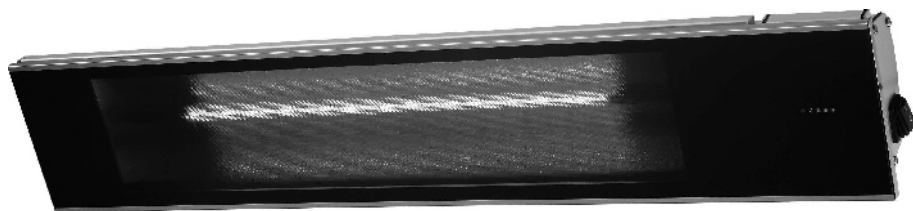




THE AIR MOVEMENT SPECIALISTS

RADIANT OUTDOOR STRIP HEATER Instruction Manual



Model: SUN1800WHS

IMPORTANT INFORMATION

Please carefully read the Operation Manual before using the infrared heater.

This Operation Manual contains the important information on your safety, as well as some recommendations on proper use of the appliance and its maintenance.

WHAT'S IN THE BOX

- Heater fitted with flexible cord and plug.
- Operating and Installation Instructions.
- One small box contains 2 sets of Brackets.
- One remote controller.

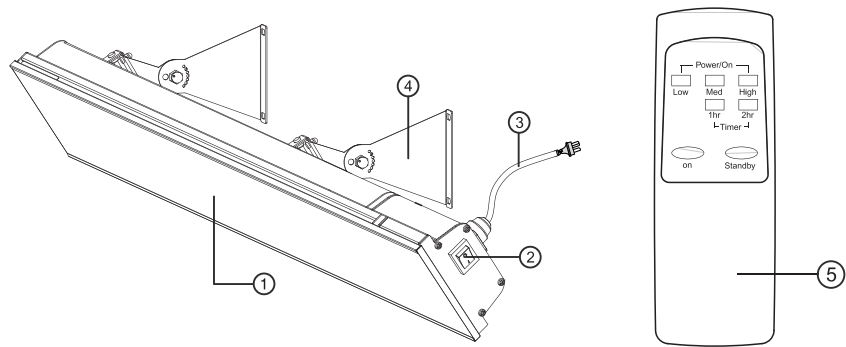
SAFETY INSTRUCTIONS

- During use of the infrared heater, it is necessary to observe some precautions. Improper operation with disregard of precautions may result in infliction of harm to health of the user and other people, as well as in infliction of damage to their property.
- Use only the voltage specified on the rating plate of the heater.
- ONLY connect the appliance to a properly installed socket-outlet with earth contact.
- The heater should be connected to the electric mains equipped with an automatic circuit breaker.
- The unit must be handled with care, and avoid vibration or hitting.
- WARNING: FIRE RISK EXISTS IF THE HEATER IS COVERED BY OR POSITIONED CLOSE TO CURTAINS OR OTHER COMBUSTIBLE MATERIALS.
- Do not use the appliance areas where gasoline, paint or other flammable liquids are used or stored.
- Do not use the appliance in particularly in dusty or where explosives are stored.
- Do not use the appliance in a building site, green house, barn or in animal stables.
- Do not use the appliance as a sauna heater.
- Do not use this unit in the place of animal propagating and rising.
- Warning: Do not touch the glass . Temperature of the glass during operation of the heater may reach 380 °C. To avoid burns, do not touch the appliance surface by hand and other body parts. It is also necessary to avoid touching the heater whilst the appliance is switched on, as severe burns may result. The appliance can take up to 1 hour to cool down after switching it off.
- Do not place any items of clothing, hand towels or similar over the heater to dry. Risk of overheating and fire hazard.
- Do not leave the heater unattended whilst in use.
- Do not use this heater on a wet surface, or where it can fall or be pushed into water.
- Do not reach for an appliance that has fallen into water. Switch off at supply and unplug immediately.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- If the heater is defective, it must be checked and repaired by the manufacturer, its service agent or similarly qualified persons for repair.
- Do not operate appliance with wet hands.
- Use this appliance only as described in this manual. Any other use is not recommended by the manufacturer and may cause fire, electric shock or injury.
- Do not use abrasive cleaning products on this appliance. If the body becomes dirty, wipe off dust with a cloth, and the glass should be wiped in cold condition with a damp soft cloth. Always remove plug from the mains supply before cleaning.

