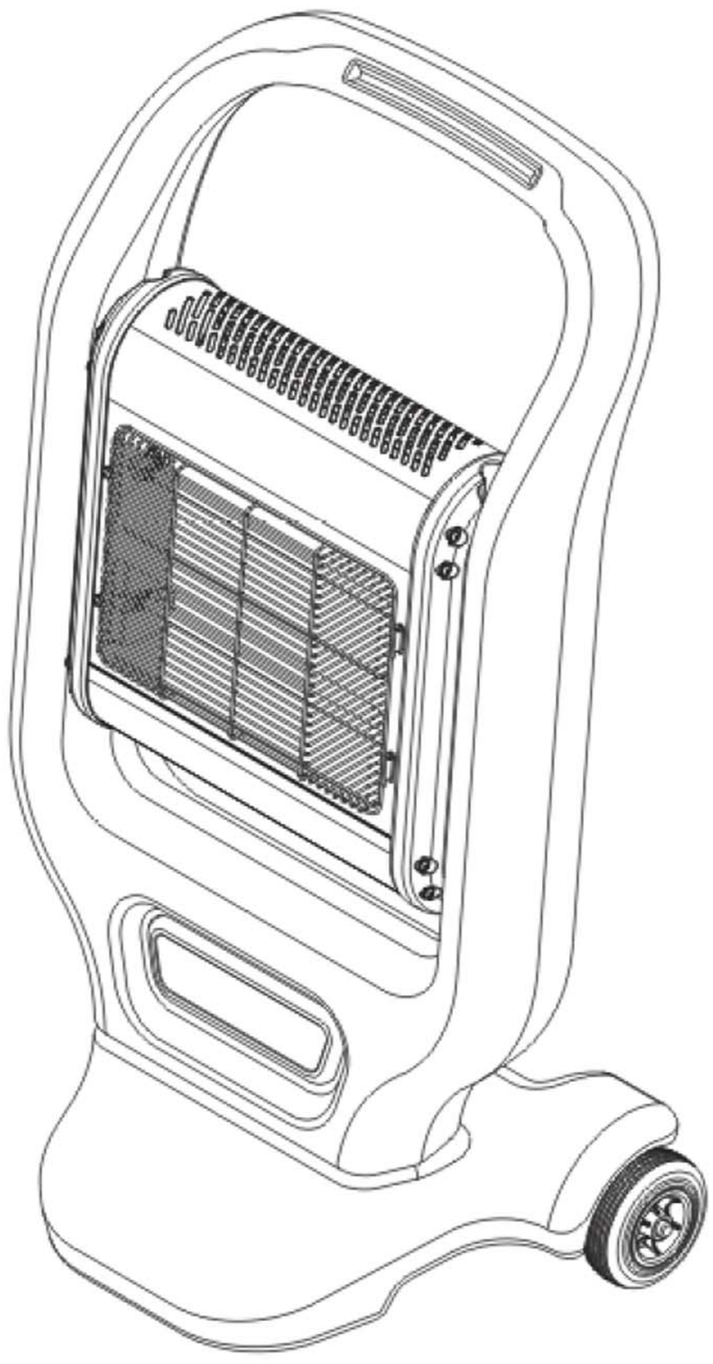
ELITE

# HEATMK3



## USER MANUAL

CONTROLLED DOCUMENT NO: 00146UIRS0721V1

## IMPORTANT SAFETY INSTRUCTIONS

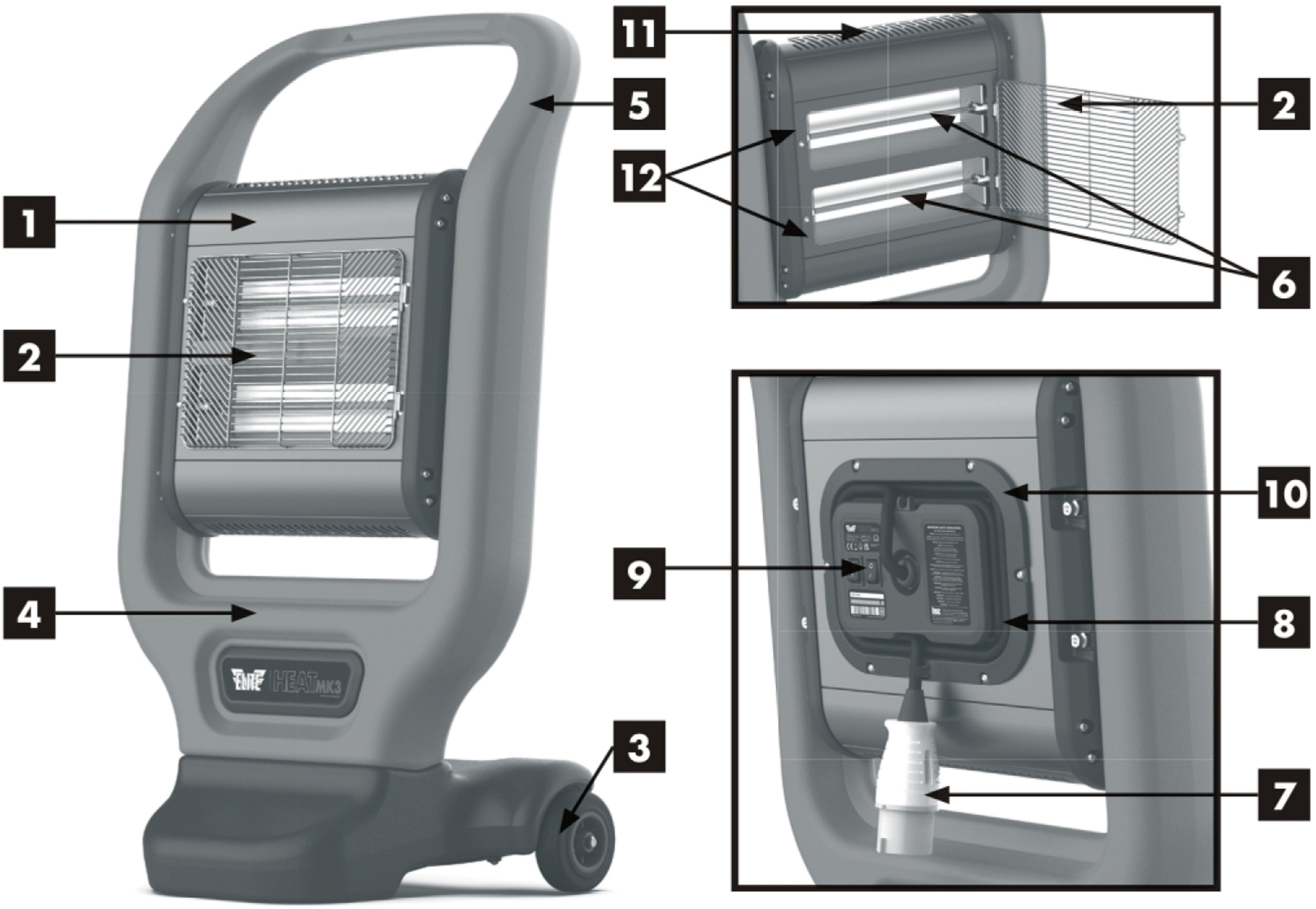
Before using this HEATMK3 please read this user manual, if you do not understand any of the instructions within please do not use and consult your retailer or the manufacturer for clarification. Failure to follow these instructions may result in damage to the product, property or cause personal injury.

**SAFETY, OPERATION & MAINTENANCE INSTRUCTIONS**
**FOR EH110MK3 (110V) & EH240MK3 (240V)**

**KEEP THIS BOOKLET FOR FUTURE REFERENCE**

# ELITE | HEATMK3

## INFRARED RADIANT HEATER




1. Heater Cassette
2. Safety Guard
3. Wheels for easy mobility
4. Heater Body
5. Handle
6. SK15 Heating Elements
7. Mains power plug
8. Cable storage recess
9. Lamp on/off switches
10. Easy access maintenance panel
11. Airflow vents
12. Safety grill securing points

# GENERAL SAFETY INFORMATION

1. Ensure power supply is correct frequency and voltage for heater by checking the Rating Plate on the rear of the heater cassette and confirming with the supply voltage.
2. Ensure infrared lamps are correct voltage, i.e. 110V power input – 110V lamp, 240V power input – 240V lamp (check Rating Plate as above).
   NOTE: Using heating elements of different voltage or power to the heater can increase risk of damage to heater or cause personal injury.
3. Replace damaged power cord immediately.
4. Replace damaged reflectors or safety guard immediately.
5. Refer all servicing of electrical parts to a qualified electrician.
6. Protect power cord from contact with sharp objects, chemicals or hot surfaces. Ensure the power cord is not in line of sight of the heating elements
7. This product is designed for indoor usage only and should not be used outdoors, near or immersed in water.
8. Ensure no object/material/surface is within the minimum safe distance (see 'General Operational Information').
9. Only use the heater in the upright position.

