

Heat Transfer Kit

1 Room Kit

Model: VHTK1

INSTRUCTION MANUAL



ATTENTION: Read all instructions before operation.
Save this guide for future reference and adhere to all safety warnings.

Heat Transfer 1 Room Kit

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Definitions

Before use, please read and understand these definitions.

- **WARNING:** Refers to conditions where the possibility of injury or death exists if the procedure is not followed.
- **CAUTION:** Indicates the possibility of damage to the equipment, installation, or premises if a procedure is not followed.
- **NOTE:** Provides additional information intended to clarify points, procedures, or instructions.

Warning

- Read all instructions carefully before commencing installation.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, unless they have been given supervision or instruction by a person responsible for their safety.
- Children should be supervised to ensure they do not play with the appliance.
- Isolate the mains supply before making any electrical connections. This system must be installed by a licensed electrician.
- A means of mains power isolation must be incorporated in the fixed wiring in accordance with the wiring rules.
- All electrical and mechanical parts must be installed, and all ducting secured, before applying mains power.
- There are no safety extra-low voltage (SELV) terminals incorporated. Treat all terminals as mains live.

Safety & Compliance

- **Installation:** Must be installed in accordance with all local electrical, building, and gas safety regulations (AS/NZS 3000 and AS/NZS 5601.1).
- **Flued Appliances:** If the room contains a gas heater, wood fire, or any appliance with a flue, a licensed professional must be consulted prior to installation. Mechanical air transfer can affect flue performance and cause “back-spilling” of combustion gases or smoke.
- **Electric Heating:** This system is compatible with rooms using standard electric heating.
- **Make-up Air:** It is the responsibility of the installer to ensure the system does not interfere with the safe operation of heating appliances and that adequate make-up air is provided to the room.

Caution

- All wiring must comply with national wiring rules.
- Any changes or modifications made to this product without prior written approval from the manufacturer will void all warranties.
- Take appropriate safety measures when cutting hazardous building materials (e.g., lead or asbestos).
- The use of a door vent can assist in circulating air throughout the room.

Heat Transfer Systems

This system does not generate heat, however, all measures have been taken to ensure that heat is not lost through this heat transfer system. The excess heat capacity available for transfer in the source room must exceed the overall heat losses in the target room if the temperature is to rise. The following points are worthy of consideration for you to optimise the performance of your system:

- ☐ Do you have enough excess heat?
- You may need to run your heat source at higher output levels!
- ☐ Is your property well insulated?
- Heat lost through poor insulation costs you money!
- ☐ Background heating takes time?
- Give the system time to create warm air circulation through the house. This may take several hours to establish!

Kit Contents

1 ROOM KIT	VHTK1
1x High performance mixflow inline exhaust fan	1
1x Insulated R0.6 6M duct (Ø150mm)	1
1x Digital touch screen controller	1
2x Adjustable inlet/outlet vents (Ø150mm)	2
1x Duct tape 30m x 48mm	1
4x Cable Ties	4
1x Instruction Manual and Warranty Card	1

Installation

Preparation

Plan the installation beforehand to ensure that the best possible ventilation solution is achieved.

Lay out fans, intake grilles, branches and ducts in the roof cavity making sure that suitable suspension points for the fans and intake grilles are available.

Ducting

- Make sure there is at least 2m of duct between the fan and the first bend of which the first metre from the fan must be straight.
- Keep ducting paths as short and as straight as possible (ducts can be cut or extended).
- Take appropriate safety measures when cutting hazardous building materials.
- Ensure adequate make-up air is provided to the room via a door vent or external wall grille as per local building regulations
- Cut holes for the diffusers using the cardboard templates provided.
- Tape ducts to diffusers and install diffusers.
- Pull ducts taught, cut off excess and tape to branches, fans and grilles.
- Make sure the inner and outer sleeve of the acoustic duct is taped thoroughly so air cannot leak out.
- Wind duct tape 3 times around duct and spigots for a secure connection.
- **DO NOT** put excessive strain on taped connections.
- Suspend the fan no more than 400mm above the roof insulation and ensure it does not make direct contact with any framing.
- All electrical/electronic and mechanical parts must be installed and all ducting secured before applying mains power
- The system can be extended to a total duct length of 12 metres.

