjust Up lack and Down lack buttons together.

The Lock Symbol appears in the middle-left of the display when locked.

Entering Advanced set-up

- Turn off your controller with the Power Off \bigcirc button.
- Press and hold the Fan Rate Adjust \$\sqrt{s}\$ button for 5 seconds.
- Switch between set-up screens using the Fan Rate Adjust 🕏 button.
- Press the Power Off (b) button to return to the home screen.
- The controller will turn off after 5 seconds of no activity in programming mode.

Advanced set-up screens

- 1. Temperature calibration: adjust with the Adjust Up and Down buttons
- 2. Maximum operating temperature (not used): default value 25°C
- 3. Minimum operating temperature (not used): default value 20°C
- 4. Fan type: select between 1-speed, 2-speed, or 3-speed fan (default)
- 5. Mode lock: switch between Heat Transfer only, Ventilation only, or Heat Transfer plus Ventilation (default)

Technical Specifications

Set Temperature Range: 5 - 35°C
Temperature Resolution: 0.5°C

Operating Voltage/Frequency: 12 - 24 Volt DC Sensing Element: NTC Thermistor

Operating Temperature: 0 - 40°C

Operating Humidity: 5 - 90% non-condensing
Output Control: Digital control interface
Display: 3.5" digital LCD touchscreen
Approval: All relevant AS/NZS standards
EMC Approval: All relevant AS/NZS standards

The system should be checked annually and the filter changed at least every 2 years.

This controller has been designed to only work with EVOAQ Heat Transfer EC Fans

EvolutionFX Limited reserves the right to change specifications or designs described in this document without notice and without obligation.

For further information, please contact EvolutionFX Limited

Email: info@evolutionfx.co.nz

Phone: +64 9 558 5590

INSTALLATION INSTRUCTIONS

EVOAQ Heat Transfer Combo Controller



- M Mode
- Fan Rate Adjust
- (Power ON/OFF
- Set Comfort Temperature Up
- ▼ Set Comfort Temperature Down

Please read all instructions before commencing installation

Automated Touch Screen Overview

This digital controller has been designed to ensure highly effective transfer and supply of heated and fresh air throughout your home. The large and simple display allows for easy setup of your heat transfer ventilation system, using a built-in high-precision sensor with custom sensing algorithm to accurately determine room temperature and improve system stability.

In Heat Transfer Mode $\stackrel{...}{\cong}$ the heat transfer damper opens and the summer damper closes, so warm air from the heat source room is circulated around the house. The controller constantly monitors the room temperature to determine the correct heat transfer rate; the fan determines its optimum speed within the specified range based on supply air temperature.

When the room temperature rises above the set temperature, the controller switches to the selected heat transfer rate. In auto mode, the controller automatically adjusts the rate according to the difference between the room and set temperature. If the room is below the set temperature, the fan continues running at low speed until the room heats up again.

In Ventilation Mode $\frac{1}{3}$ the fan switches to its ventilation program; the heat transfer damper closes and the summer damper opens, allowing fresh air to be supplied to your bedrooms. The fan automatically determines its optimum speed according to the quality of the fresh air, and the controller speed setting is used to adjust its minimum and maximum ventilation rates.

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Display Information

Off • Turn system off. The fan will be switched off and the controller switches to standby mode.

Set Minimum Room Temperature – The controller adjusts the fan rate according to the set temperature. Adjust the set temperature using the Adjust Up \triangle and Down ∇ buttons.

Mode M – Use the Mode button to switch between Heat Transfer mode $\overset{\circ}{x}$ and Ventilation mode $\overset{\bullet}{x}$

System Speed Setting

Adjust the heat transfer rate with the Fan Rate Adjust f button. The speed will cycle through the following options:

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Low rate - Fan will operate at low speed mode (10 - 60% speed).

Medium rate - Fan will operate at medium speed mode (20 - 80% speed)

High rate - Fan will operate at high speed mode (30 - 100% speed).

AUTO

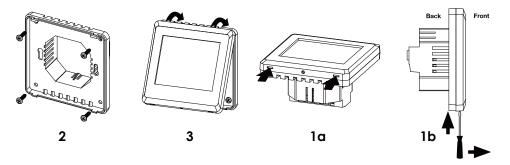
Auto rate - Controller selects Low, Medium or High rate depending on the difference between the room temperature and your set temperature.