# CAUTION

1. Ensure that heater body is positioned on a firm, horizontal dry surface.
2. Keep away from flammable objects/materials/surfaces. This product gets very hot during use. Use in a location where accidental contact (particularly by children) is unlikely.
3. Ensure on/off switches are set to 'off' before connecting power cord to power supply.
4. Do Not move heater whilst switched on.
5. Do Not move heater by pulling on power cord.
6. Do Not locate the heater directly below or in front of a socket outlet.
7. Do Not remove plug from mains supply by pulling on power cord.
8. Always switch off heater, disconnect from power supply and allow cooling for at least one hour before attempting to touch heater cassette or lamps.
9. Do Not remove safety guard whilst heater is switched on. Turn off and allow cooling (as above) before servicing.
10. Do Not operate heater without safety guard.
11. Do Not operate heater without lamps.
12. Do Not look directly at illuminated lamp(s).
13. Do Not place any object on the safety guard of the heater cassette at any time.
14. Do Not use this heater with a thermal/ programme control, timer or any other device that switches the heater on automatically as a fire risk exists if the heater is accidentally moved or covered.
15. Do Not leave the heater unattended at any time whilst switched on.
16. 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.

# INSPECT YOUR NEW HEATER

The package should include the following items which should be removed from the packaging carefully and inspected for damage;

Elite Heat MK3 Radiant Heater (with power cord, plug & 2 x 1.2kW infrared heater lamps)

# GENERAL OPERATIONAL INFORMATION

**WARNING:** This heater is not fitted with a device to control the room temperature. Do not use this heater in small rooms when they are occupied by persons not capable of leaving the room on their own unless constant supervision is provided.

The Elite Heat MK3 may be used with an electrical supply of 110V or 240V dependant on the model (see Rating Plate).

If your model is the 110V variant, Elite recommend the use of the Elite 5KVA Metal Vented Heater Transformer with 32A outlet and a minimum of 3KVA continuous rating (Part No. T5KVAMV).

The maximum permitted lamps are 2 x 1.2kW. For lamp fitting refer to 'Installation of Infrared Lamp '.

The heater can be operated with either one lamp or both lamps illuminated as desired with the lamp control switches located on the rear of the unit, but ensure two lamps are fitted at all times.

**IMPORTANT: DURING RELOCATION, THE HEATER SHOULD REMAIN SWITCHED OFF AND DISCONNECTED FROM THE POWER SUPPLY.**

In the event of the heater being knocked over, a safety cut-out switch, which activates at an angle of 35° (±10°), will disable the heater. Follow below steps to re-start the heater.

- switch 'off' the heater at the on/off switches
- disconnect the power cord from the power supply
- return the heater to a standing position as described in the 'Caution' section
- If lamps require inspection allow to cool
- Check lamps are inserted correctly ensuring cooling time has been adhered (you may need to remove the safety guard, see 'Installation of Infrared Lamp')
- If no damage has occurred to lamps, replace safety guard if applicable, re-connect power cord to the power supply and switch the heater back on.

Should the power cord require replacement, a complete wiring loom should be purchased and fitted by the manufacturer, his agent or a suitably qualified person in order to avoid a hazard.

**IMPORTANT: THE MINIMUM SAFE DISTANCE FOR THE HEATER FROM ANY OBJECT, MATERIAL OR SURFACE IS 3M. THIS MUST BE ADHERED TO AT ALL TIMES.**

# INSTALLING INFRARED HEATER LAMPS

1. Ensure the heater is isolated from the power supply-REMOVE plug from power supply BEFORE lamp replacement.
2. Ensure that the lamps are:

- The correct voltage rating for the power input,i.e. 110V power input - 110V lamp
- Maximum of 1.2kW
- SK15 pre wired lamps with a minimum of 300mm cable on either side.