Diffusers

- Install diffusers in living spaces to be heated (e.g. bedrooms and living rooms).
- Where possible, install diffusers within 2m of windows and keep away from doorways.
- **DO NOT** install diffusers in wet areas (e.g. bathrooms, kitchens and laundries).
- **DO NOT** install diffusers within 1m of smoke alarms and walls, or security sensors and walls.
- **DO NOT** install near the doorway.
- Use the cardboard template supplied to cut the hole for the diffuser.
- Before fitting the diffuser make sure the spring loaded arms are pushed upwards, as this will enable the arms to spring outwards when the diffuser is inserted in the hole.
- Regulate the amount of warmed air to each room by turning the diffuser cone clockwise to decrease the airflow or anticlockwise to increase the airflow.
- Set the touch screen controller up before use (refer to Home Screen Icons and Button Functions, page 8).

Installation

Fans

- Suspend fans more than 4m away, from bedrooms, where possible. This will ensure the quietest operation possible and eliminate any resonance.
- Find the best mounting place in the roof cavity near to the touch screen controller location.
- Ensure the correct airflow direction is maintained when mounting the fan.
- Once suitable hanging points for the fan have been found, place the fan below its intended position and secure the duct.
- Connect the wiring and allow enough cable for when the fan is in its final suspended position.
- Suspend the fan approximately 400mm above the ceiling joists.

Inlet Grilles

The hot layer of air is dispersed across the whole ceiling so it is not necessary to install the inlet grille directly near the fire flue. Inlet grille should be at least 2m from the flue in order to avoid excessively high temperatures.

- Choose the inlet grille location within the heat source room.
- Use the cardboard template supplied to cut the hole for the inlet grille.
- Before fitting the inlet grille, make sure the spring loaded arms are pushed upwards, as this will enable the arms to spring outwards when the inlet grille is inserted in the hole.
- Regulate the amount of warmed air transferred out from the heat source room by adjusting the inlet grille's damper. Open the damper fully when installing the grille and adjust as required once the system is operating.

Installation

Touch Screen Controller

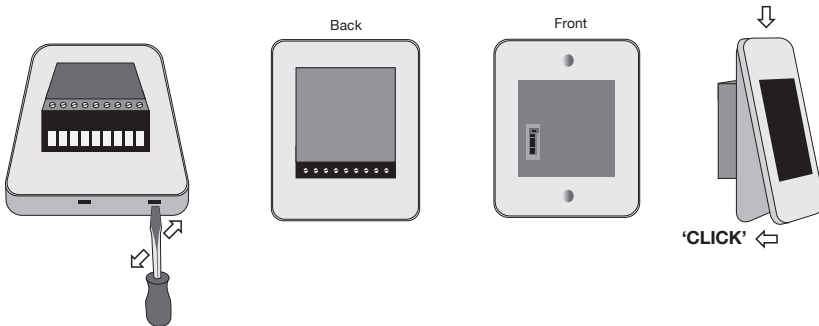
- Install on an inside wall at eye level in the heat source room, preferably opposite the heat source, where the air temperature can be sensed as accurately as possible and not be adversely affected by direct solar radiation or convection currents.
- **DO NOT** install in wet/damp areas (ie. laundry or bathrooms), on hot surfaces, in convection currents, exposed to direct sunlight or locations which are not generally affected by changes in the room temperature.
- **DO NOT** install near any localised heat source.
- Cut an opening in the wall for flush box and mount it.
- Run the electrical cable from the roof cavity down to the flush box.
- Wire the cable to the power module of the touch screen controller, located on the back.
- Separate the front screen of the touch screen controller from the back module. Carefully insert a flat head screwdriver into the slot and gently lever the screwdriver handle upwards.
- Mount the power module to the flush box using screws provided.

CAUTION: Using incorrect screws or not tightening screws sufficiently may cause damage to the product when re-assembling.

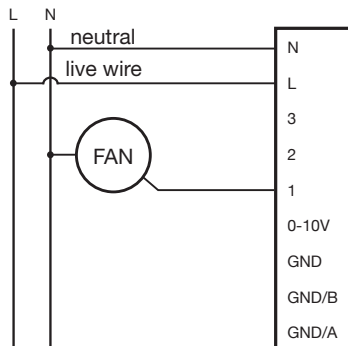
- Ensure the circuit board on the back module is centred so the connectors to the front screen can line up.