- The heater must be installed at least 1.8 m above the floor.
- The heater must not be located immediately below a socket-outlet. The heater must not be located in front of a socket-outlet. They should be located outside the physical footprint of the units to minimize heat build-up behind the heater.
- The installation must be equipped with a standard electrical power point with a break contact distance of at least 3mm. The standard power point must be installed by a licensed electrician.
- If the heater is to be mounted on an incline (eg. Sloping or angled ceiling), ensure the electrical connection is located at that lowest point of the heater.
- Do not connect the appliance to the mains source until it has been installed in its final location and adjusted to the position it will be used in.
- Do not operate with the cord coiled up as this could cause a buildup of heat, which could pose a hazard.
- The use of an extension cord with this appliance is not recommended.
- Do not allow cord to come in contact with heated surfaces during operation.
- Do not run cord under carpeting, throw rugs or runners etc. Arrange cord away from areas where it is likely to be tripped over.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance
- The appliance is only intended for the purpose described in user manual.
- Do not use appliance or any part of the appliance out of the intended use to avoid risk.
- The use of attachments which are not recommended or sold by the appliance manufacturer may cause a risk of injury to persons
- CAUTION — some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.
- Install and operate the heater in strictly horizontal position on the ceiling or ceiling structural surface. The thermal resistance of the ceiling coating and ceiling material should be at least 80 °C.
- WARNING: This heater is not equipped with a device to control the room temperature. This heater is to be used in open, alfresco environment or large areas with high ceilings. The heater must not be within reach from the floor, as severe burns may occur due to high surface temperatures. Do not use this heater in small rooms or where the room or area is occupied by persons not capable of leaving the room on their own, persons who are unable to operate the heater safely and with the guidelines of the use manual, unless constant supervision is provided.
- WARNING: The heater must not be used if the glass panels are damaged.
- When the appliance is not in use and before cleaning, unplug the appliance from the outlet.
- To protect against the risk of electrical shock, do not immerse the unit, cord or plug in water or other liquid.

HOW TO OPERATE THE HEATER

General design layout



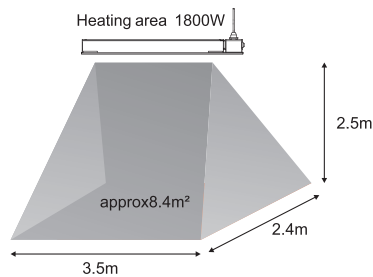
- ① Ceramic glass panel
- ② ON/OFF main power switch
- ③ Power cords and plug
- ④ Brackets for wall or ceiling mounting
- ⑤ Remote control

DIRECT HEATING AREA

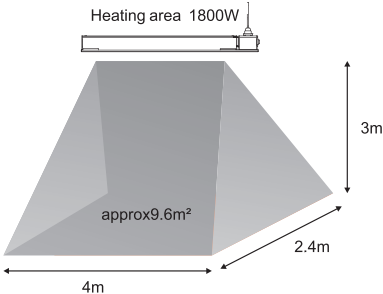
The infrared strip heater produces radiant heat which heats objects rather than the air. Therefore, it is imperative that objects to be heated (i.e. People), are within the direct radiant footprint of the heater.

The below diagrams show the approximate heating area for each model based on an indoor and outdoor enclosed environment. And the diagram shows that the maximum heat output is found directly under the heater, and the temperature decreases as the user move away from the heater.

