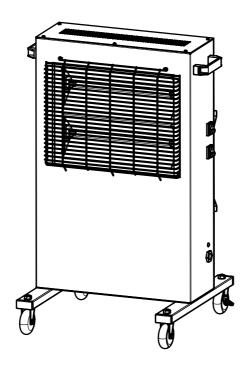


# ELITE IR HEATER – EH1102400W & EH2402400W



OPERATING INSTRUCTIONS – PLEASE READ BEFORE USE

# Operating Instructions.

Thank you for purchasing an Elite product, manufactured to a high standard, this product will, if used in accordance to these operating instructions, labels affixed to the product and properly maintained, provide you with many years of reliable services.

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS.

USE THE PRODUCT CORRECTLY FOR THE PURPOSE TO WHICH IT IS INTENDED.FAILURE TO DO SO MAY RESULT IN DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE YOUR WARRANTY.

KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Do Not Cover



**Caution: Hot Surfaces** 



Read user instructions

# WARNING!

It is the responsibility of the owner and the operator to read, understand and comply with the following:

You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices.

A Residual Current Circuit Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a Residual Current Device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any doubt consult a qualified electrician.

You must also read and understand the following instructions concerning electrical safety. The Electricity at Work Act 1989 Ed3 requires that all portable electrical appliances, if used on business premises, are tested by a qualified person, using a Portable Appliance Tester (PAT), at least once a year.

The Health & Safety at Work Act 1974 makes owners of electrical appliances responsible for the safe condition of those appliances and the safety of the appliance operators. If in any doubt about electrical safety, contact a qualified electrician.

#### SAFETY.

**ENSURE** the heater is located on a firm, horizontal dry surface.

**ENSURE** that the insulation on all cables and on the appliance is safe before connecting it to the power supply.

**ENSURE** nothing is positioned directly in front or passes by the heater. Maintain a 2 metre exclusion zone immediately around the front of the heater.

**ENSURE** the heater is kept clean and in good working order.

**ENSURE** the heater is in good order and condition before use. If in any doubt do not use the unit and contact your supplier.

**ENSURE** the mains cable is free from damage and is not routed on walkways that may present a trip hazard and potential damage. If any damage is noted replace immediately before use. Use an authorised service agent only.

**ENSURE** the heater is cooled before handling or storage.

**ENSURE** the heater is stored in a safe, dry location preferable in the original packaging if not to be used for a significant amount of time. Ensure this location cannot be easily accessed by children.

**ENSURE** Regularly check all connections to ensure that none are loose.

**ENSURE** that the voltage marked on the appliance matches the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating.

**ENSURE** you familiarise yourself with the applications and limitations of the heater before use.

**ENSURE** the on/off switches are set to "off" before connecting the power.

**ENSURE** the work area is kept clean and clear of unnecessary items.

**ENSURE** the heater is disconnect from mains and allow to thoroughly cool before moving, storing or attempting any cleaning or maintenance.

**ENSURE** that the element guard is in place, undamaged and firmly attached before use.

**ENSURE** that only recommended attachments and parts are used. To use unauthorised parts may be dangerous and will invalidate your warranty.

**DO NOT** use the heater if any parts are damaged. Immediately remove from service, repair or replace parts. Use an authorised service agent only.

**DO NOT** pull or carry the appliance by the power cable

**DO NOT** pull the plug from the socket by the cable.

**DO NOT** use worn or damaged cables, plugs or connectors. Immediately have any faulty item repaired or replaced by a qualified person. When a BS 1363/A UK 3 pin plug or 110V 32A industrial plug is damaged, cut the cable just above the plug and dispose of the plug safely.

Fit a new plug according to the following instructions.

- a) Connect the GREEN/YELLOW earth wire to the earth terminal "E"
- b) Connect the BROWN live wire to the live terminal "L".
- c) Connect the BLUE neutral wire to the neutral terminal "N".

d) After wiring, check that there are no bare wires, that all wires have been correctly connected, that the cable outer insulation extends beyond the cable restraint and that the restraint is tight.

**DO NOT** get the heater wet or use in damp or wet locations or areas where there is excessive condensation.

**DO NOT** locate the heater below a power outlet.

**DO NOT** touch the heater elements, even when cold.

**DO NOT** modify the heater or operate a heater which has been modified from its original design.

**DO NOT** allow untrained persons, children or persons with learning difficulties to operate the heater. Use in a location where accidental contact (particularly by children) is unlikely.

