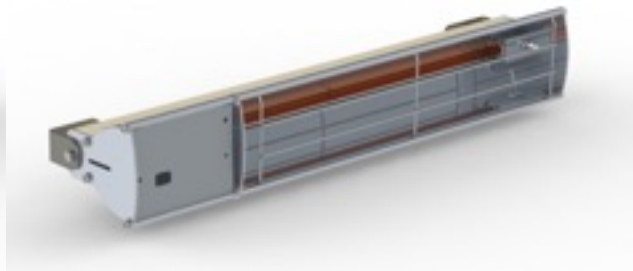
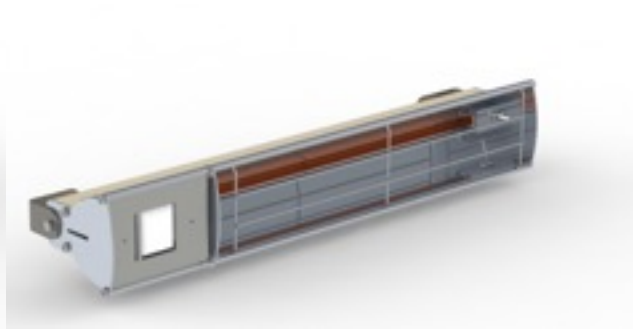
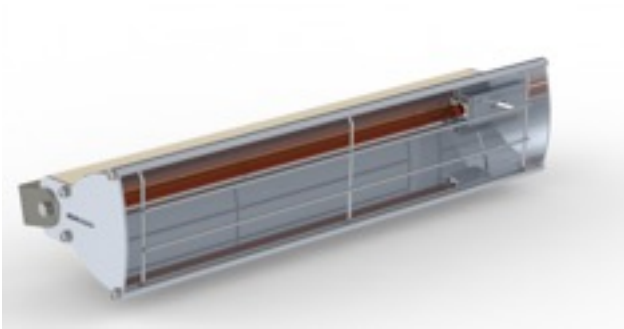


Model 3 Shortwave Infrared Heaters *instructions*



Model
G3

G3 Models

	Gold Range			Ceramic	Red Range		Process
	Heater only	With Dimmer	With HF Sensor		Heater only	With HF Sensor	
1000 watt	G3 1000 G		G3 1000 GS	G3 1000 C			
1500 watt	G3 1500 G		G3 1500 GS		G3 1500 R	G3 1500 RS	G3 1500 WR
2000 watt	G3 2000 G	G3 2000 D	G3 2000 GS	G3 2000 C	G3 2000 R	G3 2000 RS	G3 2000 WR
3000 watt	G3 3000 G		G3 3000 GS		G3 3000 R	G3 3000 RS	
4000 watt	G3 4000 G		G3 4000 GS		G3 4000 R	G3 4000 RS	G3 4000 WR

Introduction

You purchase South Africa's leading Infrared Heater. It will provide you with years of economical and effective Infrared heat if properly installed. It is virtually maintenance free and should just be cleaned once a year. Installations close to the coast will require a bit more cleaning.

Reading through this instruction manual will assist you in installing in operating this infrared heater in the best possible way.

Features

- Quick and easy element replacement
- Easy installation
- Light and durable
- Improved and Unique reflector design 98% energy into heat.
- 5 Year warranty on the body, 1 year on electronics
- Integrated uni-body reflector
- Manufactured in South Africa. Parts available locally.
- High grade Aluminium and Stainless steel construction.

