

## **DEVIL QUARTZ HALOGEN HEATER**

MODEL NO: 371PC

PART NO: 6950020

# OPERATING & MAINTENANCE INSTRUCTIONS



ORIGINAL INSTRUCTIONS

GC1119 ISS2

## INTRODUCTION

Thank you for purchasing this CLARKE Quartz Halogen Infra-red Heater.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

## **SPECIFICATIONS**

Model Number	Devil 371PC
Part Number	6950020
Weight	15.7 kg
Dimensions (LxWxH)	550 x 490 x 875 mm
Wattage	2.8 kW
Amperage	25.5 A
Supply Voltage	110v/50hZ
Insulation Class	IP20
Max Heat Output	2.8 kw

#### **GUARANTEE**

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission. This guarantee does not effect your statutory rights.

# THE FOLLOWING TABLE ADDRESSES THE INFORMATION REQUIREMENTS OF REG.2015/1188

Item	Symbol	Value	Unit
Heat output			
Measured seasonal space heating energy efficiency	Measured seasonal space heating energy efficiency		36%
Nominal heat output	P <sub>nom</sub>	2.8	kW
Minimum heat output (indicative)	P min	1.4	kW
Maximum continuous heat output	P <sub>max</sub>	2.8	kW
Auxiliary electricity consumption	,	'	
At nominal heat output	el <sub>max</sub>	n/a	kW
At minimum heat output	el <sub>min</sub>	n/a	kW
In standby mode	el <sub>SB</sub>	0	kW
Type of heat input for electric storage local heaters on	nly		
Manual heat charge control with integrated thermost	at		No
Manual heat charge control with room and/or outdoor temperature feedback			No
Electronic heat charge control with room and/or outdoor temperature feedback		)	No
Fan assisted output			No
Type of heat output/room temperature control (select	one)	'	
Single stage heat output, no temperature control		No	
Two or more manual stages, no temperature control		No	
With mechanical thermostat temp control		No	
With electronic temperature control			No
Electronic temperature control with day timer		No	
Electronic temperature control with week timer			Yes
Other control options (multiple selections possible)			
Room temperature control with presence detection		No	
Room temperature control with open window detection		No	
Room temperature control with distance control option		Yes	
Room temperature control with adaptive start control		No	
Room temperature control with working time limitation		No	
Room temperature control with black bulb sensor		No	

## **GENERAL SAFETY RULES**

- These heaters are for INDOOR USE ONLY.
- DO NOT expose the heater or power cable to rain or wet conditions. Any water entering the heater will increase the risk of electric shock. DO NOT use this heater in a bathroom, shower room or any other wet environment.
- 3. NEVER locate the heater near combustible materials such as curtains, furniture etc. Allow at least 1 metre distance.
- 4. DO NOT locate the heater close to an adjacent wall or low ceiling. Allow a distance of at least 1 metre from a wall or ceiling. Avoid placing the heater directly below power socket outlets.
- 5. Take care to ensure that the wire guard cannot be covered.
- Do not operate heater in explosive atmospheres such as in the presence of flammable liquids, gases or dust such as in a paint spray booth or any explosive environment.
- 7. NEVER stand the heater on a movable vehicle where it could tip over.
- 8. DO NOT allow the halogen tubes to become covered with dust which could become a fire hazard. If used in a dusty workplace it should be cleaned as described under Cleaning and Maintenance.
- 9. NEVER touch the halogen tubes for at least 15 minutes after switching off.
  - 10. DO NOT leave the heater unattended.



- 11. If children are present always use with a fireguard.
- 12. Store the heater out of the reach of children and do not allow persons unfamiliar with these instructions to operate it.
- 13. Use ONLY in an upright position.
- 14. ALWAYS manoeuvre the heater using the handles provided and avoid trapping the fingers between the handle and the heater body.
- 15. NEVER leave the heater unattended while in use. Turn off at night if unattended.