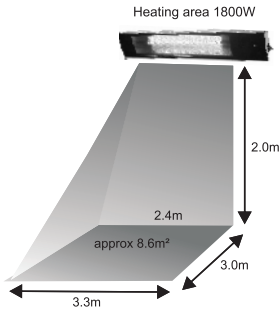
Outdoor heating area -ceiling mounted



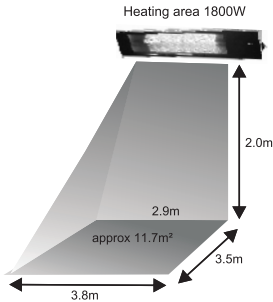
Indoor heating area -ceiling mounted



Outdoor heating area -wall mounted



Indoor heating area -wall mounted



Technical Specification

MODEL NAME	SUN1800WHS
Voltage	230-240V~, 50Hz
Rated power (W)	1800
Installation	Wall mounted Ceiling mounted Ceiling Flush mounted
Ideal Mounting height (M)	1.8- 2.3
Electric protection class	I
Water splash proof rate	IP65
The length of cable(mm)	1050
Unit size- L*W*H(mm) (without bracket)	900*170*80

OPERATION

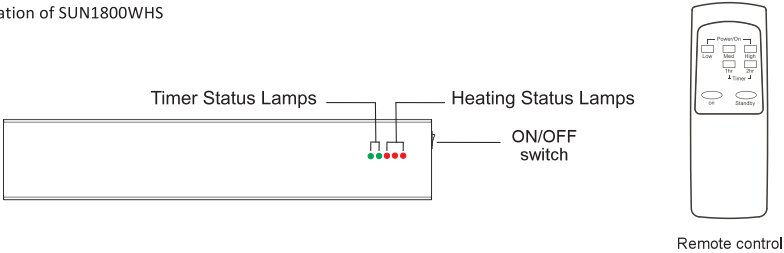
WARNING!

Slight crackles may be heard during the heating or cooling period. This is normal operational noise.

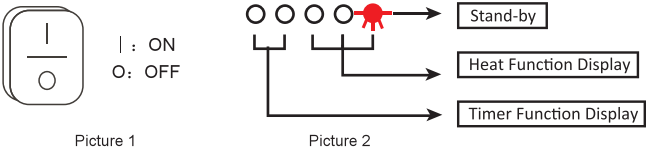
NOTE:

- ✓ After switching on the appliance for the first time and following extended periods on non-use, the appliance may expel a slight odor for a short time. It will not affect the use of the heater.
- ✓ To exclude unpleasant burnt odor, it is recommended to keep the heater clean preventing accumulation of dust on it
- ✓ The distance between the heater and the remote control should be less than **3 metres**, and the remote control must be directly pointed to the receiver on the front panel during the operation.

Operation of SUN1800WHS



1. Plug in the device, and then press the switch to the position **I: ON** (picture 1). The device will sound 1 beep, Heating Status Lamp turns to red and twinkles. (picture 2), the device is in Standby Mode and doesn't heat now (picture 2).



2. Point the remote control directly to the receiver, press the button “ON”, the device will sound 1 beep, and starts to heat in high power mode (100% the rated power) . All three Heating Status Lamps will turn to Red (picture 3).



Picture 3

Press the button "Standby", the device will sound 1 beep and revert to Standby Mode, with red twinkling lamp (picture 4).



Picture 4

3. When the device is in heating mode or in stand-by mode, point the remote control directly to the receiver and press the button “Low”, the device will sound 1 beep, and starts to heat in low power mode (33% of the rated power). One Heating Status Lamp will turn to Red (picture 5).



Picture 5

4. When the device is in heating mode or in stand-by mode, Point the remote control directly to the receiver and press the button “Med”, the device will sound 1 beep, and starts to heat in medium power mode (66% of the rated power). Two Heating Status Lamps will turn to Red (picture 6).



Picture 6

5. When the device is in heating mode or in stand-by mode, Point the remote control directly to the receiver and press the button “High”, the device will sound 1 beep, and starts to heat in High power mode (100% of the rated power). All Three Heating Status Lamps will turn to Red (picture 7).



Picture 7

Timer function:

Press either, or both, of the Timer control buttons (picture 8) to activate the Delay-off timer function. (1,2 or 3 hour options).