3. Open the safety guard on front of heater cassette by loosening and removing the 2 guard safety screws and opening guard.
4. Remove the lamp clips and retaining screws.
5. Remove the tube from outer packing carefully leaving it in its protective wrapping (see " About The Infrared Lamps"). Expose the pre wired ends of the tubes of the lamps.
6. Fit the ceramic lamp end caps to either end of the lamp.
7. Pass the wires through the lamp cable channels to the rear control panel wiring enclosure.
8. Slightly turn the lamps to allow the end to fit into the side recesses to enable the lamps fit within the reflector.
9. Remove the 6 control panel fixing screws to access the inside control panel wiring enclosure.
10. Connect the two right hand cables from the upper and lower lamps to the neutral terminal marked on the terminal block.
11. Connect the upper amp left hand cable to the lamp 1 live terminal - L1.
12. Connect the lower lamp left hand cable to the lamp 2 live terminal - L2.
13. Align lamp in correct position and secure in position using the lamps clips and screws. It may be necessary to light pull any excess/gathered wire from the rear control panel to ensure the correct alignment. ENSURE the lamps clips are secured over the heat resistant ceramic protective end caps and NOT the lamp.
14. Replace the control panel and secure in position with the 6 screws it is recommended all terminals are checked to ensure tight recommended torque setting of 2.8 N.M. and a visual inspections is conducted. Take note of any overheating and make necessary corrective maintenance where applicable.
15. Close and secure the safety guard
16. Connect the heater the mains supply and test. Tilt the unit forwards and backwards to ensure correct operation.

# ABOUT THE INFRARED HEATER LAMPS

**Elite** recommends the use of Elite Infrared Heater Lamps. Slim Ruby type is used for the 110V heater and carbon element for the 240V to minimise incorrect use and for user comfort in commercial applications, both variants are readily available from Elite

Do Not touch lamp quartz glass with bare hands. Quartz tube material could deteriorate by salt to lose mechanical strength. Sweat on fingers contain salt components and have detrimental influence on quartz tubes.

Hold the tube using the protective wrapping provided in its package or with a piece of clean dry cloth. If the tube glass surface is touched, clean cold tube with alcohol and a soft cloth.

Do Not touch a lamp just after switching 'off' its power supply. Temperature of a halogen lamp surface can exceed 600°C during its operation and will cause serious injury .

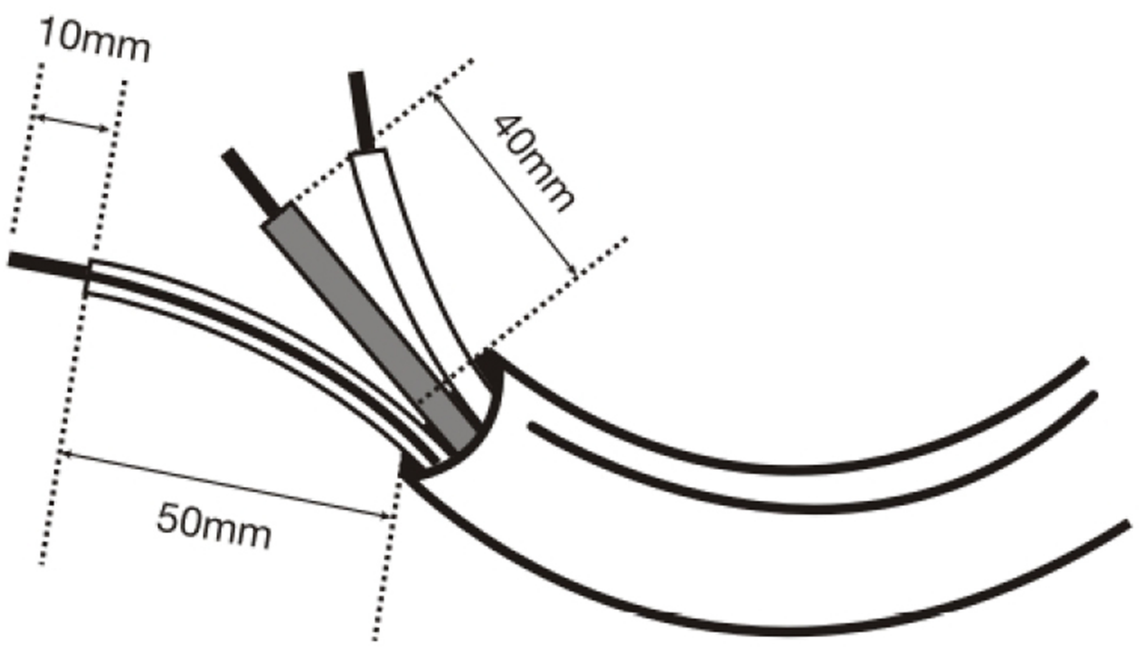
# REPLACEMENT PLUG WIRING INSTRUCTIONS

In the event of the plug requiring re-wiring or replacing, please follow these instructions;