**DO NOT** use the heater outside or in a wet environment such as swimming pools

**DO NOT** operate the heater without any guarding supplied.

**DO NOT** leave the heater unattended whilst in use.

**DO NOT** use the heater within a potentially explosive environment

**DO NOT** use duct work to direct heat. DO NOT restrict air on the inlet or outlet.

**DO NOT** move whilst on or immediately after switching off.

**DO NOT** use the heater near flammable, combustible of explosive materials. This may include solids, liquids or gases. This product gets very hot during use.

**DO NOT** remove safety guard whilst heater is switched on. Turn off and allow cooling (as above) before servicing.

**DO NOT** disassemble the heater for any reason. The heater must be checked by qualified personnel only.

**DO NOT** use this product to perform a task for which it has not been designed.

**DO NOT** operate heater without safety guard or elements installed.

**DO NOT** look directly into the lamps

**DO NOT** place any object on the safety guard of the heater cassette at any time.

**DO NOT** use this heater with a programmer, timer or any other device that switches the heater on automatically since a fire risk exist if the heater is covered or positioned incorrectly.

**WARNING!** The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities or lack of experience or 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 at all times to ensure they do not play or touch this appliance.

WARNING! If a fuse blows, ensure it is replaced with an identical fuse type and rating.

**AVOID** using an extension reel. If an extension reel must be used it should be fully unwound before connection. A reel with an RCD fitted is preferred since any appliance plugged into it will be protected. The cable core section is important and should be at least 2.5mm<sup>2</sup> @ 240V and 4.0mm<sup>2</sup> @ 110V

**ALWAYS** switch off heater, disconnect from power supply and allow cooling for at least one hour before attempting to touch heater cassette or elements.

#### **Getting started**

The Elite Heat EH1102400W & EH2402400W is a fully powder coated metal construction heater using two Quartz Infrared heating lamp providing instant heat when required. Ideal for workshops, garages and any industrial applications where performance and durability is required.

#### Features include:

Chemically polished reflectors provide maximum heat

SK15 pre wired elements – essential for portable heaters

Controllable power output comes from the conveniently placed rocker switches on the side of the unit to give the user control.

Compact design on lockable castors to ensure easy manoeuvrability and safety once positioned.

Ergonomically designed carry handles conveniently located on either side to ensure reduced risk to manual handling.

Supplied with cable and BS1363 or EN60309 approved plug.

Max.Power: 2400W Min.Power: 1200W

Input supply: 110V/32A or 240V/13A

#### Heater Identification Fig.1

- 1) Handle
- 2) Heating Lamp
- 3) Safety Guard
- 4) Heater Body
- 5) Castor assembly
- 6) Power select switches

# Fig.1 5

#### Inspect your new heater

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

#### 1X Elite EH1102400W or EH2402400W Radiant Halogen Heater

(with power cord, plug & 2 x 1.2kW infrared halogen heater lamps)

2x castor footplate sub-assemblies

4x M8 x 40mm Hexagonal Bolt to assemble castor footplate sub-assemblies

# Assembly

- Remove all parts from packaging.
- With the main body turned upside down and positioned on flat level surface, it is recommended a
  protective cloth/matt is used to prevent damage to the surface finish.
- Align castor sub-assemblies ensuring the lockable castor is positioned at the rear of the unit.
- Using the bolts provided (M8x40mm hexagonal bolt) secure the sub assembly in position with a 14mm spanner. Tighten to 9 N.m
- Repeat on the opposite side of the heater.

- Carefully return heater to the upright position.
- Your Elite heater EH1102400W & EH2402400W is now ready to use.

# Using the Elite Heat EH1102400W & EH2402400W

Position the heater in the desired location, please note the following considerations:

Ensure there is a minimum 2M exclusion zone from the front of the heater.

Ensure the heater is not obstructing walkways and the cable is not posing a potential trip hazard.

Ensure there is a suitable power supply to the correct voltage and current available, Check the heaters rating label for detailed technical information.

Connect to the power supply – before connection ensure the cable and plug are in good condition, free from any abrasions, cracking or any visual defects. It is also recommended that the lamp power selection switches are set to off "O" before power is applied.

