

# Kinlux®

## User's Manual and Operating Instructions

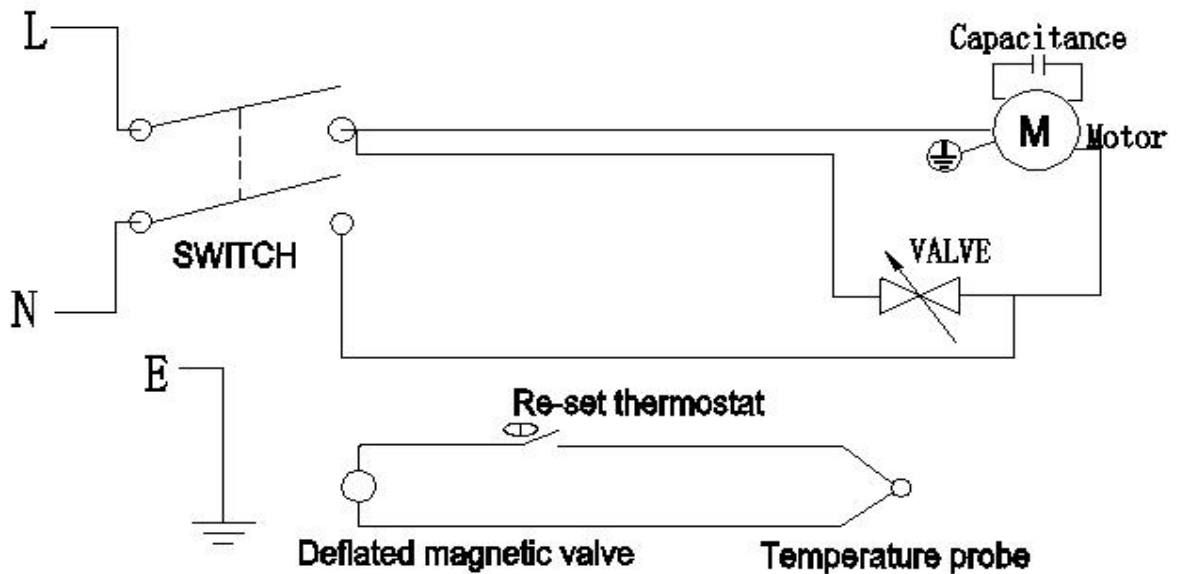
LPG/Gas Forced Heater  
30T/50T

**READ INSTRUCTIONS CAREFULLY:** Read and follow all instructions. Place instructions in a safe place for future reference. Do not allow anyone who has not read these instructions to assemble, light, adjust or operate the heater.

### STRUCTURE CHART



### CIRCUIT DIAGRAM



## **HEATER SPECIFICATIONS**

Model	BGA1401-30T	BGA1401-50T
Rating	61,500BTU-10,2000BTU (18-30kw)	10.2000BTU-17,0000BTU (30-50kw)
Fuel Consumption	1.30-2.18kg/h	2.18-3.63kg/h
Fuel Orifice Port Size	1.28mm	1.4mm
Air Flow Temp.	430°C	360°C
Type Of Gas	For use with LPG only	
Gas Supply Pressure	700mBar	1500mBar
Electricity Input	220-240V~50Hz	
Ignition	piezo	
Primary Flame Control	Thermal Probe Operated Gas Valve	
Overheating Protection	110°C	110°C

### **WARNINGS**

**YOUR SAFETY IS IMPORTANT TO YOU AND TO OTHERS, SO PLEASE READ THESE INSTRUCTIONS BEFORE YOU OPERATE THIS HEATER.**

#### **GENERAL HAZARD WARNING:**

**FAILURE TO COMPLY WITH THE PRECAUTIONS AND INSTRUCTIONS PROVIDED WITH HEATER, CAN RESULT IN DEATH, SERIOUS BODILY INJURY AND PROPERTY LOSS OR DAMAGE FROM HAZARDS OF FIRE, EXPLOSION, BURN, ASPHYXIATION, CARBON MONOXIDE POISONING, AND/OR ELECTRICAL SHOCK.**