## **ELECTRICAL SAFETY**

- Electrical appliances must match the power outlet. Never modify the plug in any way. Do not use adaptor plugs with earthed (grounded) appliances. Correct plugs and outlets will reduce the risk of electric shock.
- 2. DO NOT abuse the electrical cable. Never use the cable for pulling or unplugging the heater. Keep the cable away from sources of heat, oil,

- sharp edges or moving parts. Damaged or tangled cables increase the risk of electric shock.
- 3. Keep the power cable well away from machines and ensure an adequate electrical supply is close at hand so that the operation is not restricted by the length of the cable.
- 4. DO NOT use this product with an extension cable.
- 5. ALWAYS disconnect from the power supply before moving the heater or performing any cleaning or maintenance tasks.
- 6. Inspect the mains cable regularly for signs of damage. DO NOT use if it is damaged, and ALWAYS keep it away from the source of heat.
- Check the heater for damage before use. DO NOT use if the heater tubes are damaged or broken. Any damage should be properly repaired or the part replaced. If in doubt, **DO NOT** use. Consult your local Clarke dealer.

#### **SERVICE & REPAIRS**

 If necessary, have your heater repaired by a qualified person using identical replacement parts. This will ensure that the safety of the appliance is maintained.

Please keep these instructions in a safe place for future reference.

## **ENVIRONMENTAL RECYCLING POLICY**

Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

## **ELECTRICAL CONNECTIONS**

## DEVIL 371PC (110V) UNITS

The 110V model is fitted with a 32 amp, three pin industrial plug to EN 60309 and MUST be connected to a 110 volt, 1 phase 50 Hz supply through a suitably fused isolator switch. On no account must a 230V, 13 amp (BS1363) plug be used.

**NOTE:** If a portable 110V transformer is used, make sure it has a rated capacity sufficient to take the load of the heater.

If the heater is hard wired into the electrical system, all work must be carried out in accordance with IEE regulations.

If in any doubt, consult a qualified electrician. DO NOT attempt any electrical repairs yourself.

## **UNPACKING AND ASSEMBLY**

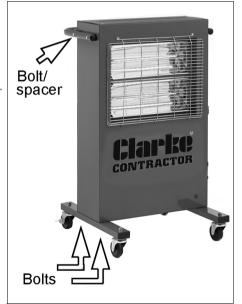
### UNPACKING

Before assembling, please check contents against the following list and advise your dealer immediately if any parts are missing.

- 1 x Heater
- 2 x Support Frames with castors (2 with brakes)
- 2 x Halogen tubes
- 1 x Handle
- 1 x Fixings pack
- 1 X Remote control unit

### **ASSEMBLY**

- Attach the support frames to the heater body using 14mm securing bolts supplied.
- Attach the handle to each side of the heater body using the 10 mm bolts and plastic spacers. supplied.
- 3. Fit the halogen tubes (see detail on page 11).



## **OPERATION**



WARNING: FOR SAFE OPERATION OF THIS HEATER IT IS ESSENTIAL TO READ THESE INSTRUCTIONS BEFORE USE.

#### USING THE REMOTE CONTROL

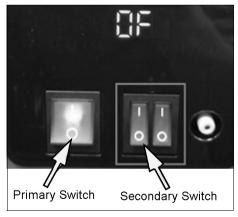
All operations must be done using the remote control.

- 2 x AAA batteries are required and are installed as shown by the diagram found inside the control unit.
- The remote control must be directed at the heater display panel. It has a range of approx 2.5 metres and must be aimed at the correct angle.



#### MANUAL OPERATION

- Position the heater where required, and lock the castors to prevent the heater from moving. Always move the heater using the handles.
- 2. Connect the power cable to a suitable power supply.
  - The heater is equipped with an anti-tilt switch that automatically cuts the power off should the heater tip over. If this happens, stand the heater upright and it will immediately re-set.



- 3. Switch on the power at the primary switch.
  - The neon indicator will illuminate.
- 4. Set one or both secondary switches to the I (On) position as required.

- The left one controls the upper heating element and the right one controls the lower.
- Press the ON/OFF button on the remote control to switch the elements on.
  - The secondary switches will each illuminate to show that the heating element is in use.
  - The ambient room temperature will be displayed.
- Set the target temperature by pressing the + and - arrow keys on the remote control to a value between 15°C and 45°C.