**110V** – Elite recommend the use of a 32Amp Yellow Plug that conforms to BS 60309.

**240V** – Elite recommend the use of a 13Amp UK 3 Pin Fused Rewireable Plug that conforms to BS 1363/A.

1. Unscrew the screws holding the plug rear cover with the yellow plug housing and pull apart.
2. Insert a suitable power cord through the rear cover. 1.5mm H07- RNF for the 240V variant and 4.0mm H05-VVF for the 110V.
3. Loosen the screws on the strain relief (situated on the rear of the yellow plug housing) to allow the cable to pass through.
4. Strip the outer power cord insulation approx. 60mm to expose the three cores.
5. Reduce the live and neutral cores by 10mm to ensure the earth core is 10mm longer.
6. Strip the insulation of the three cores approx. 10mm to expose the copper conductors
7. Insert the BROWN (live) core into the correct terminal (manufacture symbols may differ) and loosely tighten screws.
8. Insert the BLUE (neutral) core into the correct terminal (manufacture symbols may differ) and loosely tighten screws.
9. Insert the YELLOW/GREEN (earth) core into the correct terminal (manufacture symbols may differ) and loosely tighten screws.
10. Ensure all copper wire is fully inserted into correct terminal positions before fully tightening all terminal screws.
11. Clamp the strain relief over the outer insulation of the power cord (leaving at least 5mm of insulation above the strain relief on the exposed three cores side) and then fix it in place with the screws.
12. Push the plug rear cover together with yellow plug housing and fully tighten with the 2 screws. Do not over tighten.



**IMPORTANT: IF USING THE 13AMP FUSED PLUG, A 13AMP FUSE, CONFORMING TO BS 1362, MUST BE USED.**

1. Unscrew the single centre screw holding the plug rear cover with the plug housing and remove top cover
2. Loosen the two screws on the strain relief (situated on the rear of the plug housing) and remove.
3. Using a suitable power cord 1.5mm H07-RNF for the 240V variant.
4. Strip the outer power cord insulation as recommended on the plug wiring card or on the underneath of the plug housing itself to expose the three cores.

   IMPORTANT: Ensure that the YELLOW/ GREEN (earth)core is the longest of the three cores to ensure that it will be the last to be 'pulled out' in the case of excessive force applied to power cord.

5. Strip the insulation of the three cores approx. 6mm to expose the copper conductor.
6. Insert the BROWN (live) core into the terminal connected to the fuse housing and finger tighten screw.
7. Insert the BLUE (neutral) core into the terminal to the bottom left of the neutral terminal and finger tighten screw.
8. Insert the YELLOW/GREEN (earth) core into the top centre terminal and finger tighten screw.
9. Ensure all copper wire is fully inserted into correct terminal positions before fully tightening all terminal screws.
10. Clamp the strain relief over the outer insulation of the power cord (leaving at least 3mm of insulation above the strain relief on the exposed three cores side) and fix in place with the two screws.
11. Push the plug rear cover together with plug housing and fully tightened the single centre screw. If requirement is for a 240V 16Amp or 32Amp Blue Plug, ensure conformity to BS 60309. For wiring instructions, please follow 110V wiring instructions where relevant.

## ELECTRICAL TEST, MAINTENANCE & STORAGE

**WARNING: THIS IS A CLASS 1 TESTED APPLIANCE**

- When earth bond testing, the readings should be 0.10Ω and below.
- Do Not perform a flash test, as this will reduce the life of the lamps.
- Do Not use abrasive cleaners or polishes.
- Always switch 'off', disconnect the heater from the power supply and allow cooling for recommended time before cleaning. Clean the heater with a damp cloth.
- When not in use, store in a dry suitable environment (preferably in the original carton to prevent damage)

## TROUBLE SHOOTING

| FAULT DESCRIPTION | SUGGESTED SOLUTION |
|---|---|
| HEATER DOES NOT OPERATE | • Check power supply.<br>• Check lamp(s) for damage<br>• Check all wiring connections.<br>• Check tip over safety switches |
| OTHERS | Consult a qualified electrician or contact elite (contact details opposite). |

