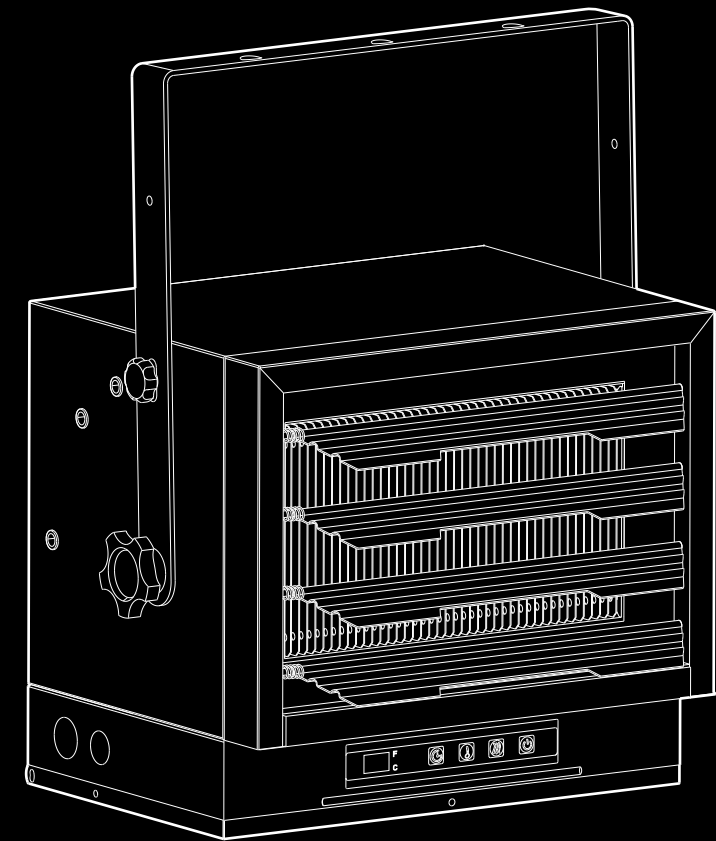


VIVOSUN

Designed by **VIVOSUN** in California.
Made in China



Fan-Forced Heater

USER MANUAL

Love
what
you
grow™

Welcome to **VIVOSUN**

Thank you for choosing VIVOSUN. We are committed to product quality and friendly customer service. If you have any questions or suggestions, please don't hesitate to contact us.

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IMPORTANT INSTRUCTIONS

When using electrical appliances, basic precautions should always be taken to reduce the risk of fire, electric shock, and personal injury, including the following:

1. Read all instructions before installing or using this heater.
2. This heater is hot when in use. To avoid burns keep bare skin away from hot surfaces. Keep combustible materials, such as electrical cords, furniture, pillows, bedding, papers, clothing, and curtains at least 3 feet (0.9 m) from the front of the heater and keep them away from the sides and rear.
3. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
4. Always switch off the power to the heater when not in use.
5. Do not operate any heater if it is faulty, has been dropped or damaged in any manner. Disconnect the power supply at the service panel and have the heater inspected by a reputable electrician before reusing.
6. Do not use outdoors.
7. This heater is not intended for use in bathrooms, laundry areas or similar indoor locations. Never locate the heater where it may fall into a bathtub or other water container.
8. Do not push objects of any kind into the ventilation or exhaust openings as this may result in electric shock, fire or damage to the heater.
9. To prevent the risk of fire, do not block the air intake or exhaust openings in any way. Do not use on soft surfaces, like a bed, where openings may become blocked.
10. A heater has hot parts inside that may arc or spark. Do not use it in areas where gasoline, paint, or flammable liquids are used or stored.
11. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or personal injury.
12. To disconnect the heater, turn the device off, and turn off the power to the heater circuit at the main disconnect panel.
13. This heater may include a visual alarm to warn that parts of the heater are getting excessively hot. If the alarm illuminates, immediately turn the heater off and inspect for any objects on or adjacent to the heater that may have blocked the airflow or otherwise caused high temperatures to have occurred. **DO NOT OPERATE THE HEATER WHILE THE ALARM LIGHT ILLUMINATING.**

IMPORTANT INSTRUCTIONS

WARNING TO PET OWNERS:

The health of some small pets, including birds, is extremely sensitive to the fumes produced during the first-time use of many appliances. These fumes are not harmful to humans but we recommend that you do not use your heater around birds and small pets during its initial use until the manufacturing corrosion coatings have burned off.

Warning

This product may expose you to chemicals including Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Diisodecyl phthalates (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.