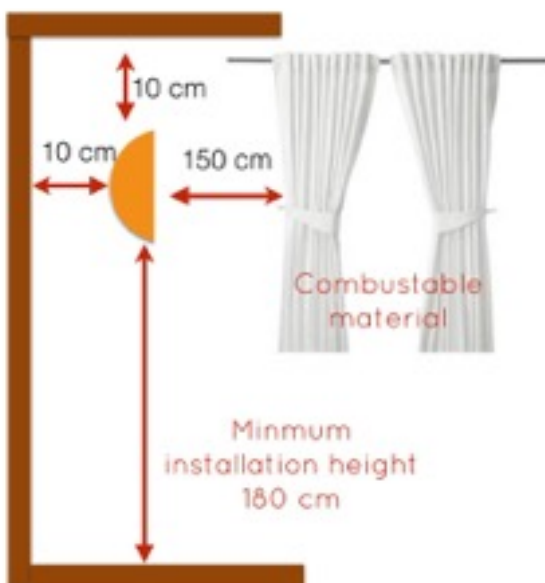
Instruction Manual

Safety Instructions



- The appliances must be installed by a qualified electrician according to the legal regulations as published.
- The heater must always be earthed.
- DO NOT cover the heater with anything
- If the heater is installed without a plug, or with other means for disconnection from the supply, a double pole isolator should be used.
- The heater must not be installed in a recessed area. It must always be surface mounted and allow for proper ventilation. Do not allow any heat build-up.
- The minimum ventilation openings around the heater, after installation, must be 150mm from the top and sides and at least 1500mm away from any combustible materials (curtains, paper etc)
- Remove the foam that protects the lamp during transit before operating the heater.
- The heater MUST be installed above 1800mm from the floor surface.
- Ensure that the heater is properly fixed using the supplied swivel brackets.
- Permanent wall plugs and or screws should be used.
- Do not use any form of adhesive tape or temporary fixing.
- 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.
- When installed in a bathroom / Jacuzzi area, installed in such a way that the heater, switches and other controls cannot be touched by a person in the bath

Safety distances



Tools required for installation



Or



Unpacking

- Remove the heater carefully from the box.
- Remove all plastic and white polystyrene packing aids,
- Remove the protective foam from behind the element.
- Ensure that the Wall brackets, plugs and crews are removed from box
- **Never touch the element.** If you do clean with alcohol based cleaner

Selecting your position

There are a number of products and installation methods to suite your needs...

Understanding the characteristics of Infrared heat will assist you selecting your ideal position. This is not an exact science and the averages discussed here should be sufficient.



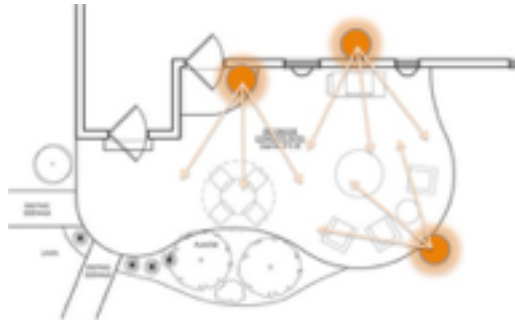
Shade: Infrared heat is actually light rays - as the sun. It therefore have shaded areas. Imagine your heater is a light. The shadow areas will not receive direct heat, although it receives a lower level of “scattered” light. The more heaters you install in an area, the higher the “scattered heat” will be. If you use more than one heater in a specific area, try and position them either in a zig-zag pattern or opposite each other.

Direction: The sun at 12 o'clock noon is warmer than early morning, because there are less shadow areas as the sun shines directly from above. Same with Infrared. If possible, mount your heater to the ceiling. The higher the angle (when wall mounted) the more shade is introduced.

Height vs wattage: The higher the installation, the less heat reach the target. The ideal height for a 1500 watt heater is between 2.1m and 2.5 m. If installation is only possible higher than 3 m, then consider the 3000 and 4000 watt heater. It sometimes are more economical to use a 3000 watt heater at a height of 3,5 m to cover an area, than 2 x 1500 watt heaters at the same height.

Current available: Each 1500w heater draws about 8 ampere and the 3000w 16 ampere. A typical residential “trip switch” can accommodate 2 x 1500 watt heaters or 1 x 3000 watt heater. If you require more than that, you will have to run a separate supply from the distribution box. Industrial clients must ensure that they have sufficient ampere available for larger installations. To be legally compliant, all installations must be done by an electrician.