## SPECIFICATION DATA

| | |
|---|---|
| PART NUMBER | 110V - EH110MK3<br>240V - EH240MK3 |
| POWER REQUIREMENT | 110V~ or 240V~, 50Hz |
| INFRARED HEATER LAMP (110V & 230V) | Wattage - 2 x 1.2kW (± 5%)<br>Overall Length - 349mm<br>Average Life - 1000Hrs |
| POWER CORD LENGTH | 2 Metres |
| PLUG | 110V - 32A (BS EN 60309)<br>240V - 13A UK 3 pin (BS 1363/A) with 13A fuse (BS 1362) |
| POWER CORD | 110V - Yellow 3G 4.0mm² H07 VV-F<br>240V - Black 3G 1.5mm² H07 RN-F |
| DIMENSIONS (WxDxH –<br>Heater cassette in upright position) | 615 x 420 x 1090mm |
| WEIGHT | 13.1Kg 240V 13.4Kg 110V |
| OPERATING TEMPERATURE | -20°C to +40°C |

## SPARE PARTS LIST

| | |
|---|---|
| ON/OFF ROCKER SWITCH | EHMK3-001 |
| WHEEL | EHMK3-002 |
| LAMP TEMINAL BLOCK | EHMK3-003 |
| TIP OVER MICROSWITCH | EHMK3-004 |
| SAFETY GUARD | EHMK3-005 |
| CREAMIC LAMP END CAPS | EHMK3-006 |
| 110V TUBE | EHMK3-007 |
| 240V TUBE | EHMK3-008 |
| COMPLETE HEATER CASSETTE 110V | EHMK3-009 |
| COMPLETE HEATER CASSETTE 240V | EHMK3-010 |
| WHEEL AXLE | EHMK3-011 |
| CABLE GLAND 110V M20 | EHMK3-012 |
| CABLE GLAND 240V M16 | EHMK3-013 |
| VENTED GRILL | EHMK3-014 |
| LAMP CLIPS | EHMK3-015 |

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal. Recycle it responsibly to promote the sustainable reuse of material resources. To return your used device. Please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.