SPECIFICATIONS

| Rating | AMPS | BTU/hour |
|-------------------|------|----------|
| 8500W II 240-1-60 | 35.4 | 29010 |
| 5600W I 240-1-60 | 23.3 | 19112 |
| 6400W II 208-1-60 | 30.7 | 21843 |
| 4200W I 208-1-60 | 20.2 | 14334 |

SAFETY INFORMATION

Warning

THIS HEATER REQUIRES HARDWIRE INSTALLATION (NO PLUG). THE INSTALLATION OF THIS PRODUCT MUST BE CARRIED OUT BY A CERTIFIED ELECTRICIAN AND IN ACCORDANCE WITH ALL LOCAL AND NATIONAL ELECTRICAL CODES.

NOTE: COMPATIBLE WITH A 240V LINE VOLTAGE DOUBLE POLE WALL THERMOSTAT. MUST BE INSTALLED BY A CERTIFIED ELECTRICIAN.

READ AND UNDERSTAND ALL INSTALLATION & OPERATION INSTRUCTIONS PRIOR TO OPERATING THIS UNIT. OBSERVE ALL SAFETY INSTRUCTIONS.

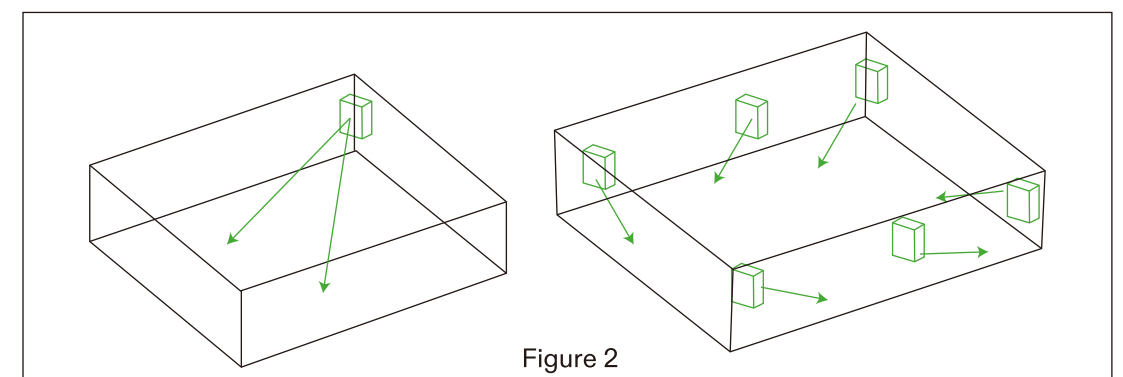
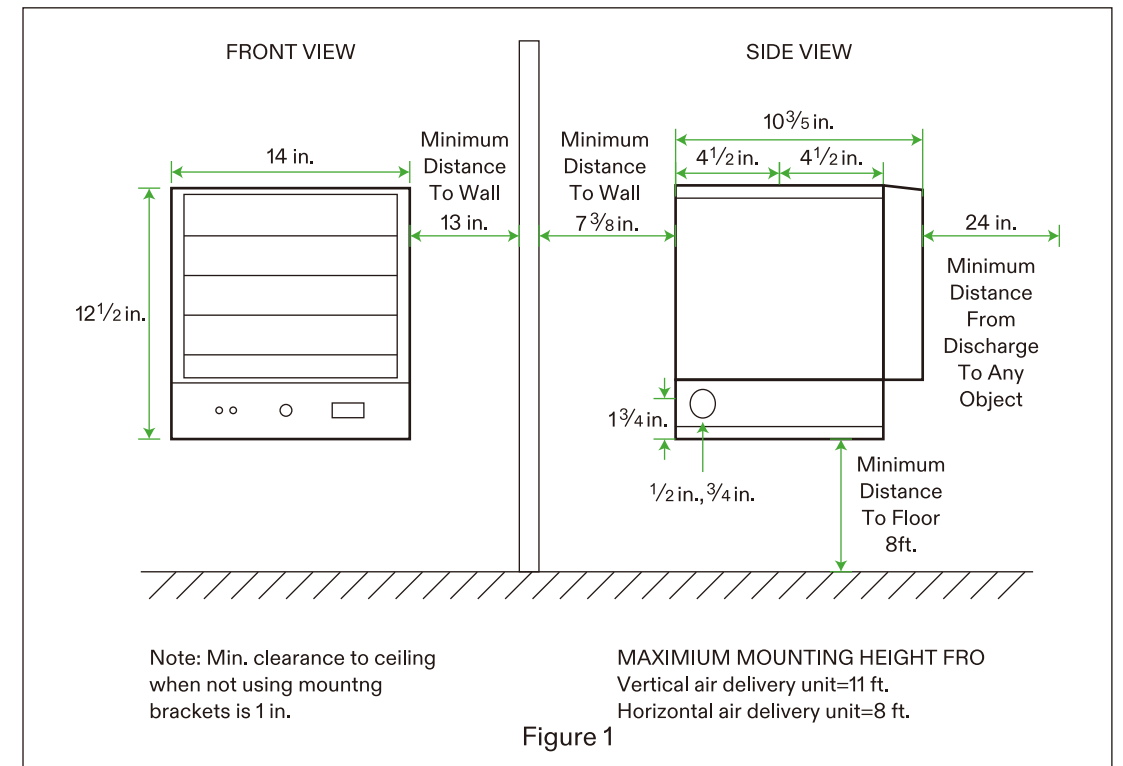
1. Use only copper wires rated for at least 60°C.
2. The air flow from the heater must be directed parallel to or away from the adjacent wall.
3. Observe all wall, floor and ceiling clearance requirements.
4. All wiring must comply with national and local electrical codes. The heater must be grounded as a precaution against possible electric shock. The heater circuit must be protected with proper fuses.
5. The mounting structure and fixing hardware must be capable of supporting the weight of the heater and the mounting bracket (if used).
6. All electrical power must be disconnected from the main service box, which must be locked before connecting, inspecting, cleaning or servicing the heater. This is an important precaution to prevent serious electric shock.
7. This heater is not suitable for use in hazardous areas containing explosive liquids or vapors. This heater has hot, arcing or sparking pads inside. Do not use it in areas where gasoline, paint or flammable liquids are used or stored.
8. This heater is not suitable for use in corrosive atmospheres such as marine greenhouses or chemical storage areas.
9. This heater must be mounted at least 8 feet above the floor. For specific clearances, please see the next page.