“1 Hour Timer”

Point the remote control directly to the receiver and press the button "1hr". The 1st Timer Status Lamp will turn to Green (picture 9). The device will switch off after 1 hour and revert to Standby Mode (picture 4).



Picture 8



Picture 9: 1 hour timer

"2 Hours Timer"

Point the remote control directly to the receiver and press the button "2hr". The 2nd Timer Status Lamp will turn to Green (picture 10). The device will switch off after 2 hours and revert to Standby Mode (picture 4).



Picture 10: 2 hours timer

"3 Hours Timer"

Point the remote control directly to the receiver and press the button of "1hr" and "2hr". Both Timer Status Lamps will turn to Green (picture 11). The device will switch off after 3 hours and revert to Standby Mode (picture 4).



Picture 11: 3 hours timer

CAUTION: There is a built-in safety feature that will automatically trigger the heater to go into standby mode (picture 4) after eight hours of continuous operation, if the timer is not triggered.

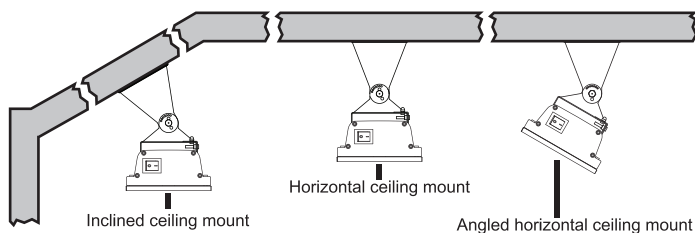
INSTALLATION

Before installation, read the manual carefully.

The heater must be installed in accordance with the manufacturer's installation instructions

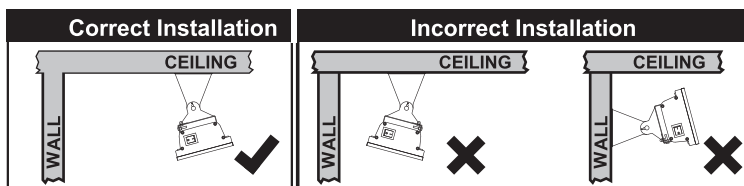
This heater comes with a pair of stainless steel adjustable angle mounting brackets. The adjustable angle enables the heater to be installed on vertical, horizontal and inclined surfaces.

Ceiling mounted (SUN1800WHS)



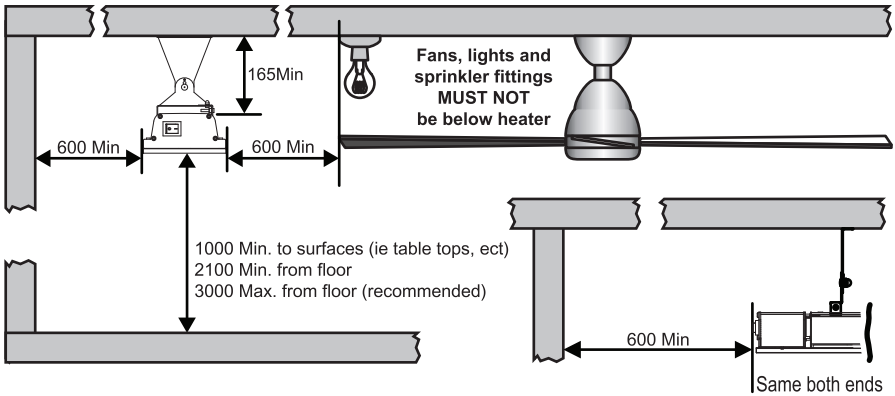
The ideal mounting position is directly above the area to be heated with a longitudinal orientation and facing vertically downwards.

Warning: The heater must never be installed in the upwards or inwards facing position, the heating surface must always be positioned to direct the heat in a downwards or outwards direction.