**ONLY PERSONS WHO CAN UNDERSTAND AND FOLLOW THE INSTRUCTIONS SHOULD USE OR SERVICE THIS HEATER. NOT FOR HOME OR RECREATIONAL VEHICLE USE.**

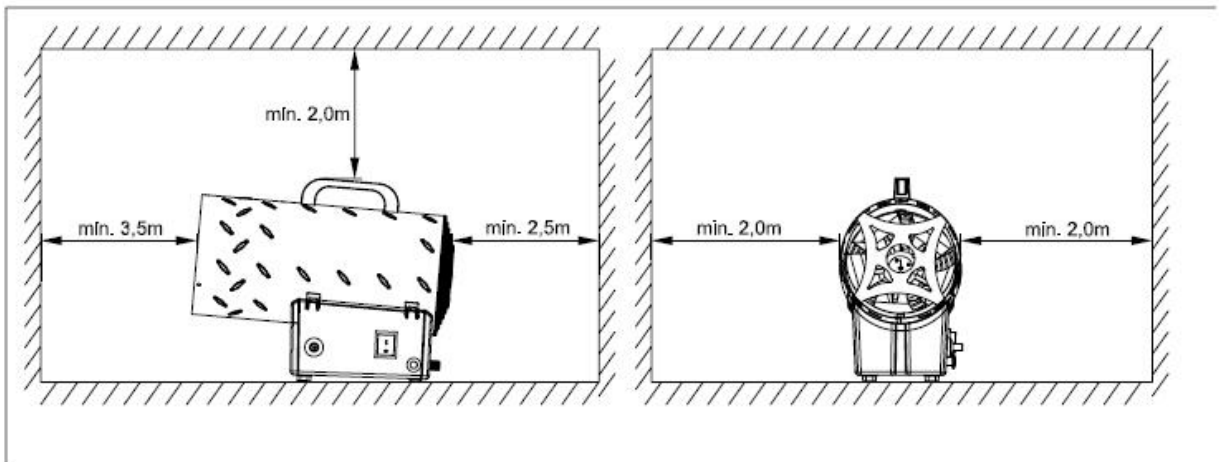
- Use only in a well ventilated area and away from combustible materials
- NOT to be used for the heating of habitable areas of domestic premises, for use in Public buildings, refer to national regulations.
- After use turn off the gas supply at the cylinder valve.
- Ensure that the fan is operating correctly before lighting the burners.
  
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.



- **WARNING:** In order to avoid overheating, do not cover the heater.

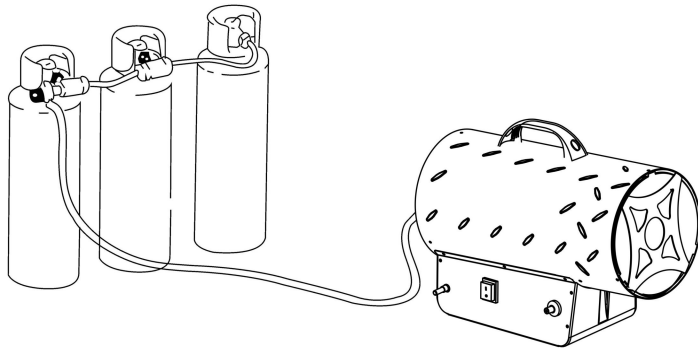
- Children of less than 3 years should be kept away unless continuously supervised.
- Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.
- CAUTION-some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.

### Safety Clearance



## 1. GENERAL INSTRUCTION

- 1.1. The heaters mentioned in this manual must only be used outdoors or in well ventilated surroundings.
- 1.2. For every KW it is necessary to have permanent ventilation of  $25\text{cm}^3$ , equally distributed between the floor and high level, with a minimum outlet of  $250\text{cm}^3$ .
- 1.3. Gas cylinders must be used and kept in accordance with current regulations.
- 1.4. Never direct the hot air flow towards the cylinder.
- 1.5. Use only the supplied pressure regulator.
- 1.6. Never use the heater without its cover.
- 1.7. Do not exceed  $100\text{W}/\text{m}^3$  of free room. The minimum volume of the room must be larger than  $100\text{m}^3$ .
- 1.8. Do not obstruct the inlet or outlet sections of the heater.
- 1.9. If the heater has to work for a long period at its maximum capacity, it's possible that ice will form on the cylinder. This is due to excessive vapour withdrawal. Not for this reason, or for any other, should the cylinder be heated. To avoid this effect, or at least to reduce it, use a large cylinder or two cylinders linked together (figure1).