Location: Always keep in mind the area that you are living in or the positioning of the installation e.g. south. You will have to compensate for this. You can either install more heaters by moving them closer or use the 2000 watt or 3000 watt units.



If you stand beneath the heater the effective heating area will be :

Single element and Ceramic heaters: 4 meter to the front and 2 meters to each side of the heater

Double element heaters: 5 - 6 meters to the front and 2.5 to 3 meter to each side

Position the heater in a position according to this heat spread.

Installation

- Mark 2 holes on the wall / position that you want to install the heaters. The different distances between the respective holes are:
 - Single element models: 300mm
 - Dimmer and Single element Sensor units: 406mm
 - Single Ceramic units: 180mm
 - Double Ceramic units: 430mm
 - Double element units: 660mm
 - Double element with Sensor units: 766mm
- The recommended **installation height** is as follows:
 - 1500, 2000 watt models: 1800 – 2500mm above floor height
 - 3000, 4000 watt models: 2500mm – 4000mm above floor height
 - Ensure that you adhere to **all safety distances** as per diagram 1
- Drill a 6mm hole about 70mm deep on both positions
- Fix the L bended wall brackets using the supplied 6mm Anchor screws The slotted part of the bracket goes against the wall and the 5mm hole against the heater. **Do not tighten yet.**
- If you mount the heater on wood / drywall etc. ensure that you use the **appropriate screws**
- Fix the heater to the wall brackets using the supplied M5 washer en Hex bolt. Move the wall brackets either left or right in the slot to ensure a tight fit
- Focus / move the heater to the desired position and tighten the bolts.
- Connect the electrical wire to the supply as per

Installation on a portable stand

- **Do not** use this heater in the immediate surroundings of a bath, a shower or a swimming pool.
- **Do not** use the portable stand indoors or near any combustible materials, couches, carpets etc.
- Ensure that the electrical cable is secure and not crossing any walkways.
- Remove any wall brackets from the heater
- Fit the Supplied stand bracket to the centre of the heater using the M4 Hex screw
- Fit the complete unit on the stand using the M10 Wing nut
- Focus / move the heater to the desired position and tighten the bolts.
- Let the heater **cool down for 5 minutes** before you move the stand

Operation the heater

- 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.
- Do not cover or obstruct the heater at any time
- Do not use this heater with a programmer, timer, separate remote-control system or any other device that switches the heater on automatically, since a fire risk exists if the heater is covered or positioned incorrectly.
- The fireguard grill does not give full protection.
- Do not insert any object through the front grid or opening in the heater.
- Do not leave the heater unattended. Always switch off before leaving the room/area.
- Do not stare at the element while switched on. Prolonged starring at the element can cause damage to the eyes.
- Keep combustible materials such as furniture, papers, clothes and curtains at least 1500mm away from the front of the heater.
- The heater can be used outside BUT must be sheltered from any rain / water.
- The heater is NOT waterproof but is safe for using in a humid environment
- Disconnect from the mains during installation, cleaning and/or replacing the element.

- To avoid risk of burns, always ensure that the element and heater body had time to cool down before cleaning.
- Do not handle the halogen element with bare hands. If it is inadvertently touched, remove finger marks with a soft cloth and methylated spirit or alcohol.
- Otherwise, the marks will burn into the element causing premature heater failure.
- Do Not touch the element with any object (incl. cigarette)

Cleaning the heater

- Ensure that you have disconnected the heater from the electrical supply and that the units has sufficiently cooled down
- If it is only dust on the inside, you may clean the inside by blowing compressed air over the surface.
- Remove the fire grid in front of the heater by pulling it carefully to the front.
- Unclip one side first then the other
- General dishwasher soap and water will clean the inside and outside of the body.
- Be sure not to touch the element with bare hands.
- Should you accidentally touch the element, clean the element with a paper towel dipped in either an alcohol or Cutex remover (acetone). Any fatty / soapy marks on the element will permanently damage the element when switched on.
- Clean the inside of the heater at least annually to remove any dust and dirt build-up. This will ensure optimal reflection of the infrared beams.