Select the desired heat output required by switching the switches located on the side of the unit. Note the upper switch corresponds with the upper lamp, once selected to the one position "1" the switch will now illuminate and the lamp will turn on. The lower switch corresponds to the lower lamp.

Each lamp is powered at 1200W enabling the heater to be run at either 1200W (1 lamp) or 2400W (2 lamps)

In the event of the heater being knocked over, a safety cut-out switch, which activates at an angle of 35° will immediately turn both the heater elements off.

- · Unplug the unit from the power supply
- Switch the both lamps to the off position on the switches located on the side of the unit.
- Return the heater to a standing position.
- Thoroughly visually inspect the heater for damage, making specific attention to the lamps. If there are any
  doubts wait for the unit to thoroughly cool and them complete a more detailed inspection.
- If no damage has occurred to the elements, re-connect power cord to the power supply and switch the heater back on.

The infrared element is fragile and therefore it is important that it is not subjected to any unnecessary shocks or vibration and is not moved when it is on or until cooled down.

The heater can be operated with either one lamp or both lamps illuminated as desired, but ensure both lamps are fitted at all times.

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

IMPORTANT: THE MINIMUM SAFE DISTANCE FOR THE HEATER FROM ANY OBJECT, MATERIAL OR SURFACE IS 2M. THIS MUST BE ADHERED TO AT ALL TIMES.

#### Trouble shooting

FAULT DESCRIPTION	SUGGESTED FAULT DESCRIPTION SOLUTION
HEATER DOES NOT OPERATE	Check power supply.
	Check for damage or misalignment.
	Check all wiring connections
OTHERS	Consult a qualified electrician or dealer.

#### Maintenance

WARNING! There are no serviceable components inside this heater, if any element requires replacing please consult your supplier and only replace the elements if this can be carried out by a competent person.

The industrial radiant heater is designed and manufactured to withstand tough conditions; this quality product will give reliable service when periodically cleaned and maintained in accordance with these instructions.

Make sure the heater plug is disconnected from the mains supply before any cleaning or maintenance is attempted, allow the heater to cool completely.

Do not use water or other liquids, or harsh abrasive cleaners to clean the heater. Clean the exterior with a soft damp cloth with some mild detergent.

# About the Infrared halogen heater lamps

Elite recommends the use of genuine manufacturers Infrared Halogen Heater Lamps for optimum performance and safety.

**Do Not** touch halogen lamp quartz glass with bare hands. Quartz tube material could deteriorate by salt and lose mechanical strength. Sweat on fingers contain salt components and can have detrimental effect 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 immediately after switching 'off' its power supply. Temperature of a halogen lamp surface can exceed 600°C during its operation. Leave to fully cool for a minimum of 1 hour and remove power before maintenance.

# **Technical data**

DADT NUMBER	4401/ 51144034001//
PART NUMBER	110V – EH1102400W
	240V – EH2402400W
POWER REQUIREMENT	110V~ or 240V~, 50Hz
INFRARED HALOGEN LAMP	Wattage - 2 x 1.2kW (± 5%)
(110V & 240V)	Overall Length - 300mm
	Average Life - 1000Hrs
POWER CORD LENGTH	2 Metres
PLUG	110V - 32A ( <i>BS 60309</i> )
	240V - 13A UK 3 pin (BS 1363/A) with 13A fuse (BS
	1362)
POWER CORD	110V - Black 3G 4.0mm <sup>2</sup> H07 RN-F
	240V - Black 3G 1.5mm² H07 RN-F
DIMENSIONS (LxWxH – Heater cassette in	570 x 490 x 870mm (assembled)
upright position, inc. castor sub assembly &	580 x 250 x 890mm (packaged)
handles)	
WEIGHT	15.1Kg (110V) 14.6Kg (240V)
OPERATING TEMPERATURE	-20ºC to +40ºC

## Electrical test and storage

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

When earth bond testing, the readings should be  $0.10\Omega$  and below.

**Do Not** perform a flash test, as this will reduce the life of the heating elements.

When not in use, store the heater carefully in a safe, dry, childproof location. Preferably in the original packaging if available.

# Replacing infra-red halogen heater lamps

ONLY replace the heater elements after ensuring that the heater is NOT plugged in to a power supply.

ONLY replace the heater elements after the heater has had sufficient time to cool down.