(figure1)

- 1.10. Do not use the heater in cellars, basements or in any room below the ground level.
- 1.11. In case of malfunction, please contact the technical assistance service.
- 1.12. After use, turn the gas cylinder tap off.
- 1.13. The gas bottle must always be replaced following safety rules away from any possible source of ignition.
- 1.14. The gas hose must not be twisted or bent.
- 1.15. The heater must be placed where there is no risk of fire, the hot air outlet must be at least 3m from any flammable wall or ceiling and must never be directed towards the gas bottle.
- 1.16. Only use original gas hose and spare parts.
- 1.17. Heaters described in this leaflet are not intended for domestic use.
- 1.18. In the case that a gas leak is found or suspected, immediately close the gas cylinder, switch the heater off and do not use it again until it has been checked by a qualified service centre. If the heater is installed indoors, provide a good ventilation by opening door and windows completely. Do not produce sparks or free flames.
- 1.19. If in any doubt contact your supplier.

## **2. INSTALLATION**

- 2.1 Connect the heater to a suitable electric socket /230V~50Hz
- 2.2 Make sure that the machine is properly earthed.
- 2.3 Connect the gas supply hose to the pressure regulator and connect the regulator to a suitable LPG cylinder.
- 2.4 Open the tap of the cylinder and check the supply hose and fittings for gas leak. For this operation it is recommended to use an approved leak detector.
- 2.5 NEVER USE NAKED FLAMES.
- 2.6 For automatic appliances, connect the room thermostat to the socket on the appliance and adjust it to the required temperature.

## **3. INSTRUCTION FOR USE**

### **PREPARING FOR OPERATION**

1. Check the heater for possible shipping damage.
2. Connect the hose and regulator assembly to the LPG cylinder by rotating the nut counterclockwise into the LPG cylinder's valve outlet and securely tighten.

3. Open the cylinder's gas valve and check all gas connections with a soap and water solution.
4. Connect power cord to well-grounded 220V~, 50Hz source of power.

### 3.1 IGNITION / Manual ignition

- a. Turn the power switch to position I and check that the fan starts running correctly. (Figure. 2)

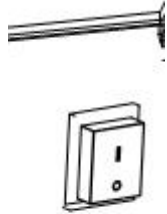


Figure.2

- b. Push the gas valve button and push repeatedly the piezoelectric lighter until the flame lights up. (Figure 3-4)

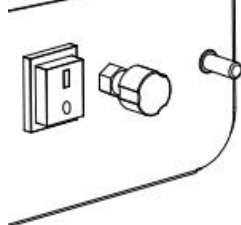


Figure.3

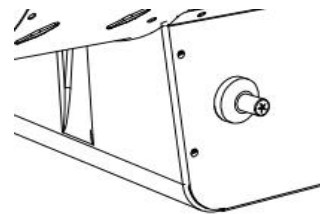


Figure.4

- c. As the flame lights up, keep the valve button pushed for 10 seconds approx. should the heater stop when the valve button has been released, wait one minute and repeat the starting operation keeping the valve button pushed for a longer time.
- d. Regulate the gas flow pressure according to the thermal power desired, by turning the wheel of the pressure reducer anticlockwise to increase the pressure or clockwise to decrease.
- e. Contact your supplier should any problem continue.
- f. Regulate the flame and output by turning the adjustable knob anticlockwise to increase or clockwise to decrease. (Figure 3).

### CAUTION

**If ignition is difficult or irregular before repeating the ignition operations make sure that the fan is not locked and the air inlet and outlet are unobstructed.**

### 3.2 SWITCH OFF

To stop the heater, shut off the gas cylinder tap. Let the fan run until the flame shuts down and then turn the fan switch to position O.