Warning

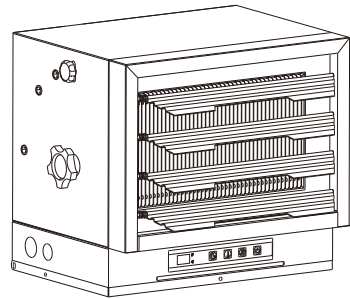
IMPROPER INSTALLATION OR FAILURE TO FOLLOW THE PROCEDURES OUTLINED IN THIS INSTRUCTION MANUAL CAN RESULT IN SERIOUS ELECTRICAL SHOCK.

LOCATING HEATER

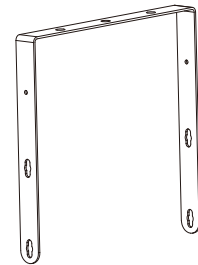
Install the heater away from traffic areas, maintaining the clearances shown in Figure 1 (below). The air flow direction should not be restricted (e.g., by columns or machinery). The airflow should wipe exposed walls rather than blowing directly onto them. Where more than one heater is used in an area, the heaters should be installed so that the air discharge from each heater supports the air flow of the others, to provide best warm air circulation as shown in Figure 2.



PRE-INSTALLATION



Garage Heater
x1pc



Mounting Bracket
x1pc



Infrared Remote Control
x1pc



Screw
x3pcs



Washer
x6pcs

INSTALLATION

MOUNTING THE BRACKET (Refer to Figures 3a and 3b.)

1. Locate a wooden stud in the wood ceiling joist. If you cannot locate a wooden stud, you must install a piece of wood on the ceiling as this heater must be securely fastened.
2. Remove the mounting bracket from the heater unit by loosening the bracket screws with a wrench and sliding the handle off over the screw heads.
3. Place a washer on the screws before inserting them through the holes in the mounting bracket and screw them securely into a ceiling joist.

INSTALLATION

NOTE: If the heater is to be swivelled either to the right or left, it is recommended that a washer is added to both sides of the bracket. A longer lag bolt may be required to secure the unit properly. See Figure 3a.

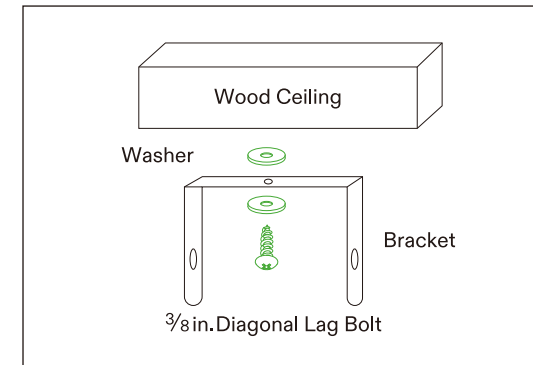


Figure 3a. Single-Screw Mounting

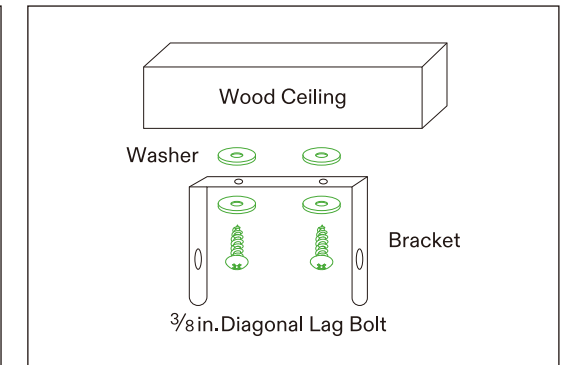


Figure 3b. Double-Screw Mounting

HANGING THE HEATER

1. Attach the heater unit to the mounting bracket.
2. Lift the heater up and into the mounting bracket.
3. Align the bracket screws with the keyhole slots in the mounting bracket.
4. If the heater is to be tilted it must be positioned in the keyhole slots - see Figure 4.
5. Tighten the bracket screws with a wrench the unit is securely suspended horizontally or vertically.