- During normal operation the bar below the temperature display pulsates to indicate that the heater is operating.
- When the heater has reached the target room temperature, the bar will become solid and the heater will automatically turn off. It will resume working when the ambient temperature falls 2°C below the target temperature.

## PROGRAMMING THE TIMER

When programming, note that the selection will only remain actively displayed for approximately 10 seconds before reverting to the beginning of the process. If unsure what value you wish to enter, you can maintain the display by making constant adjustments with the +/- buttons until making your final selection.

#### SETTING CURRENT TIME

- 1. Switch the heater on with the remote control (on/off). The heating elements can be either on or off.
- 2. Press the TIME button.
  - SUN will flash repeatedly.
- 3. Use the left and right arrow buttons to choose a day.
- 4. Press the TIME button to go to the next step.
  - The first 2 digits (HOUR) of the time display will flash.
- 5. Use the + and buttons to scroll to the correct time (24 hr clock).

- 6. Press the TIME button to set the Minutes.
- 7. Use the + and buttons to scroll to the minutes you require.
- 8. Press the TIME button to finish the time and day set up.
  - The current time and day will show as a constant when the WEEK TIMER is activated

**NOTE:** The Time and Day setting will be lost and will need to be reset. Once the heater is powered off completely, (either from the power switch or wall supply) Follow steps 1 to 8 to reset the clock.

#### THE WEEK TIMER

- The Week Timer covers a 7 day week (Monday to Sunday). You can program up to 3 individual "on/off" cycles each day.
- Each heating period can be set for a maximum of 24 hours in 10 minute increments. It is not possible for the program to span two consecutive days e.g. Monday 10pm to Tuesday 2am.
   If the user requires the heater to operate over the midnight period they would have to set two programs, one for Monday and one for Tuesday.
- The user can then also set two further programs for Tuesday if required.
- Always ensure that the heating elements are switched to the ON position when in Timer mode.

## SETTING THE WEEK TIMER

#### SETTING THE DAY AND PROGRAM

- 1. Press the WEEK TIMER button on the remote control.
  - Monday will start to flash.
- 2. Press the left and right arrow keys to select the day you want your program to start and press the WEEK TIMER button to confirm.
  - Program 1 (01) will now flash.
- 3. Use the + and buttons to select the program you want to set and press the WEEK TIMER button to confirm.
  - The programs will be displayed as 01, 02 and 03.
  - The first two digits of the clock will flash and the word ON will be displayed.
- 4. Use the + and arrow keys to select the starting hour and press the WEEK TIMER button to confirm.

- The second set of digits will flash.
- 5. Use the + and arrow keys to select the starting minutes and press the WEEK TIMER button to confirm.
  - The display will show OF and the first two digits of the clock will flash.
     You can now set the time the heater will turn off.
- 6. Use the + and arrow keys to select the finishing hour and press the WEEK TIMER button to confirm.
  - The second set of digits will flash.
- 7. Use the + and arrow keys to select the finishing minutes (in increment of 10) and press the WEEK TIMER button to confirm.

#### SETTING FURTHER PROGRAMS

1. Repeat the above steps to program each individual program/day.

#### **ACTIVATING THE TIMER FUNCTION**

- 1. To activate the TIMER mode press the TIMER On/Off button.
  - The Day and Time will be shown on the display.
- 2. To turn the heater off press the TIMER On/Off button. The day and time will be removed from the display and only temperature will be shown.

#### TO CLEAR A PROGRAM

- 1. To clear a program press the WEEK TIMER button once scroll to the day that needs to be reset using the left and right arrows.
- 2. Press and hold the TIMER On/Off button for approximately 3 to 4 seconds.
  - A beep will be heard from the heater and the time for that program will show 00:00. The program is then ready to be set once again.

#### **ECO MODE**

Press the ECO button once to activate ECO mode.

- Only ambient room temperature will be displayed.
- Other lights on the display will switch off.

## **CLEANING & MAINTENANCE**

If the heater has been used, always allow it to cool down for at least 15 minutes and disconnect from the power supply before performing any maintenance tasks.

## FITTING/ REPLACING HALOGEN TUBES

Before attempting to fit/replace halogen lamps, ensure the heater is switched off and isolated from the electrical supply by removing the plug from the socket.