CAUTION: Forcing the controller back together without aligning the connectors properly may cause damage.

- Carefully attach the front screen to the back power module. Align the top edge, rock in, and listen for a click.

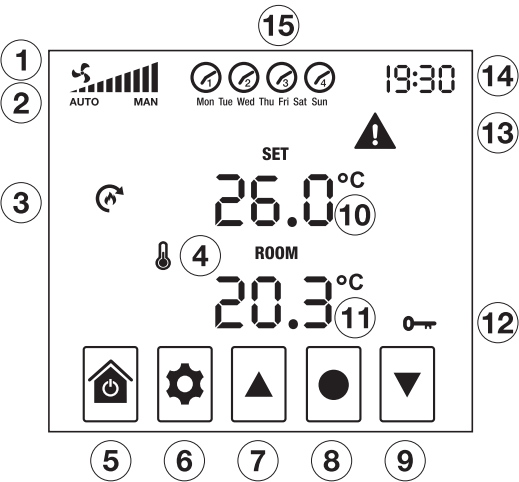


Wiring Diagram



Home Screen Icons

- 1 System Fan Speed
- 2 Heat Transfer Mode ¹⁾
- 3 Heat Transfer ON
- 4 Temperature Sensing ON
- 5 Home and Power
- 6 Settings
- 7 Up
- 8 Select
- 9 Down
- 10 Set Temperature
- 11 Current Room Temperature
- 12 Key Lock ON
- 13 Alert ²⁾
- 14 Time ³⁾
- 15 Scheduler Period and Day

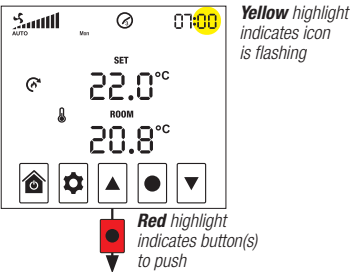


- 1) System Fan Status (Displays static graphic when the fan is running)
- 2) When an electronic fault in the system occurs, the alert icon will appear and the applicable error code(s) will be displayed instead of the time
- 3) Time is displayed in a 24 hour clock format

