EVOAQ Ventilation + Heat Transfer Controller

M Mode

Fan Rate Adjust

Power ON/OFF

▲ Adjust Set Temperature Up

▼ Adjust Set 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 ventilation and heat trasnfer 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 ☼ the controller constantly monitors the room temperature. When the room temperature rises above the set temperature, the controller switches to the selected heat transfer rate setting. If auto speed is selected, the controller automatically adjusts the rate according to the difference between the room and set temperature. The heat transfer fan determines its optimum speed based on the available heat from the heat source room, within the range specified by the set rate.

When in Heat Transfer Mode, the ventilation system continues to provide fresh air to the heat source room at low levels.

In Ventilation-Only Mode ❄ the heat transfer fan is switched off. Instead, the ventilation fan takes over to provide fresh air throughout your home. The ventilation fan automatically determines its optimum fan speed according to the quality of the fresh air, and the controller rate setting is used to adjust its minimum and maximum ventilation speeds.

Display Information

Off – Turn system off. The fans will stop running and the controller is turned off.

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

Mode M – Use the Mode button to switch between Heat Transfer mode and Ventilation mode

System Speed Setting

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

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).

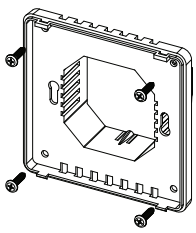
Auto rate - Controller selects Low, Medium or High rate depending on the difference between the room temperature and your set temperature.

In Heat Transfer mode, the heat transfer fan will only operate at the selected speed range if the room temperature exceeds the set temperature, otherwise it defaults to standby mode (10 - 30% speed). The ventilation fan is locked into Low rate while in Heat Transfer mode.

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.



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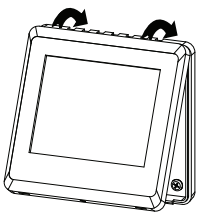

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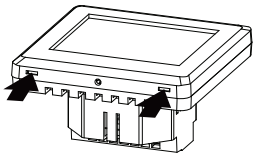
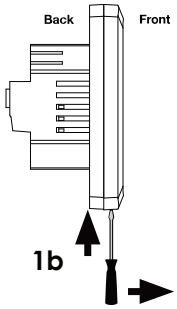


1a



1b

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.
- Do not place the controller within 1m of the heat source to avoid overly high temperatures.
- 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

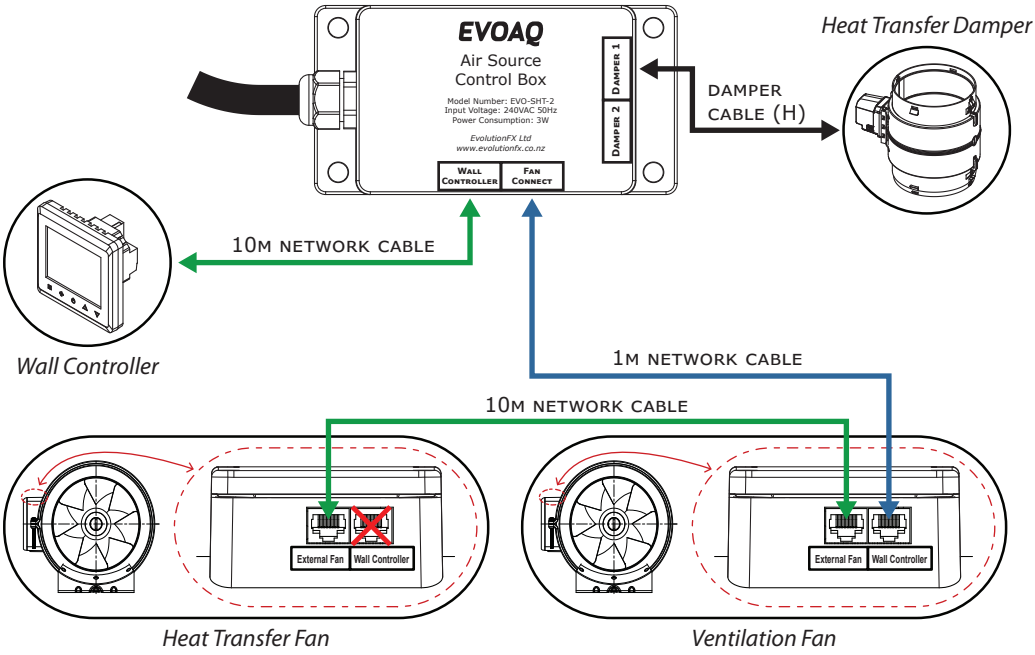
Can I place the controller in a different room than the fireplace/heat source?

No. For the heat transfer system to work effectively 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



Advanced controller functions

Locking the controller

To lock/unlock the controller press and hold the Adjust Up ▲ and Down ▼ 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 button.
- Press and hold the Fan Rate Adjust button for 5 seconds.
- Switch between set-up screens using the Fan Rate Adjust button.
- Press the Power Off 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 (01) Ventilation only (02) or Heat Transfer plus Ventilation *(03 - 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 System EC Fans

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

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