**NEVER** handle the heater tubes with bare hands. **ALWAYS** handle using either a soft clean glove or a piece of soft clean cloth wrapped around the lamp.

- 1. Loosen and remove the two pozidrive screws securing the wire guard, remove the guard and store removed parts safely.
- 2. To remove the tube, grasp and gently but firmly push it to one end of the heater. The tube holders are spring loaded and will allow the tube sufficient movement to clear the opposite holder.
- 3. Remove the tube and dispose of it, according to local regulations.
- 4. Fit new halogen tubes in reverse order.
- 5. Replace the guard using the screws removed earlier.

The heater is now ready for use again.

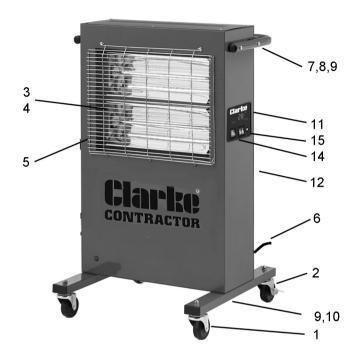
## **PERIODICALLY**

- If there is any serious build up of dirt, wipe the exterior thoroughly with a damp cloth. Take care that no moisture enters the heater. Take care NOT to touch the tubes with your fingers.
- 2. Inspect the power cable for damage. Undue heat will cause the cable to stiffen and crack. If this is found, have the cable replaced. Check cable routing and ensure it is well away from the heat source.
- 3. Ensure heating tubes are clear of dust (use compressed air to clean if possible. (ALWAYS wear a dust mask if performing this operation)
- 4. Refer to your CLARKE dealer if internal repair is required.
- 5. When storing the heater, allow it to cool down, then place it in its packing box for storage in a dry, ventilated place.

## **FAULT FINDING**

SYMPTOM	PROBLEM	SOLUTION	
Heater does not operate, although plugged in and	Plug is loose/bad connection.	Remove the plug & check the connection of the plug and socket.	
switched on.	Fuse blown.	Replace if necessary and investigate the cause. If fuse blow repeatedly, consult your Clarke dealer.	
	No power at socket outlet	Insert plug into a suitable socket.	
	Tilt safety switch is disabling unit	Ensure unit is upright. If switch does not re-set, consult your Clarke dealer.	
Heater tube is glowing hot.	Input voltage incorrect.	Ensure power supply matches the rating on the label.	
	Air flow partly blocked.	Ensure the heater is kept away from any objects or materials which could block the circulation of air.	
Heater does not	Batteries defective.	Replace batteries.	
respond to remote controller.	Controller is out of range or not pointing at the display panel.	Move closer or try different angles of pointing the controller at the heater.	

## **COMPONENT PARTS**



No	Description
1	Castor (standard)
2	Castor with brake
3	Ceramic end cap
4	Halogen tube
5	Wire guard
6	Power cable
7	Handle
8	Plastic spacers

No	Description
9	Bolt
10	Support frame
11	Control panel assembly
12	PCB control unit (not shown)
13	Tilt safety switch (not shown)
14	ON/OFF switch (power)
15	ON/OFF switches (lamps)
16	Remote control unit (not shown)

## **DECLARATION OF CONFORMITY**





Hemnall Street, Epping, Essex CM16 4LG

#### **DECLARATION OF CONFORMITY**

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

2014/30/EU Electromagnetic Compatibility Directive.

2014/35/EU Low Voltage Equipment Directive.

2011/65/EU Restriction of Hazardous substances.
2009/125/EC Eco- Design Directive (EU 2015/1188).

The following standards have been applied to the product(s):

EN 60335-2-30:2009 +A11:2012, EN 60335-1:2012, EN 61000-3-11:2000, EN 55014-1:2017, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013,

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2019

**Product Description:** 

Electric Quartz Halogen Heater:

Model number(s):

Devil 371PC (2.8 kW / 110V).

Serial / batch Number:

N/A

Date of Issue:

24/06/2019

Signed:

J.A. Clarke

Director

18-0268 Devil 371PC Electric heaters DOC (rev0)

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