



INFRA RED CABINET HEATER  
MODEL 296

# OPERATING INSTRUCTIONS

APPROVED FOR USE IN THE UNITED KINGDOM (GB)

## IMPORTANT

Before connecting a gas container and operating this appliance, please read these instructions. Read also the heater Safety Instructions - spare copies may be obtained from your Dealer.

\* This appliance **MUST NOT** be used in high rise flats, basements, bathrooms or bedrooms.  
This heater is an infra-red heater operating from a 7 Kg cylinder of BUTANE GAS (G30) at 28.0 mbar (11.2 In w.g.)  
The heater also incorporates two distinct safety devices.

1. **Thermo-Electric Flame Failure Device:** Near to the igniter at the bottom of the radiants is a special thermocouple probe which is connected by a capillary tube to the gas tap at the top of the casing. In use, this probe when heated by the pilot, opens the main gas supply so that the radiants can be lit. If, for some reason, the flame of the pilot becomes extinguished, the thermocouple head cools, automatically shutting of the gas to the main burners and rendering the appliance safe.

2. **Atmospheric Analyser:** This is combined with the pilot near the base of the radiants. During normal operation of the heater, carbon dioxide is produced, just as results from a person breathing. In an ordinarily ventilated room this gives no trouble, but sometimes in enclosed spaces an excess can result, creating a stuffy atmosphere. The atmosphere analyser senses when a certain level of carbon dioxide has been reached, and the pilot flame ceases to heat the thermocouple probe the flame failure device, so that the heater automatically switches off.

### BATTERY

A battery is supplied in the packaging. Fit the battery inside the black plastic cover situated inside the gas cylinder compartment near the bottom. The battery is 1.5V C size (e.g. HP11, LR14 or equivalent)

### BEFORE LIGHTING

Make sure all packaging has been removed from around the heater.

### POSITIONING OF HEATER:

**DO NOT** place clothes or other materials on the heater.  
**DO NOT** position heater close to chairs and fabrics.  
**DO NOT** move heater from room to room when lit.  
**DO NOT** position heater alongside a wall or near curtains, etc.  
**ALWAYS** face heater towards the centre of the room.  
Refer to Heater Safety Instructions.

### VENTILATION:

#### USE ONLY IN A WELL VENTILATED ROOM

Adequate ventilation must be provided in rooms in which the heater is used. This ensures removal of the products of combustion and allows the entry of replacement air. Adequate ventilation should considerably reduce the possibility of condensation occurring.

HEAT INPUT	RADIANTS CONTINUOUSLY ON	SMALLEST SUITABLE ROOM VOLUME		MINIMUM SIZE OF OPENING FOR VENTILATION FOR LIMITATIONS (SEE NOTE BELOW)
		LIVING ROOM	OTHER ROOMS SEE * ABOVE FOR LIMITATIONS	
1.48 k.W. 106 g/h	1	29.6 m <sup>3</sup> 1045 ft <sup>3</sup>	15.0 m <sup>3</sup> 530 ft <sup>3</sup>	50.0 cm <sup>2</sup> 7.8 in <sup>2</sup>
2.84 k.W. 204 g/h	2	56.8 m <sup>3</sup> 2005 ft <sup>3</sup>	28.4 m <sup>3</sup> 1003 ft <sup>3</sup>	71 cm <sup>2</sup> 11.0 in <sup>2</sup>

NOTE: The ventilation opening area should be equally divided between high level and low level.

### WARNING - LEAKAGE OF GAS

Should a gas leak be suspected, close cylinder valve, extinguish all naked lights. Locate by smell or with a soapy solution - NEVER USE A MATCH.

### OPERATION OF THE HEATER

Ignition is battery powered. Pressing in the control knob at the Ign/Min position sets off a series of electronically generated sparks near the tip of the pilot.

The gas is turned on and off at the cylinder

### TURN ON THE GAS CYLINDER BY EITHER

- (a) Turning cylinder valve anti-clockwise where a screwed cylinder connection is used.  
OR  
(b) Turning the black switch so that it points upwards where a switch-on system is used.

### TO LIGHT:

The heater should have been fitted with a gas cylinder in the way illustrated on the safety card. It is important that all connections have been correctly made to prevent any gas leakage.