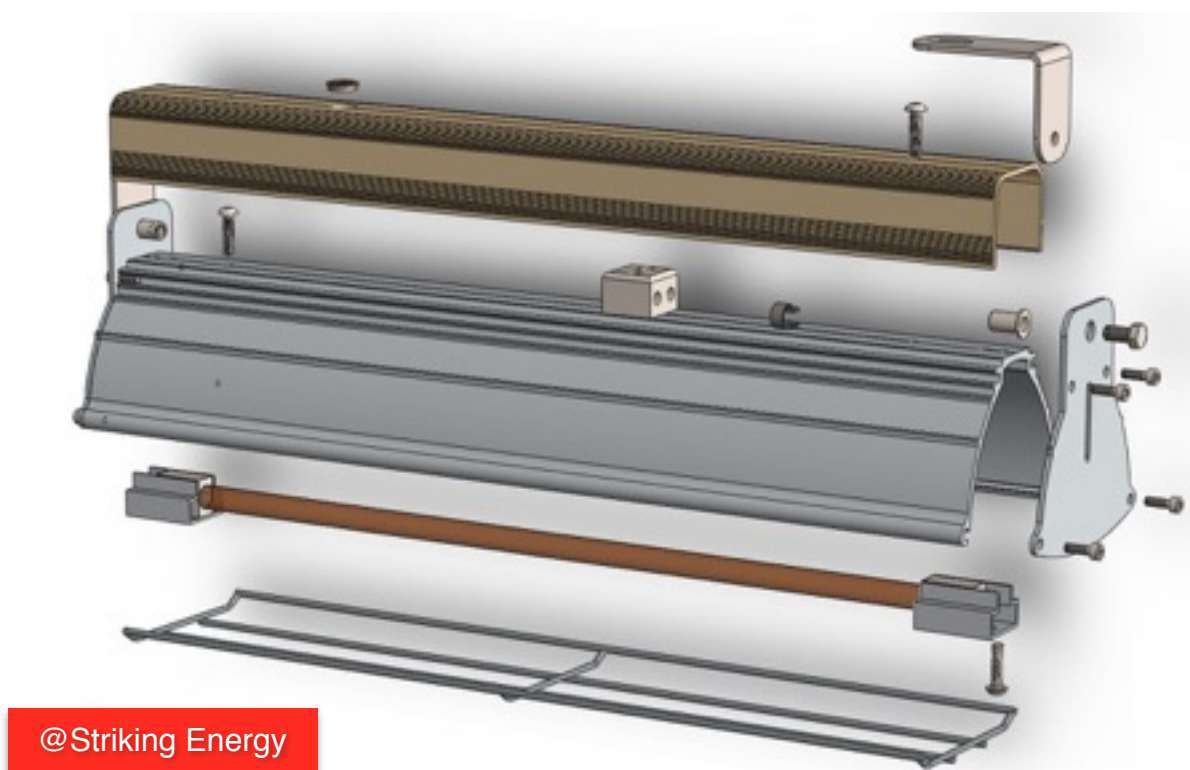
Replacing the element *(Tools required: Pliers, 2.5mm Allen Key, Philips screwdriver.)*