Button Functions

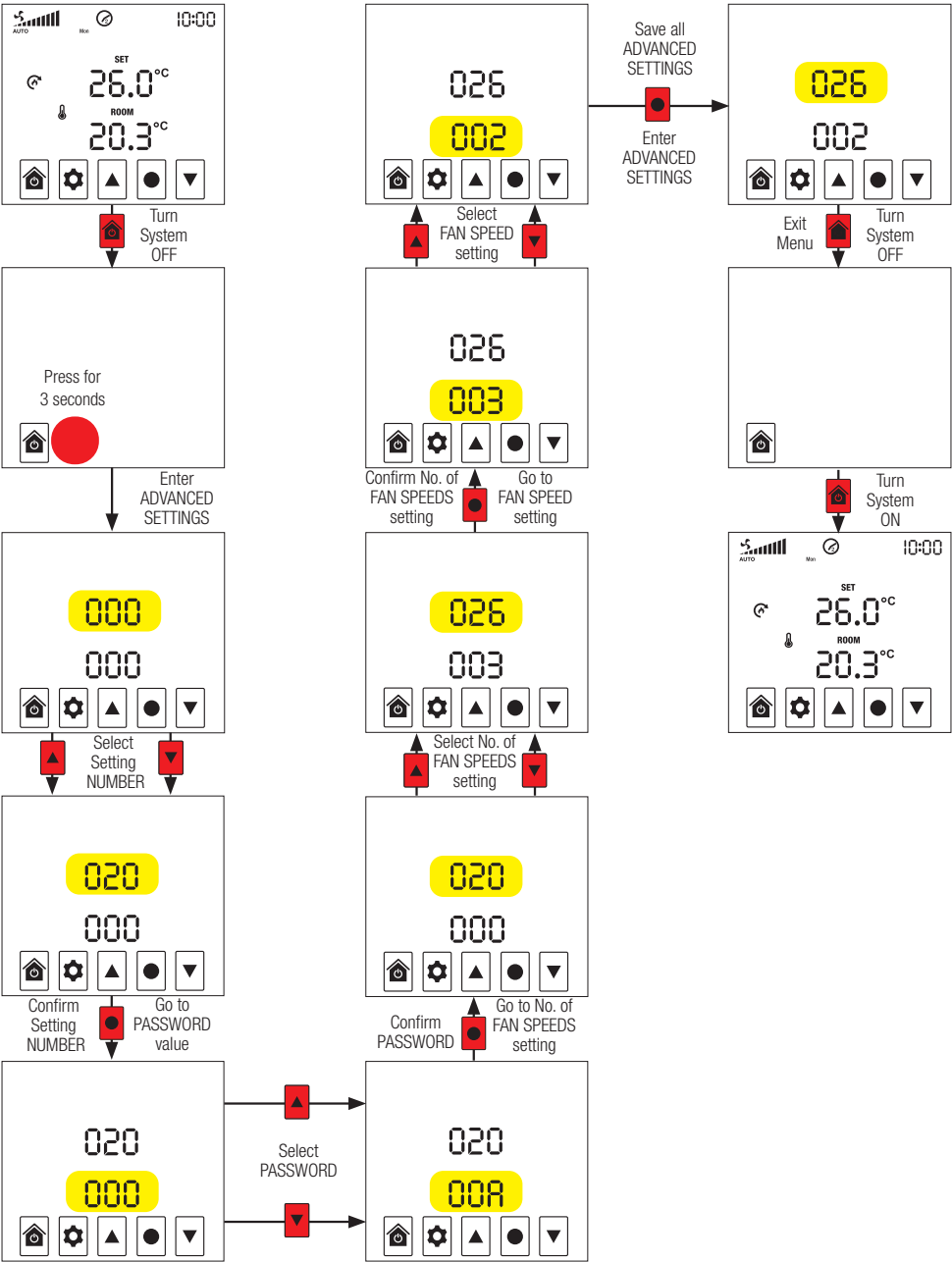
- Power OFF/ON or discard selections and return to Home Screen
- From Home Screen enter setting screen or return to previous setting option
- Scroll through setting options and change setting values
- Save setting selection and go to next setting option

Screen Highlights



Fan and Fan Speed Setting

Heat Transfer touch screen controllers are set to the default fan speed option 003. Follow the guide below to change the fan speed to fan speed option 002 as is required for your HeatTrans system.