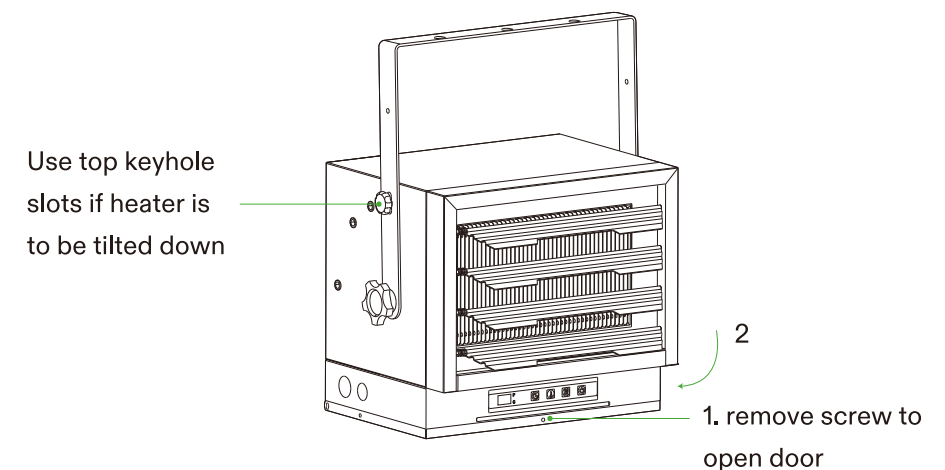


Figure 4

INSTALLATION

ADJUSTING THE AIRFLOW DIRECTION

1. To rotate the unit if it has been installed with a single lag bolt (as shown in Figure 4a), simply turn the entire heater as needed. The unit cannot be rotated horizontally if it has been installed with 2 lag bolts.

2. To tilt the unit vertically, loosen the bracket screws (see Figure 4).

NOTE: If the heater is to be tilted vertically, it must be mounted in bottom keyhole slots of the mounting brackets to maintain adequate clearance and prevent possible overheating.

3. Adjust the louvers to the desired position (see Figure 5).

NOTE: The louvers are designed not to close completely. Do not attempt to bypass this feature as this may result in damage to the unit.

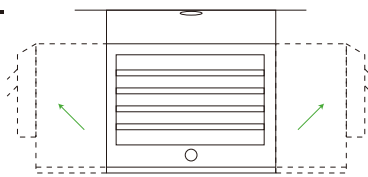
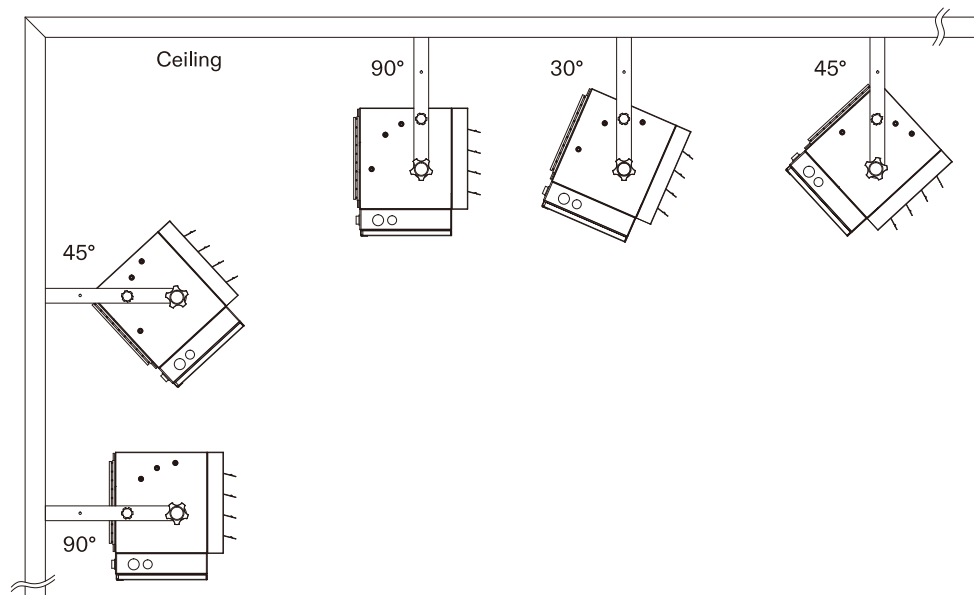