DO NOT replace whilst the other elements are still on or had not had sufficient time to cool down.

Ensure that the replacement lamps are; the correct voltage rating for the power input i.e. 110V power input – 110V lamp and rated at the correct power, maximum of 1200W

Remove safety guard on front of heater cassette by loosening and removing the two fixing screws and lifting guard in an upward direction.

Remove the failed lamps and dispose of in accordance with local waste regulations.

To remove carefully pull out the lamps until clear of the lamp retaining sprung clips.

Once the lamp is clear of the clips gently feed out the fixed wired ends at either side unto the inline connectors are accessible. Note these are protected by a high temperature silicone cover. Pull apart to expose the inline clips. Disconnect and dispose of the lamp.

Remove the new tube from outer packaging carefully leaving it in its protective wrapping (see 'About The Infrared Halogen Lamps' and follow the guidance)

To fit the new lamp follow the above in the reverse order. Special attention should be noted to the following;

Ensure the inline male and female spade connectors are mechanically sound and free of excessive movement that may lead to high resistance and premature failure

Replace the protective silicone cover fully over the inline connector.

Caution should be observed when feeding the cable back into the main body of the heater. Ensure the cable does not gather or bunch around the opening.

Gently push the lamp back onto the sprung clips. These clips should securely hold the lamp in position.

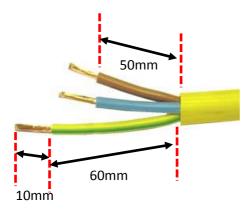
Do not overtighten the screws when refitting the protective safety guard.

#### 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.

- Unscrew the screws holding the plug rear cover with the yellow plug housing and pull apart.
- Loosen the two screws on the strain relief (situated on the rear of the yellow plug housing) to allow
  the captive cable to freely move.
- Loosen the two screws on each of the conductor pins.
- Remove the cable and dispose in accordance with local waste regulations.
- Insert a suitable power cord through the rear cover.
- Strip the outer power cord insulation approx. 70mm to expose the three cores.
- Reduce the live and neutral cores by 10mm to ensure the earth core is 10mm longer.
- Strip the insulation of the three cores approx. 10mm to expose the copper conductor strands.
- Ensure all copper wire is fully inserted into correct terminal positions before fully tightening all terminal screws.
- 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 two screws.
- Push the plug rear cover together with yellow plug housing and fully tighten with the 2 screws. Do not
  over tighten.



- Insert the **BROWN** (live) core into the correct terminal (manufacture symbols may differ) and loosely tighten both screws.
- Insert the **BLUE** (neutral) core into the correct terminal (manufacture symbols may differ) and loosely tighten both screws.
- Insert the YELLOW/GREEN (earth) core into the correct terminal (manufacture symbols may differ) and loosely tighten both screws.

240V - Elite recommend the use of a 13Amp UK 3 Pin fused rewire-able plug that conforms to BS 1363/A.

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

- Remove faulty plug from the cable and dispose in accordance with local waste regulations.
- Rewire the plug in accordance with the plugs wiring instructions
  - Insert the **BROWN** (live) core into the terminal connected to the fuse housing and finger tighten screw.

- Insert the BLUE (neutral) core into the terminal to the bottom left of the live terminal and finger tighten screw.
- Insert the YELLOW/GREEN (earth) core into the top centre terminal and finger tighten screw.
- Ensure all copper wire is fully inserted into correct terminal positions before fully tightening all terminal screws.
- Clamp the strain relief over the outer insulation of the power cord and fix in place with the two screws.
   Ensure the strain relief is fully positioned onto the outer insulation
- 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 the applicable 110V wiring instructions where relevant.



**ENVIRONMENTAL PROTECTION:** Please recycle any unwanted materials as opposed to disposing them as general waste. It is recommended the original is retained and used to store the product when not in use for prolonged periods of time. If this is not applicable ensure the materials are sorted and recycled in accordance with local regulations.

**SPECIFICATION CHANGE:** It is out policy to continually improve products to ensure these meet the rigours of the industry we serve. Therefore as such we reserve the right to alter specifications, data and components parts without prior notice.

**WARRANTY:** All Elite products come with a 1 year warranty from date of purchase, proof of which will be required in the event of any claim.

**IMPORTANT**: No liability will be accepted for the incorrect use of this product.

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