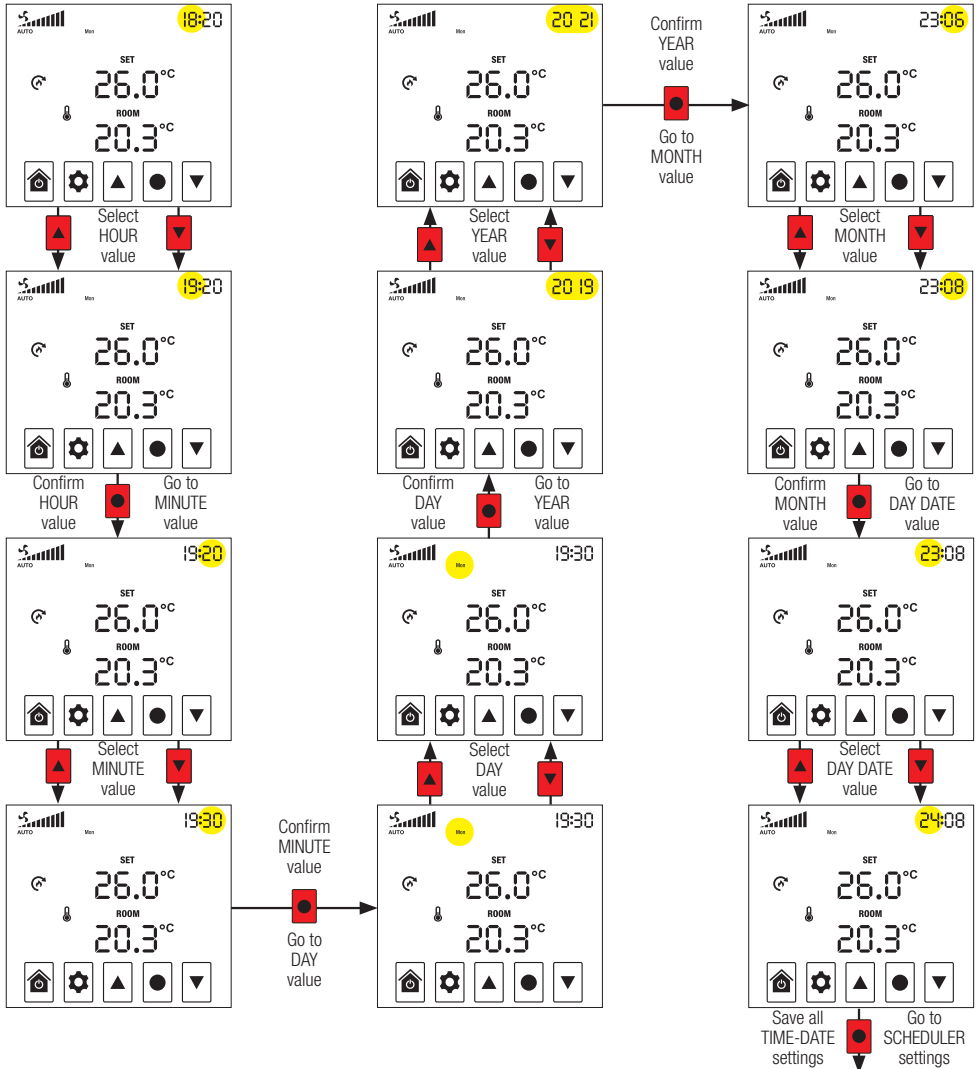
System Time-Date Settings

System Time-Date Settings must be entered before Scheduler start times for HEAT TRANSFER can be set.

- On the Home Screen, press SETTINGS  for 3 seconds to enter Time-Date Settings and follow the guide below to complete

NOTE: Settings shown are examples only

- Press HOME  at any stage to exit and enter Scheduler Settings
- Press SETTINGS  at any stage to return to the previous screen



Commissioning and Testing

Inspection Checklist

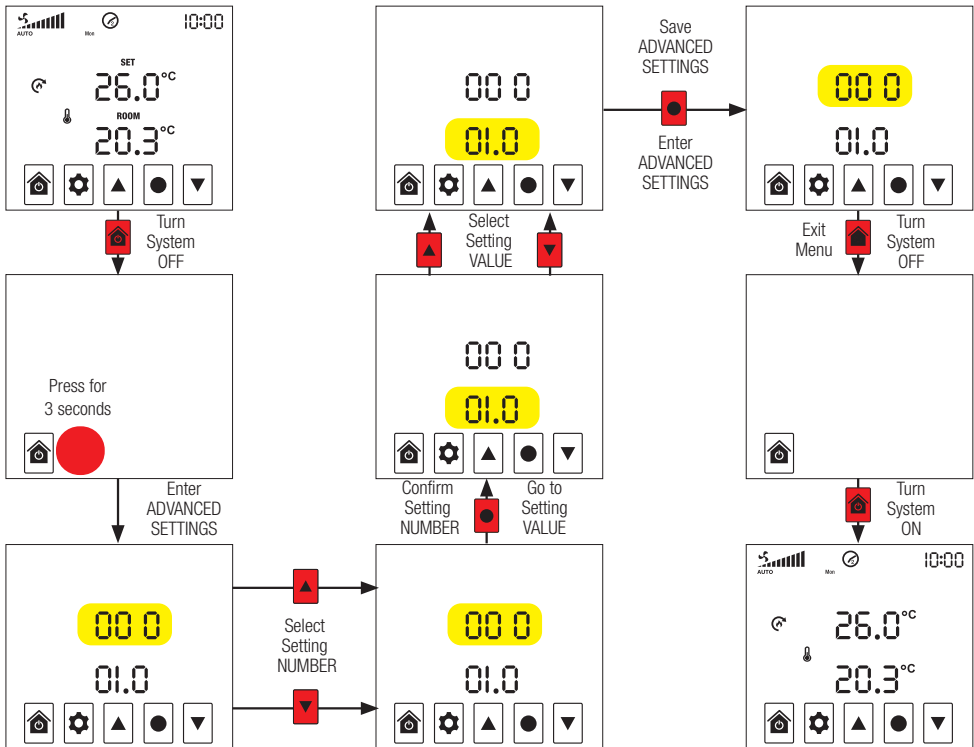
- ☐ Controller is displaying temperatures correctly.
- ☐ Controller Advanced Setting 026 is configured to single-speed mode (001).
- ☐ Fan operates correctly when the thermostat turns on.
- ☐ There are no leaks in the ducting.
- ☐ Diffuser is open and not whistling.
- ☐ System is set to AUTO operation