Figure 5

Warning

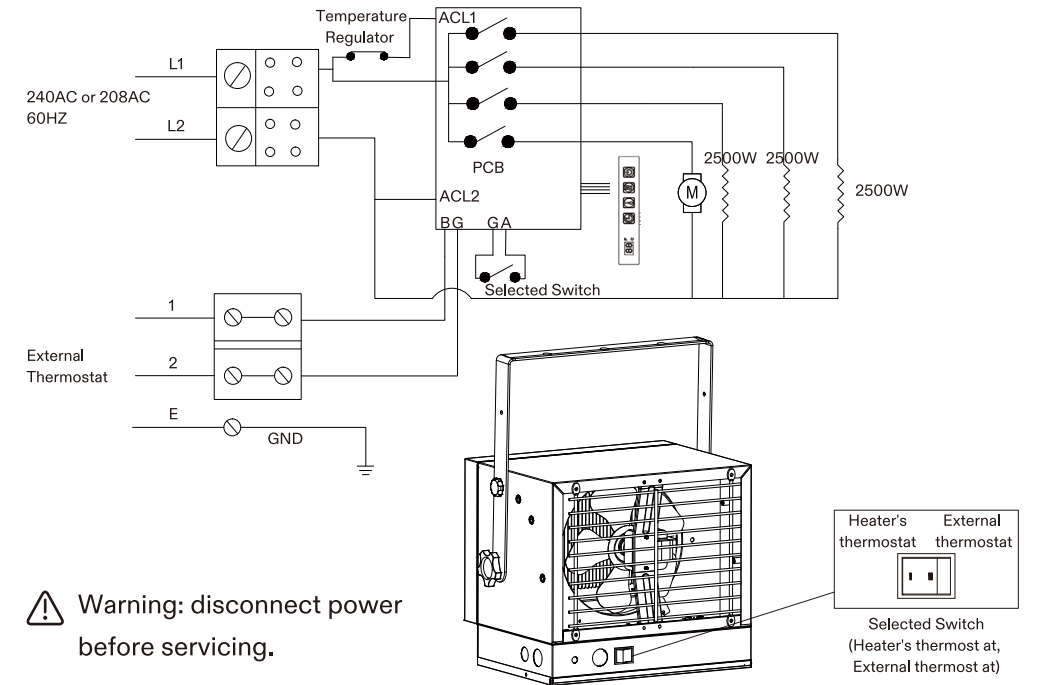
TO PREVENT POSSIBLE ELECTRIC SHOCK, DISCONNECT POWER TO THE HEATER AT THE MAIN SERVICE BOX BEFORE ATTEMPTING TO ADJUST THE HEAT OUTPUT OF THIS UNIT.

MULTIPLE VERTICAL ANGLES



INSTALLATION

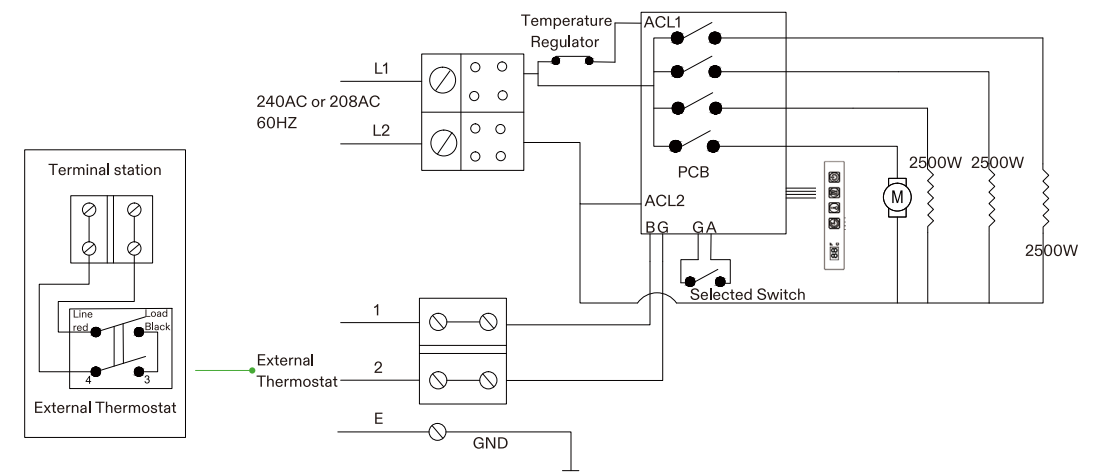
CONNECTING THE POWER



Warning: disconnect power before servicing.

If you are using an external temperature controller (external thermostat) to control whether or not the heater is on, please note the following points:

1. Make sure that the heater's temperature control knob (thermostat knob) is turned fully clockwise.
2. Connect the wire according to the below wiring diagram.



INSTALLATION

3. The external temperature control (external thermostat) should be in accordance with the requirement of the UL or ETL standard.
4. The lead wire of the external temperature control (external thermostat) must not be less than 22 AWG.