1. Reach in through the aperture over the rear door of casing and open the gas cylinder valve.

2. Press down and hold the control knob at the Ign/Min position. The pilot and right hand radiant should light.
3. While the pilot and right hand radiant are alight, continue to hold down the control knob for a further ten seconds to allow time for the thermocouple to heat up. On releasing, the heater should remain alight. If it does not, repeat the lighting sequence.
4. Select your desired heating level. The initial ignition position gives minimum heat with one radiant only alight. For a greater heat level turn the control knob to Max. At this position both radiants will be alight. Note that the control knob has to be partially depressed at the Ign/Min position to allow it to be turned to the Max position.

**TO EXTINGUISH:**

TURN OFF HEATER COMPLETELY BY:

EITHER

(a) Turning cylinder valve clockwise where a screwed connection is used.

OR

(b) Turning the black switch so that it points in a near horizontal position if a switch-on system is used.

(DO NOT touch the centre button if fitted to the black switch of your regulator).

DO NOT ATTEMPT to re-light until five minutes have elapsed.

**NOTE - FOR SWITCH-ON SYSTEM:** When the heater is alight, NEVER turn the switch to disconnect the regulator from the cylinder. Wait until the heater and pilot go out, then and only then, should the regulator be disconnected if the cylinder requires changing.

If the black switch of your regulator is fitted with a centre button this must be depressed before turning to the disconnect position.

It is dangerous to attempt to disconnect the regulator from the cylinder when the heater is alight.

**CONNECTION**

A suitable regulator set for 28 mbar (11.2 In w.g.) MUST be used to adjust to the correct operating gas pressure. A flexible hose to B.S. 3212 type 2 (minimum length 400mm) should be used with suitable jubilee or O clips. When connecting regulator to container avoid undue twisting of hose.

**CHANGING CONTAINERS:**

Changing containers must not be undertaken in the presence of naked lights. Change cylinders in accordance with the instructions provided in the Heater Safety Instructions.

**SAFETY GUARD:**

The guard on this appliance conforms to the requirements of BS 1945 - 1971; and satisfies the heater appliances (Fire Guards) regulations.

To guard is to prevent risk of fire or injury from burns and no part of it should be permanently removed.

**IT DOES NOT GIVE FULL PROTECTION FOR THE ELDERLY, YOUNG CHILDREN OR THE INFIRM.**

**GENERAL INFORMATION**

Appliance Cat. I<sub>3B</sub> EN437

**AIR IN THE SUPPLY PIPE:**

After changing to a new gas cylinder an amount of air will be present in the supply pipe, and it may be necessary to hold the control knob for a little longer than mentioned in the lighting instructions, so as to enable gas to reach the pilot for ignition.

**MAINTENANCE AND STORAGE :**

The body panels of this heater are made from rugged steel. Cleaning is simply performed by either dusting, or wiping with a damp cloth. The remaining parts of the heater should require only occasional dusting. Cleaning should be done when the heater is cool. When out of use for long periods, the heater should be covered and stored in a dry dust-free place. For continued trouble-free and safe use of the heater we recommend that it is serviced every one or two years. See your dealer.

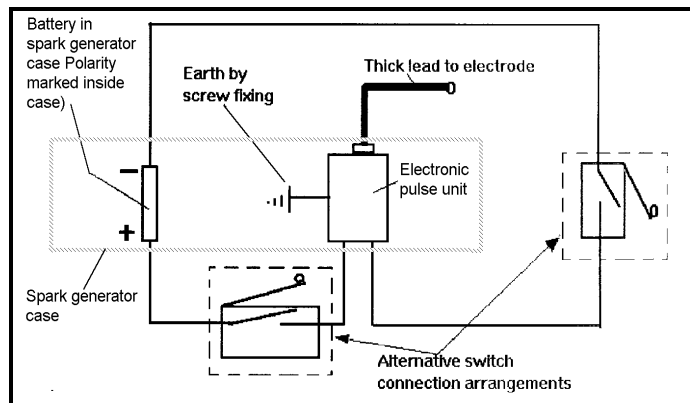
**WARNING:** For your own safety do not allow unauthorised interference to the heater. Servicing must be carried out by a qualified engineer - See your dealer.

**IGNITION SYSTEM WIRING**

When servicing the ignition system please note that the system circuitry can vary. There are two alternative switch arrangements. The wire colours may vary from one appliance to another. Refer to the wiring diagram. If there is an ignition system failure, make the following checks before deciding to replace any major component:

1. Check that the battery is not flat.
2. Check that the wire connections are secure and that there is a good earth contact to the generator unit.
3. Check that the wiring sequence conforms to that in the diagram.
4. Check that the battery is connected the correct way
5. Check that the control knob depresses the microswitch leaf sufficiently to activate the switch.

If ignition sparks are still not generated, try reversing the leads to the microswitch.



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