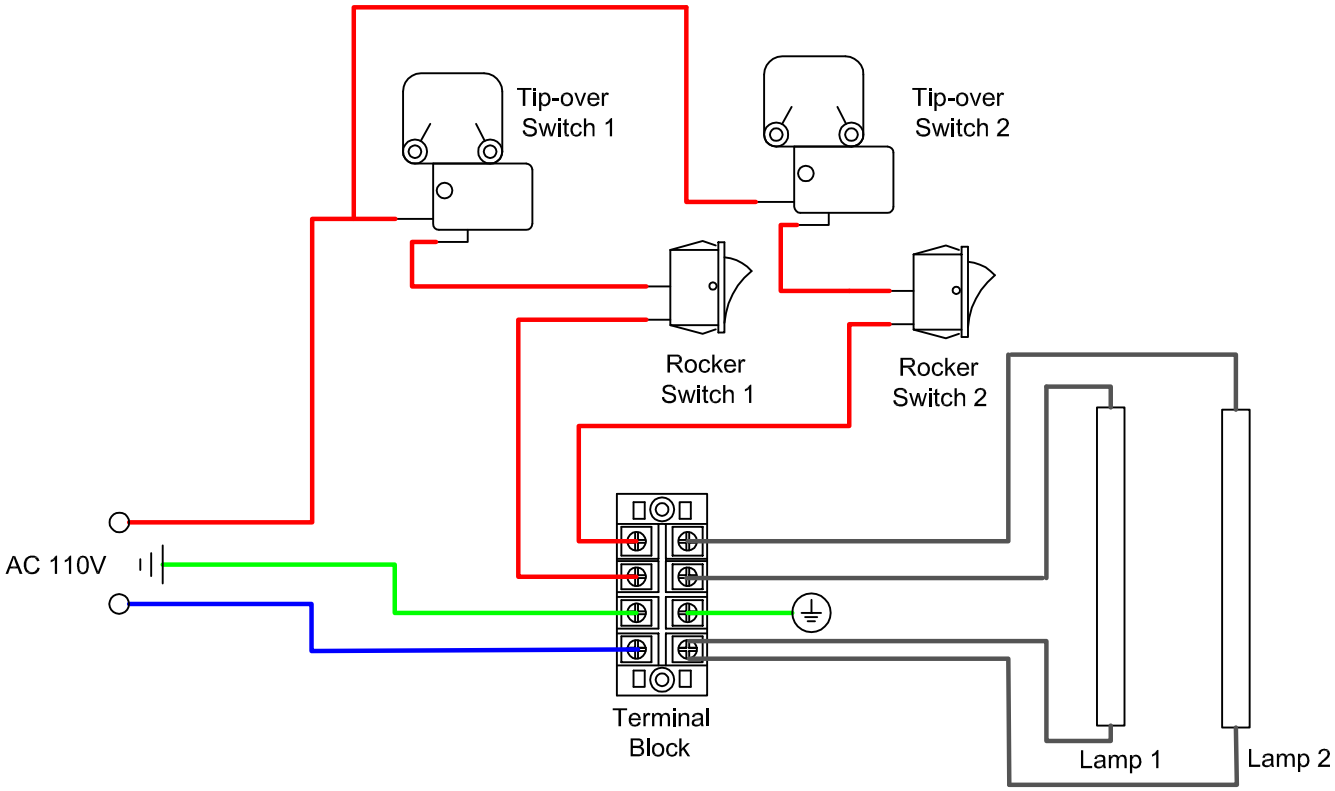
CE UKCA RoHS 2011/65/EU

hsc
The Hire Supply Company (UK) Limited
7-10 Eldon Road Trading Estate, Attenborough,
Nottingham, NG9 6DZ, UK - Tel: 0115 946 1988

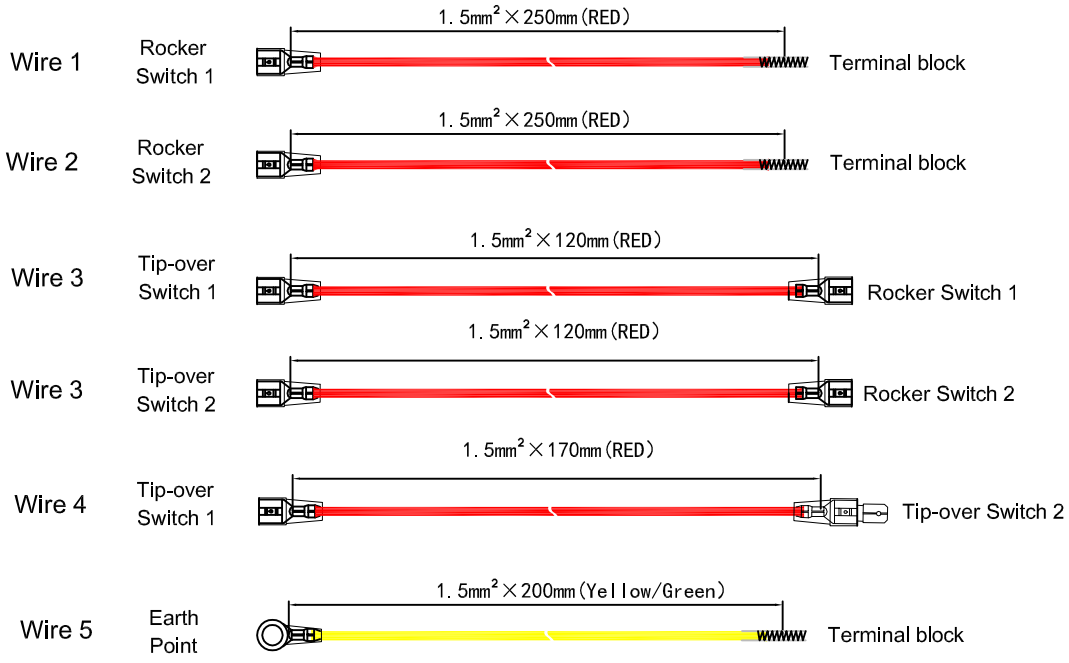
HSCGROUPUK.CO.UK

HSC Industrial and Commercial Equipment (EU) Ltd. 1st Floor, Penrose 1, Penrose Dock, Cork, T23 KW81, Ireland. Registered No: 689232