In Heat Transfer mode, the fan will only operate at the selected speed range if the room temperature exceeds the set temperature.

Mounting Instructions & Installation

- 1. Open the thermostat by pushing in the tabs located on the bottom of the unit (figure 1a and 1b) and remove the interconnect cable.
- 2. Choose a mounting position on the wall and cut a 64 mm diameter hole in the wall gib, avoiding any structure timber framing.
- 3. See Connection Diagrams for connecting to the fan using the provided data cable.
- 4. After connecting the required wiring, mount the base of the controller with the 4 screws provided (figure 2), noting the top direction.
- 5. Reconnect the interconnect cable to the display front.
- 6. Replace the cover by locating the two tabs at the top of the unit and lever the touch screen on as shown (figure 3). As you close the unit ensure the two plastic tabs at the bottom clip into place.

Note: Do not use excessive force to fit the cover.



Selecting the mounting location

- The controller is for internal use only.
- Mount approx. 1.5 metres above the floor on an inner wall near the heat source.
- The controller should be placed within the same room as the heat source.
- Avoid locations which are not affected by the heat source, e.g. other side of the room or around a corner.
- Do not mount on hot surfaces or surfaces exposed to direct sunlight.

Frequently Asked Questions

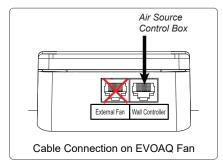
Can I place the controller in a different room than the fireplace/heat source?

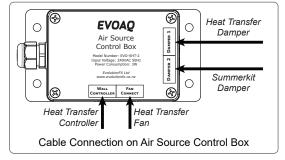
No. The controller must be mounted in the same room as your heat source. Make sure that the controller is in a position where it can easily detect changes in the room temperature from your heat source, e.g. 2-4 metres away from the heat source. Do not place the controller in the hallway or near the doorway, around a corner from the heat source, or far away (>6 metres) from the heat source in a large room.

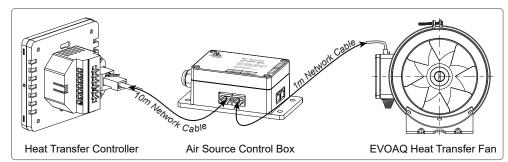
How far away from the heat source should I place the heat transfer fan?

You should keep at least 1.5 metres of distance between the heat source extraction point and the fan. However, the recommended distance between the extraction point and the fan is 3 metres

Connection Diagrams







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EVOAQ Heat Transfer Combo Controller



- **M** Mode
- Fan Rate Adjust
- (Power ON/OFF
- ▲ Set Comfort Temperature Up
- ▼ Set Comfort Temperature Down

Please read all instructions before commencing installation

Automated Touch Screen Overview

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When the room temperature rises above the set temperature, the controller switches to the selected heat transfer rate. In auto mode, the controller automatically adjusts the rate according to the difference between the room and set temperature. If the room is below the set temperature, the fan continues running at low speed until the room heats up again.

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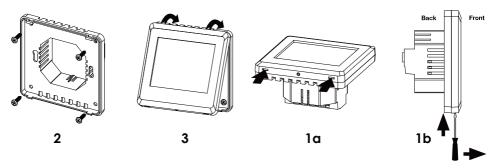
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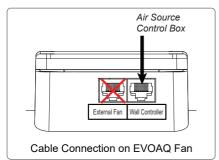
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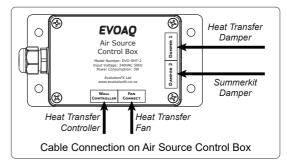
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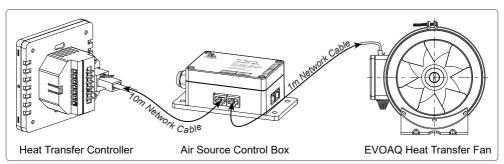
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Connection Diagrams







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Advanced controller functions

Locking the controller

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- Turn off your controller with the Power Off 🖒 button.
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