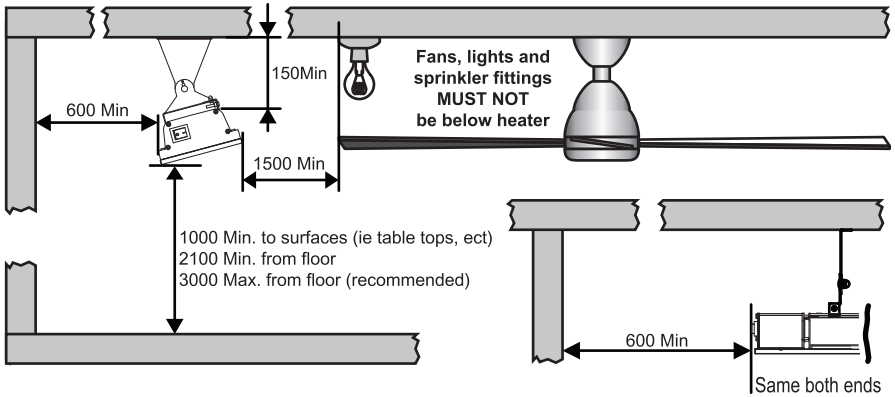


Clearances

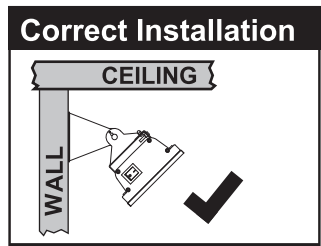
Minimum clearances when mounting the heater parallel with a ceiling. Note: dimensions are in millimetres (mm).



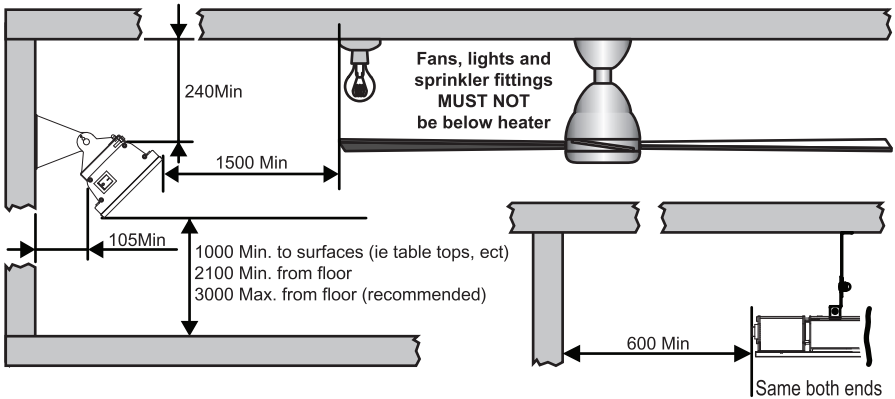
Minimum clearances when mounting the heater at an angle to the ceiling. Note: dimensions are in millimetres (mm).



Wall-mounted installation (SUN1800WHS)



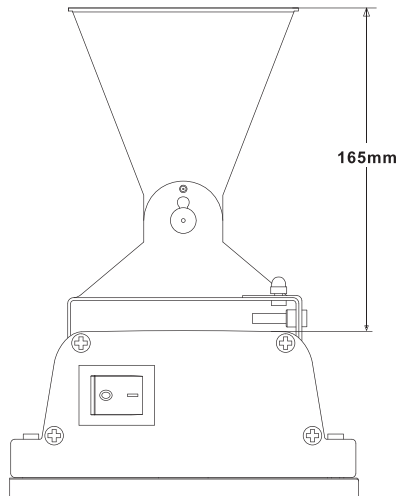
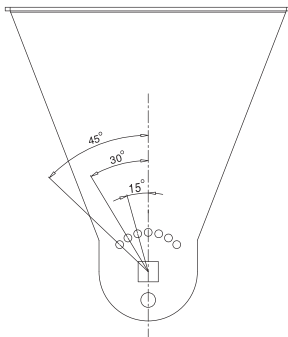
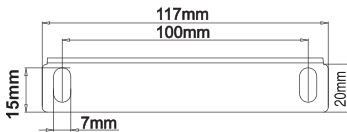
Minimum clearances when mounting the heater on A VERTICAL WALL. Note: dimensions are in millimetres (mm).