TO PROTECT THE HEATER

When starting the heater, slowly turn the temperature control clockwise slowly to terminal, the unit starts the fan first, then starts the heater.

When switching off the heater by turning the temperature control counterclockwise to off, the heating element first will turn off then the fan will run a short cooling cycle and then turn off.

⚠ Warning

THIS APPLIANCE MUST BE GROUNDED!

THE APPLIANCE MUST BE CONNECTED TO A CURRENT PROTECTION CIRCUIT OR DEVICE AT 50AMP OR LESS BEFORE BEING CONNECTED TO POWER SUPPLY!

1. Remove the screw from the front of the unit to connect the power supply to the heater.
2. Attach the cable connectors to the unit (see Figure 6) and slide the 10-gauge wire through the cable connector.

NOTE: All wiring must be carried out by a qualified electrician and must be in accordance to national and local electrical codes. For certain applications, conduit may be required, see Figure 6. Check local electrical codes. If you are running the wiring in conduit and wish to be able to turn the heater, be sure to purchase enough flexible conduit to allow the heater to be rotated.

3. Connect the wire to the power block located in the base of the heater - see Figure 6.
4. Switch on the power to the main service.

INSTALLATION

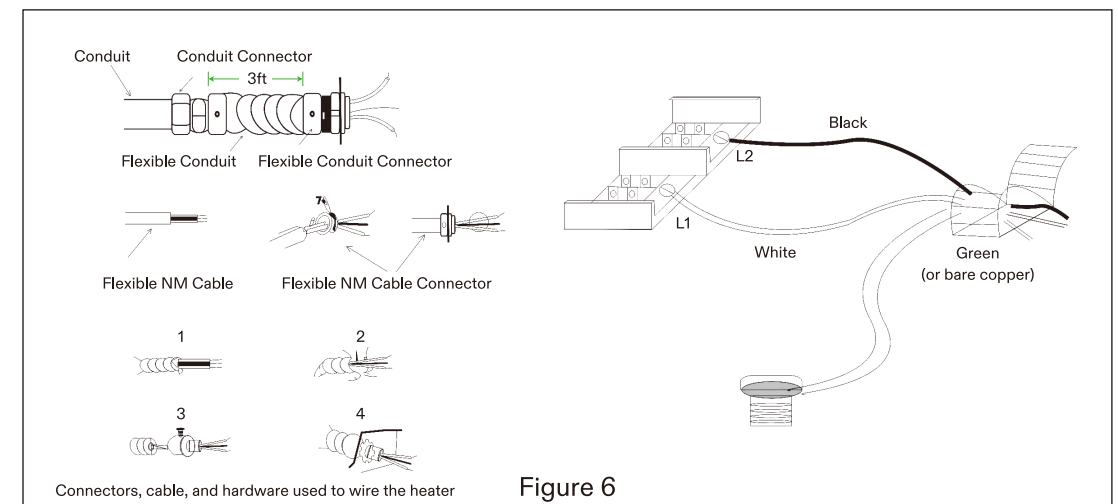
⚠ Warning

HIGH TEMPERATURES - RISK OF FIRE. KEEP FLAMMABLE MATERIALS, SUCH AS FURNITURE, PILLOWS, BEDDING, PAPERS, CLOTHING, ELECTRICAL CORDS AND CURTAINS AT LEAST 3 FT. (0.9 M) FROM THE FRONT AND TOP OF THE HEATER AND KEEP THEM AWAY FROM THE SIDES AND REAR. TO REDUCE THE RISK OF FIRE, DO NOT USE IT IN AREAS WHERE GASOLINE, PAINT OR FLAMMABLE LIQUIDS ARE USED OR STORED.

⚠ Warning

TO REDUCE THE RISK OF FIRE, DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS NEAR THE HEATER.