Advanced Settings

Advanced Setting Selection

All Heat Transfer system settings can be changed at any time using the guide below. This guide must also be used to enter the password 000 at setting 020 before settings 021 and above can be accessed.

Heat Transfer touch screen controllers are set to the default fan speed option 003. Follow the numbered steps below to change the configuration to fan speed option 001 for single-speed operation.



Advanced Setting Menu

SETTING	DESCRIPTION	RANGE	DEFAULT	NOTE
000	Hardware Version	N/A	3.1	
001	Firmware Version	N/A	3.4	
002	Temperature - Room	-10°C - 10°C	-2.5°C	1
003	Reserved	N/A	N/A	
004	Screen Brightness - Maximum	0 - 100%	80%	
005	Screen Brightness - Minimum	0 - 100%	20%	
006	Boost Time	0 min - 60 min	20 min	
007	Reserved	N/A	N/A	
008	Reserved	N/A	N/A	
009	Reserved	N/A	N/A	
010	Reserved	N/A	N/A	
011	Temperature Set - Threshold	0°C - 5°C	1.5°C	
012	Temperature Set - Differential	-5°C - 20°C	5°C	
013	Reserved	N/A	N/A	
014	Reserved	N/A	N/A	
015	Reserved	N/A	N/A	
016	Reserved	N/A	0	
017	Reserved	N/A	N/A	
018	Reserved	N/A	N/A	
019	Restore 000 - 018 Default Settings	0 - 1	0	1 = restore
020	Enter Installer Password: 0000	N/A	0	2
021	Reserved	N/A	N/A	
022	Reserved	N/A	1	Do not change
023	Reserved	N/A	N/A	
024	Reserved	N/A	N/A	
025	Fan Type	N/A	N/A	
026	Number of Fan Speeds	1 - 3	3	
027	Reserved	N/A	1	Do not change
028	Touch Activation Setting -  Home/Power	15 - 125	55	3
029	Touch Activation Setting -  Settings	15 - 125	55	3
030	Touch Activation Setting -  Up	15 - 125	60	3
031	Touch Activation Setting -  Select	15 - 125	60	3
032	Touch Activation Setting -  Down	15 - 125	60	3
033	Reserved	N/A	N/A	
034	Reserved	N/A	N/A	
035	Reserved	N/A	N/A	
036	Reserved	N/A	N/A	

1. If your room temperature reading is inaccurate, use this setting to calibrate.
2. Settings 021 and above are installer only settings and are only accessible after the installer password (**setting 020 = 0000**) has been entered and set.
3. **CAUTION:** It is possible to render buttons inoperable and irrecoverable by adjusting the touch activation settings. Adjust at your own risk. The lower the value the more sensitive the button, the higher the value the less sensitive the button.

Troubleshooting

An ALERT  icon and error code will appear on the Home Screen when there is an electronic fault in the system. If there are multiple faults the error codes will cycle to the next code periodically. Contact Ventair, +61 3 9775 0556, for assistance.