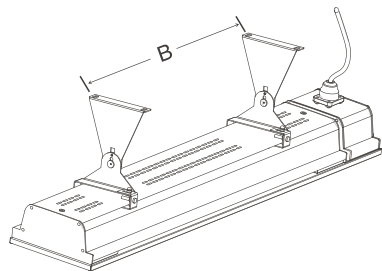
INSTALLATION PROCESS

WARNING! Mounting of the infrared heater and its connection to the electric mains should be carried out only by qualified specialists according to the Electrical Installation Regulations and Power System Safety Standards.

1. Open the factory package and carefully take the heater out.
2. Take out the packing paper sheet from the end of heater.
3. Take out one pair of mounting Brackets. These adjustable brackets allow direct ceiling or wall mount, and come with preset angle options of parallel, 15°, 30°, 45° and height 165mm.

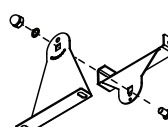


- The correct installation process, as per the diagram above, select the heater location on the ceiling by locating the stud or structural beams to ensure secure fastening of the heater, whilst observing the minimum clearances from the floor and other objects.
- Install two brackets on the ceiling or wall with the following recommended minimum bracket distance “B”.



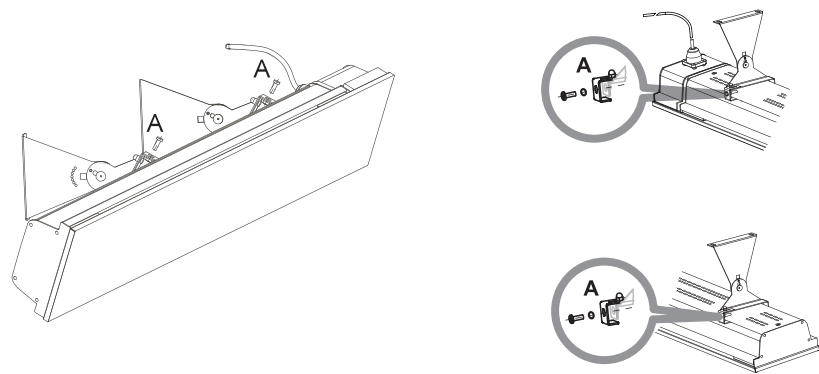
Model No.	“B” MINIMUM DISTANCE (mm)
SUN1800WHS	500 ±50

- Set the adjustable angle mounting brackets to desired angle and fasten brackets by spanner.
For ceiling mounted installation, the available mount angles are restricted to 0°, 15° and 30° only.
For wall mounted installation, the available mount angles are restricted to 15°, 30° and 45° only.



	0°	15°	30°	45°
Ceiling				
Wall				

- Hang the heater on the brackets and firmly secure in place with the mounting bracket locking plates by tightening bolts.
As shown in figure A.

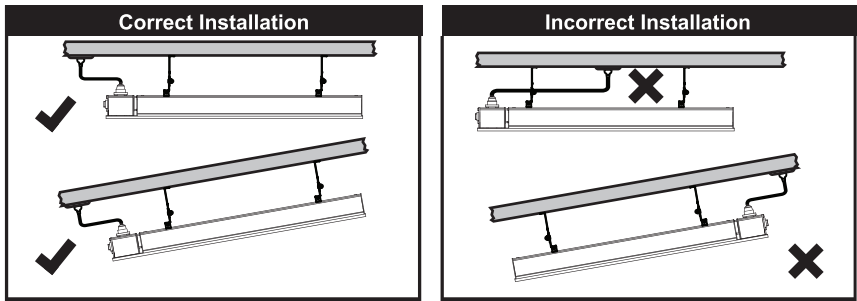


NOTE:

Depending on material and design of ceiling structural elements, the appliance must be secured with the correct fasteners. The weight of the heater is up to 5.1 Kg, the installation location must be able to hold 4 times the weight of the appliance .