1. **Disconnect the power supply completely** and ensure that the element is not illuminated and that the heater body and element are cool.
2. Remove the grid by pull it out towards you. It should "pop out" of the grooves. It will help pulling on the center part while keeping the sides down with your hands
3. Remove the 2 screws in the element holders using a Philips screw driver. Keep all parts save
4. Remove the back cover slowly while feeding the wire through the hole.
5. Tilt the heater facing downwards or should you prefer - remove the heater from the brackets and place on an even surface
6. Unscrew the 2 screws at the back using the 2.5mm allen key. Keep the M4 x 25mm screws safe.
7. Unscrew the 2 brown wires on the ceramic holder or unscrew the ceramic holder itself on the 3000 and 4000 wat models.
8. Slowly pull element out to the front while feeding the wires.
9. Take the 2 spacing washers out that are on the element wires and keep them safe. Discard the element
10. Remove your new element from it's box. Rather torn the box than to pull on the element. Be careful not the break the white end caps. Leave the white sponge around the element.
11. Insert the 2 M5 spacing washers through the wire
12. Slowly and carefully insert the new element from the front through the holes.
13. BE CARE FULL NOT TO TOUCH THE ELEMENT WITH YOUR BARE HANDS.

Assemble

1. Replace the lamp holders and tighten lightly using a Philips driver
2. Connect the new wires with the same ceramic connectors.
3. Replace the back cover and secure with the Allen Key
4. **Remove the Sponge from the element**
5. Tilt the heater and fix
6. Clip the grill back in
7. Reconnect the electricity

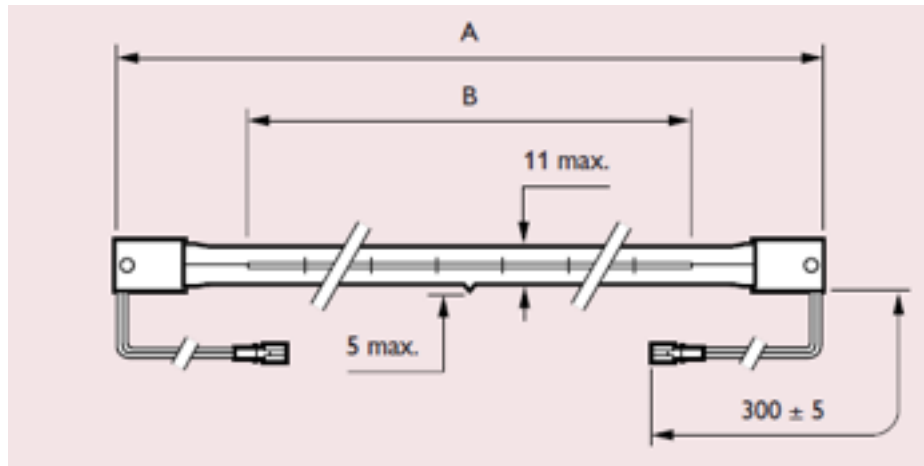
Parts diagram and explode view



Technical Specifications

LampType / Wattage	Single Element	Double Element
Gold Range	1000 watt 1500 watt 2000 watt	3000 watt 4000 watt
Ceramic Range	1000 watt	2000 watt
Ruby Red Range	1500 watt 2000 watt	3000 watt 4000 watt
Material	Aluminium (6063,1200H4), Stainless Steel 304 Safety grid: Electro polished Stainless Steel	
Electrical requirements	230 Volt 50 Hz 1500watt – 7 Amp 2000watt – 9 Amp	230 Volt 50 Hz 3000watt – 14 Amp 4000watt – 18 Amp
Overall Dimensions (Width x Height x Depth)	370 x 84 x 105 mm 250 x 84 x 105 mm (ceramic) 476 x 84 x 105 mm (Dimmer and Sensor)	730 x 84 x 105 mm 500 x 84 x 105 mm (ceramic) 836 x 84 x 105 mm (Dimmer and Sensor)
Burning position	Horizontal as well as vertical position.	
Element Life	Half life of 5000 hrs for Ruby and Gold Half life of 20 000 hrs for Ceramic	
Electrical Cable	3 Core 1,5mm Silicone heat resistant cable. Open ended	3 Core 2,5mm Silicone heat resistant cable. Open ended
Warranty	5 Years on body, 1 year on electronics	

Heating Element



The latest version and instructions available on www.striking.co.za

VERSION 3 June 2016
© Striking Energy