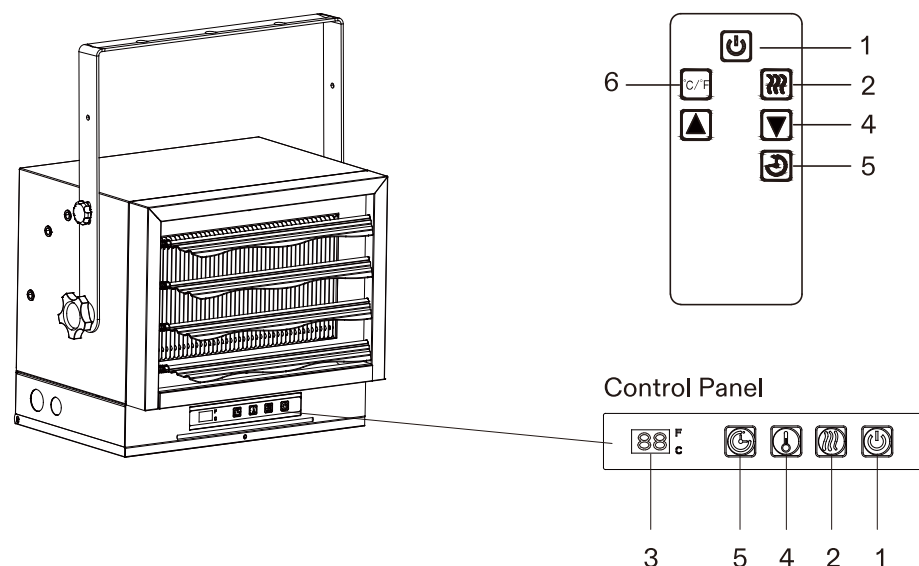
CONNECTING THE POWER



OPERATING INSTRUCTIONS

⚠ Warning

THE HEATER MUST BE PROPERLY INSTALLED BEFORE IT IS USED.



Check that the garage heater outlet grill is not covered or obstructed in anyway, and make sure the power to the unit is switched on.

The garage heater control functions can be accessed in two (2) ways:

- Using the touchpad control panel located on the front of the garage heater below the air guide plates.
- Using the multi-function remote control unit.

1. Main Power Button:

This button supplies power to all functions of the garage heater. It must be switched on for the garage heater to operate.

OPERATING INSTRUCTIONS

2. Heater Control Button:

This button adjusts the 3 heating levels: OFF, FA (Fan Only), AU: LOW (5600W displays "L") or High (8500W displays "H").

3. Temperature/Timer Display:

This LED display shows the set point for the temperature and timer functions. When either of these functions is activated, the display will show the set point for about 10 seconds and then fade to black. Any change to the set point of the temperature or timer set point reactivates the display, which then disappears after approximately 10 seconds.

4. Temperature Control Button

REMOTE:

▼ DOWN Control Button: Only in "AU" mode, this button is used to decrease temperature.

▲ UP Control Button: Only in "AU", this button is used to increase temperature.

GARAGE HEATER :

Only in "AU", this button is used to increase the temperature setting. To switch from Fahrenheit to Celsius, or vice versa, hold this button for 3 seconds.

The temperature range is between 10°C - 35°C (50°F - 95°F) in 1-2°F (1°C) increments. In the AU (H/L) gear, when the set temperature more than or equal to ambient temperature 0 degrees but less than or equal to 5 degrees, the heater will be switched to low power to save energy. The heater is firing high power only when the set temperature is out of 5 degrees range. Until the ambient temperature is more than the set temperature, the heater will stop heating, but the fan will stop working after 60 seconds.

5. Timer Button:

This button controls the Timer OFF (no display) and 8 settings from 1 to 8 hours. When the Timer is turned on, it will come on at the shortest time setting (1hour). Each time the Timer button is pressed, the time increases by 1 hour, up to the longest setting (8 hours). Once the set time expires, all garage heaters functions will be automatically turned off.

OPERATING INSTRUCTIONS

6. Fahrenheit/Celsius Button:

REMOTE:

This button displays F (Fahrenheit) or C (Celsius) depending on how the temperature mode is set. When the garage heater is turned on, the temperature is displayed in Fahrenheit (F).

GARAGE HEATER :

Unless power to the unit has been interrupted, the garage heater will remember the last temperature mode setting and will start at that setting.