Connection to electric mains

- The heater is designed for connection to the single-phase 230-240V~ 50Hz electric mains equipped with an earth wire.
- Before connection, make sure that specifications of the electric mains at the connection point meet the single-phase 230-240V~ 50Hz voltage.
- The electric mains should be equipped with an automatic circuit breaker with rated current not less than 16A.
- The heater must not be located immediately below a power point. Power point should not be located at the back of the heater. The power point needs to be located outside the physical footprint of the heater to minimize heat build-up behind the heater.
- If the heater is to be mounted on an incline (eg. Vaulted ceiling), ensure the power point located at that lowest point of the heater.



MAINTENANCE

- Any maintenance should only be carried out by a qualified electrician.
- During operation, it is necessary to periodically (once a year) check the electric cable contacts and terminal connectors for good tightening.
- If the body becomes dirty, wipe off dust with a towel, and the glass should be wiped in cold condition with a damp soft rag.

WARNING!

- ✓ Never immerse the appliance in water! Danger to life!

TROUBLESHOOTING

Possible malfunctions are given in Table below.

SYMPTOM	CAUSE
Will not heat / No operation indicator	Check that power is connected and switched on
Heater smells when first used.	This is caused by oil or dust left over from the manufacturing process and will stop after a short time
Faint smell for short periods after turning on the heater	This is normal and should stop after a short time
Heater smells when turned on after periods of no use	Build-up of debris and dust on the heater, Switch the heater off and allow it to cool down and then clean
Clinking noises when heater is turned on and after being turned off	This is expansion and contraction noises of the heaters metal components and is normal
Poor heating performance	Exposure to extreme ambient conditions such as high winds / excessively cold temperatures can lower the heating performance of an outdoor installation Unit is not installed in correct position, possibly too high or heater is too small for recommended area.

When to contact the authorized service or seller

There are no user serviceable parts in this appliance, only an authorized person such as a qualified electrician can service or maintain this appliance.

SYMPTOM	CAUSE
There is a burning smell and or strange sounds (other than normal expansion and contraction noises) coming from the unit	Turn off the heater, and contact seller.
When associated circuit breaker (safety, ground) is thrown or a fuse is blown	Turn off the heater, and contact your authorized electrical installer
Poor heating performance	Incorrectly sized installation, contact your authorized electrical installer
	Faulty heater element, turn off the heater, and contact seller
Will not heat / No operation indicator	Check that power is connected and switched on, if still faulty, turn off the heater, and contact seller or your installing electrician.

Ventair's Details:

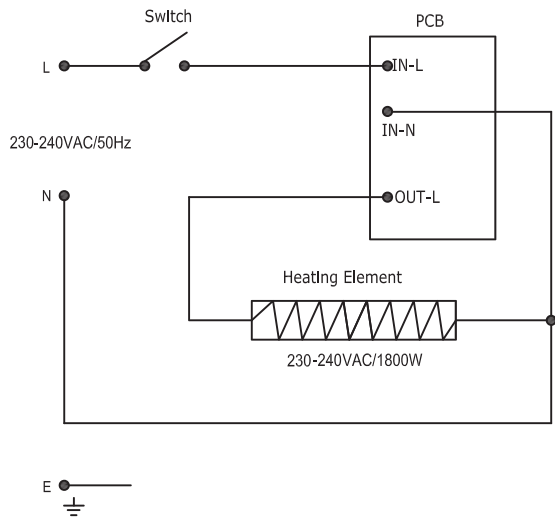
4 CAPITAL PLACE CARRUM DOWNS VIC 3201

PHONE: (03)97750556

FAX: (03)97750775

WIRING SCHEMATIC DIAGRAM

SUN1800WHS



STORAGE AND DISPOSAL

If you do not plan to use the heater for extended periods of time, it is recommended that it is cleaned and stored (preferably in its original packaging) in a cool, dry place.

WARNING: Please do not attempt to open or repair the heater yourself. Doing so could void the warranty and cause damage or personal injury.



Do not dispose of electrical products with household waste. Please check with your local council for advice on disposal or recycling. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.