Technical Specifications

TOUCH SCREEN CONTROLLER V3.4	
Temperature Range	5-35°C adjustable
Display Resolution	0.1°C
Operating Voltage/Frequency	220-240V AC, 50Hz
Switching Voltage	240V AC Max
Switching Current	3A max resistive load
Operating Temperature	0 to 40°C
Operating Humidity	5-90% non condensing
Live Output Isolation	Relay
Output Control	Relay (Single-speed power switching)
Display	3.5" digital LCD touch screen
Approval	All relevant AS/NZS standards
EMC Approval	All relevant AS/NZS standards  E6337

MIXFLOW INLINE FAN	
Air delivery	438m3H (Low) - 561m3H (High)
Motor Power	40W (Low) - 50W (High)
Duct size (inlet/outlet)	Ø150mm
Draft stopper	Yes
Noise level	39db (Low) - 47db (High)

Specifications are subject to change without notice

WARRANTY



IMPORTANT

WARRANTY INFORMATION ON REVERSE SIDE DO NOT DISCARD KEEP FOR YOUR REFERENCE

MODEL NUMBER:

COLOUR:

DATE OF PURCHASE:

PURCHASED FROM:

INSTALLING ELECTRICIAN:

ELECTRICIAN LICENCE NUMBER:



support@ventair.com.au



4 Capital Place, Carrum Downs, VIC 3201 Australia



(03) 9775 0556



ventair.com.au

WARRANTY



OUR GOODS COME WITH GUARANTEES THAT CANNOT BE EXCLUDED UNDER THE AUSTRALIAN CONSUMER LAW. YOU ARE ENTITLED TO A REPLACEMENT OR REFUND FOR A MAJOR FAILURE AND COMPENSATION FOR ANY OTHER REASONABLY FORESEEABLE LOSS OR DAMAGE. YOU ARE ALSO ENTITLED TO HAVE THE GOODS REPAIRED OR REPLACED IF THE GOODS FAIL TO BE OF ACCEPTABLE QUALITY AND THE FAILURE DOES NOT AMOUNT TO A MAJOR FAILURE.

IMPORTANT WARRANTY INFORMATION FOR OWNER AND INSTALLER.

PLEASE READ AND OWNER TO RETAIN.

BEFORE INSTALLATION: Check all components to ensure there is no visible damage. Should there be any damage, contact Ventair support via email: support@ventair.com.au or Ph: (03) 9775 0556 to discuss.

WARRANTY PERIOD: This Heat Transfer Kit is covered against manufacturing defects by a 5-year limited warranty from the date of purchase. This includes a 2-year in-home warranty covering parts and labour (residential applications only), followed by an additional 3-year parts-only replacement warranty. During the warranty period, Ventair will, at its discretion, repair the unit, supply parts, or provide a replacement unit of the same or comparable model.

INSTALLATION TYPE: This product must be installed by a licensed electrical contractor in accordance with local wiring rules (AS/NZS 3000). Any unauthorised alterations, hardwiring modifications, or damage to the factory-fitted power cord will void the manufacturer's warranty.

IN-HOME WARRANTY SERVICE: In-Home service applies strictly to the hardwired thermostat control and structural wiring components that legally require a licensed electrician to install or service. In-Home service is not applicable to the inline fan unit itself; because the fan connects via a standard factory-fitted plug, it can be safely disconnected and replaced by the user. Ventair is not responsible for any onsite removal, re-installation, or electrical contractor costs associated with the plug-in fan unit.

NON-RESIDENTIAL USAGE: This product carries a maximum 1-year limited manufacturer's warranty when used in any non-residential, commercial, or industrial setting. In-home service is not applicable to any commercial or non-residential installations.

If you suspect a manufacturing defect, lodge a warranty by visiting www.ventair.com.au/warranty

For a claim to be processed, the following information must be provided:

- Proof of purchase.
- Nature of the fault.
- Model details: Eg: Brand, model number, and unit colour.
- Owner's information: Name, address, and contact number.
- Supporting evidence: Clear photos and short video clips (with sound).

All warranty claims are subject to the below:

- Physical damage, modification, misuse, neglect, abuse, or accidents will void the warranty.
- Faults must not be the result of normal wear and tear.
- No solid-state speed control device has been used with this appliance.
- Must be installed strictly in accordance with the manual using approved Ventair hardware.
- Installation faults are not covered under warranty, contact the installer to rectify.

CRITICAL RULE: [NO LABOUR CHARGES OR INVOICES WILL BE PAID WITHOUT WRITTEN APPROVAL FROM VENTAIR.](#)

Heat Transfer Kit

1 Room Kit

Model: VHTK1