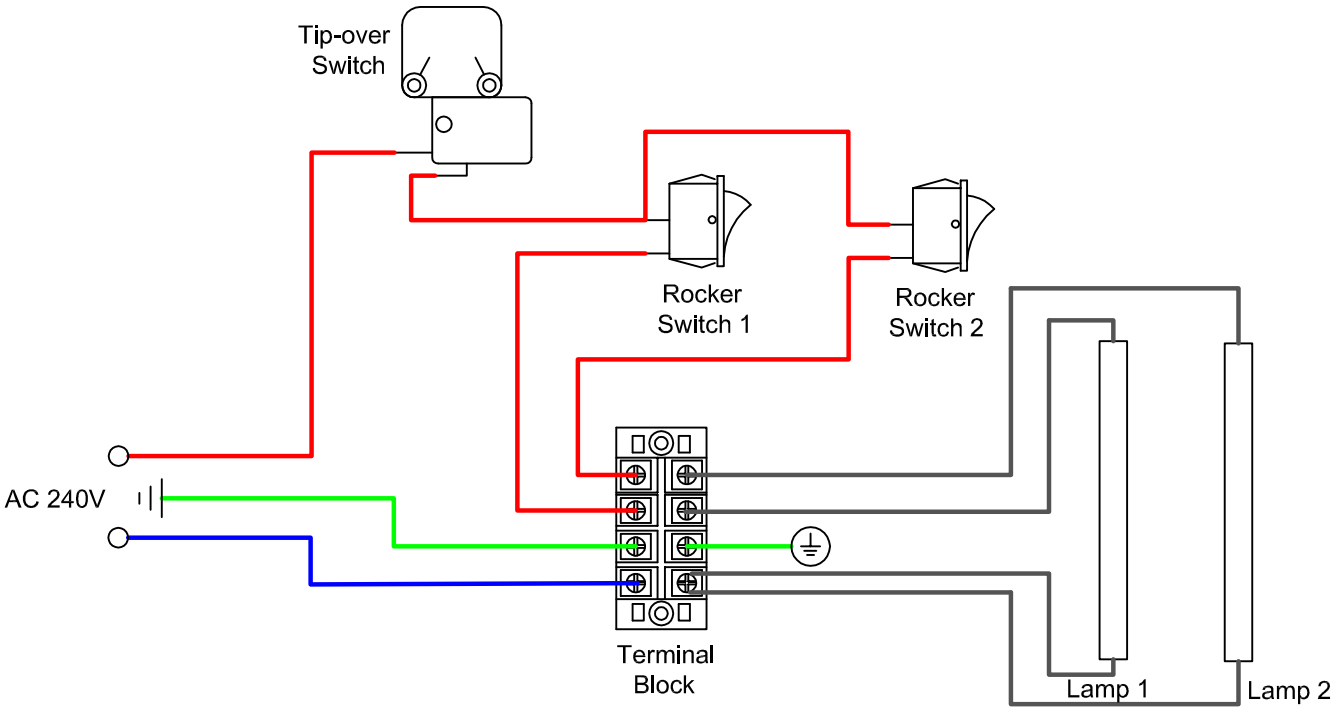
# Wiring diagram - 110V

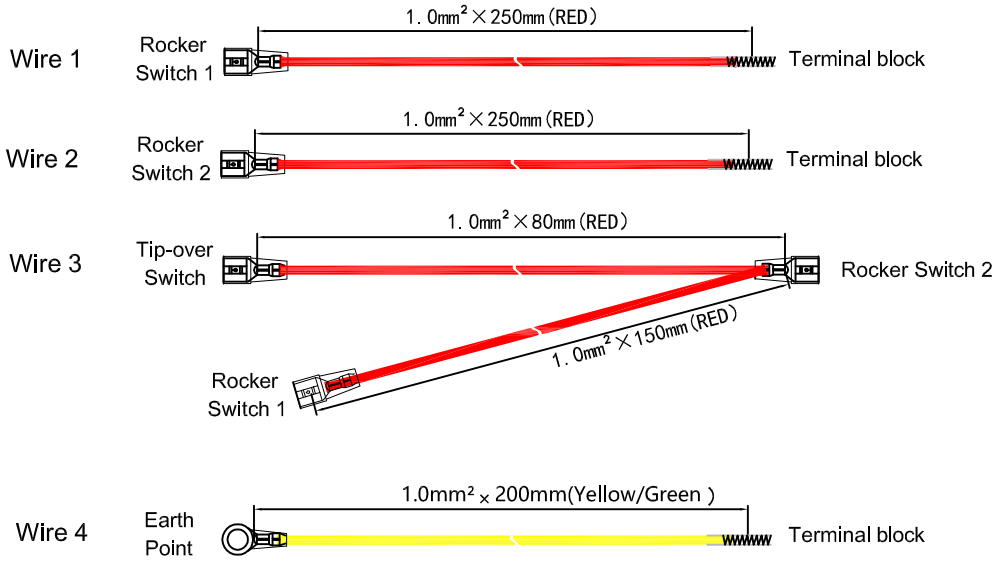



# Wire Specification



# Wiring diagram - 240V




# Wire Specification