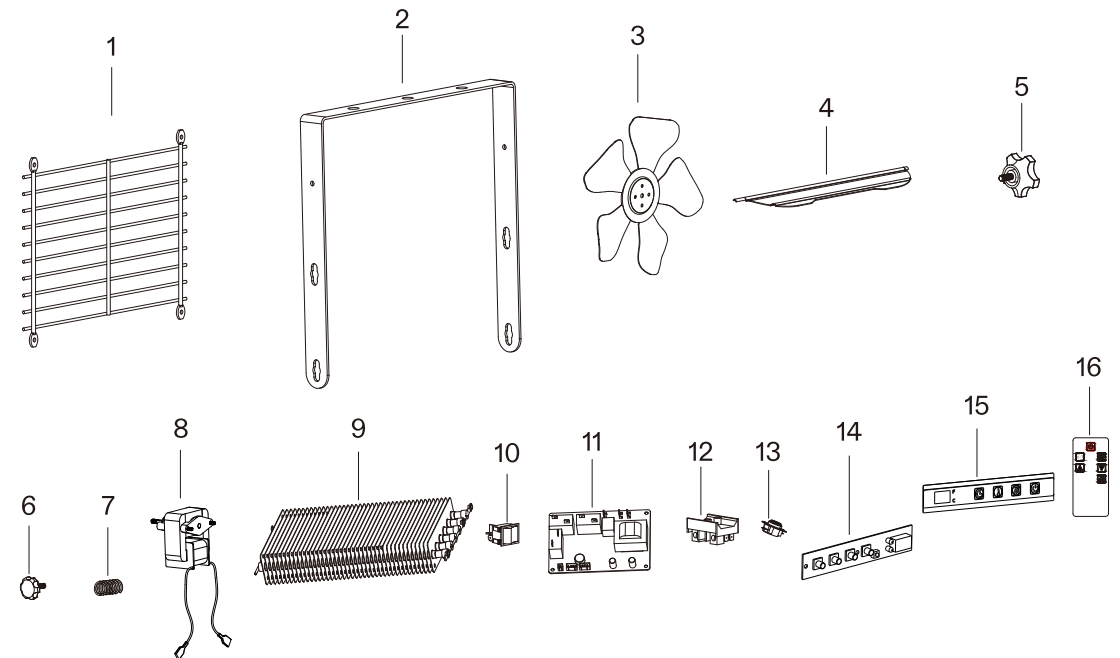
REPLACEMENT PARTS

| Part | Description | Part# | Part | Description | Part# |
|------|-------------------|--------------|------|-----------------------------|--------------|
| 1 | Back mesh | HS1250-06001 | 9 | Heater | HS1285-06001 |
| 2 | Hanging plate | HS1250-06002 | 10 | Selection switch | HS1250-06011 |
| 3 | Fan blade | HS1250-06003 | 11 | Main board | HS1275-08001 |
| 4 | Air guide plate | HS1250-06004 | 12 | Terminal block | HS1250-06014 |
| 5 | Large handle seat | HS1250-06005 | 13 | Temperature CUT-OFF | HS1250-06017 |
| 6 | Small handle seat | HS1250-06006 | 14 | Control panel circuit board | HS1275-08002 |
| 7 | Spring | HS1250-06007 | 15 | Button surface sticker | HS1275-08003 |
| 8 | Motor | HS1250-06008 | 16 | Infrared remote control | HS1275-08004 |

MAINTENANCE

1. Before cleaning, make sure that the power is switched off at the circuit breaker panel and that the heating element of the heater is cool.
2. To maintain the external appearance of the heater it is necessary to occasionally wipe the unit with a dry cloth. During the summer months, or at other times when the appliance is not in use and is completely cold, it should be wiped over with a damp cloth.
3. Do not use abrasive cleaning powders or furniture polish. Do not use chemical or abrasive products, metal scourers, etc., to clean the unit as they may damage the surface.
4. Disconnect the power supply during the summer months or when not in use. Store the unit in a dry and cool place.
5. All other services should be carried out by qualified service personnel. Do not try to repair the heater yourself.

NOTE: The motor is permanently lubricated, and no further lubrication is needed.



TROUBLESHOOTING

| Problem | Display Code | Root Cause | Corrective Action |
|-------------------------------------|--|--|--|
| Unit is not heating | Display shows "EE" | The thermostat sensor is broken or disconnected. | Please call customer service. |
| | The product does not have electricity entering | The overheat protection has activated. | Inspect the garage heater and check that the air inlets and outlets are not blocked as this may cause overheating. Switch off the circuit breaker to the garage heater for 30 minutes and allow it to cool down. Turn the power back on and operate. |
| | The heater button is invalid | Heater is in Lock Mode | Hold the POWER button for 10 seconds to unlock the heating function. |
| | Display shows "FA" and blows cold air | The heater is set to FAN ONLY mode | Change the setting and switch to "AUT" heating mode |
| | The heater will not start | The room temperature has already reached the set thermostat temperature | Adjust the temperature setting to make sure the thermostat setting temperature is higher than current room temperature. |
| | The heater will not start | The breaker has tripped | Reset the breaker at the fuse panel and restart the heater |
| Garage heater emits a burning smell | | During production dust and/or oil debris gathered on heating coils. | Make sure the room is well ventilated. Allow the garage heater to run until the smell is dissipated. |
| | | Check and make sure there is no combustible material within 0.9 meters (3 feet) of the garage heater. | Remove the combustible material around the garage heater. |
| | | This heater must be mounted at least 8 feet off the floor, for specific clearances, please check the "LOCATING HEATER" section in the instruction manual | Relocate the garage heater so there is enough space between the heater and the adjacent wall and floor. |

WARRANTY

1. We offer a 3-year warranty against manufacturing defects for all of our products from the date of purchase. If you need warranty assistance, please contact us as soon as possible.
2. The warranty does not cover damage due to high moisture levels, water damage, power surges, improper hanging/mounting, improper use, dust build-up, or users' unauthorized modifications.
3. In the USA, if any product ceases working within 30 days of use, you can choose:
 - (A) Exchange: We will email you a pre-paid return label. Please ship the product back to our USA warranty center and a replacement will be sent to you free of charge as soon as we receive the defective product.
 - (B) Refund: We will email you a pre-paid return label. Please ship the product to our USA warranty center and we will issue a refund as soon as the product has been received. Refund periods may depend on the processing time of your bank or institution—usually, a refund takes about 5 business days to be processed.
4. Our company reserves all rights to the final explanation of this warranty structure. If you have any questions about our warranty policy, please contact us.