### 3.3 AIR CONDITIONING

- a. The heater can also be used as a ventilator.
- b. In this case remove the gas supply hose and connect the plug of heater to a suitable electrical supply.
- c. Set the fan switch to position I.

## **ODOR FADE WARNING**

### **!!! WARNING**

#### **Asphyxiation Hazard**

1. Do not use heater for heating human quarters.
2. Do not use in unventilated areas.
3. The flow of combustion and ventilation air must not be obstructed.
4. Proper ventilation air must be provided to support the combustion air requirements of the heater being used.
5. Lack of proper ventilation air will lead to improper combustion.
6. Improper combustion can lead to carbon monoxide poisoning leading to serious injury or death. Symptom of carbon monoxide poisoning can include headaches dizziness and difficulty in breathing.

## **FUEL GAS ODOR**

**LP gas and natural gas have manmade odorants added specifically for detection of fuel gas leaks.**

**If a gas leak occurs you should be able to smell the fuel gas. Since Propane (LP) is heavier than air you should smell for the gas odor low to the floor. ANY GAS ODOR IS YOUR SIGNAL TO GO INTO IMMEDIATE ACTION!**

1. Do not take any action that could ignite the fuel gas. Do not operate any electrical switches. Do not pull any power supply or extension cords. Do not light matches or any other source of flame. Do not use your telephone.
2. Get everyone out of the building and away from the area immediately.
3. Close all propane (LP) gas tank or cylinder fuel supply valves, or the main fuel supply valve located at the meter if you use natural gas.
4. Propane (LP) gas is heavier than air and may settle in low areas. When you have reason to suspect a propane leak, keep out of all low areas.
5. Use your neighbor's phone and call your fuel gas supplier and your fire department. Do not reenter the building or area.
6. Stay out of the building and away from the area from the area until declare safe by the firefighters and your fuel gas supplier.
7. FINALLY, let the fuel gas service person and the firefighters check for escaped gas. Have them air out the building and area before you return. Properly trained service people must repair any leaks, check for further leakages, and then relight the appliance for you.

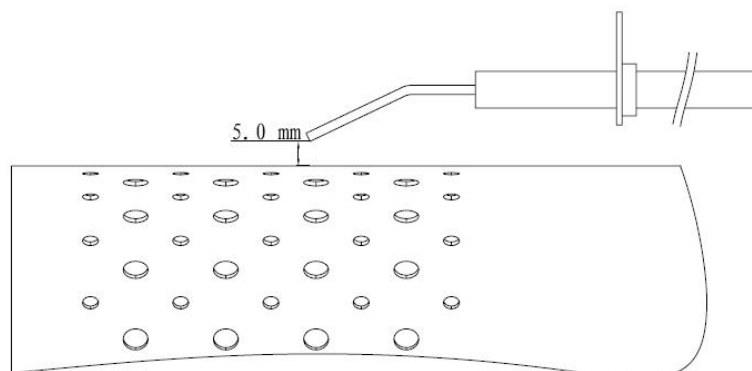
## **4. MAINTENANCE**

- 4.1. The repairs or maintenance operations must only be carried out by qualified personnel.
- 4.2. The unit must be checked by a qualified technician at least once a year.
- 4.3. Regularly check the conditions of gas hose, and gas regulator if it must be replaced only use original spare parts.
- 4.4. Before starting any maintenance operation on the heater disconnect from both gas and electrical suppliers.
- 4.5. If the unit has not been used for a long period we advise that a technician

carries out a general check up before using. It is important to control the following:

4.5.1. Periodically check the gas supply hose conditions and, should it be changed, use only original spare parts.

4.5.2. Check the starting electrode position (see Fig.5).



4.5.3. Check the connections of the safety thermostat and of the thermocouple: they must always be clean.

If necessary clean the fan blade and the inside of the heater using compressed air.

## 5. TROUBLESHOOTING

PROBLEM	CAUSES	SOLUTIONS
The motor does not work	No electricity supply	Check the terminal board with a tester
	The safety thermostat is on	Wait about one minute then restart
The motor works, but the burner does not light up and after few seconds the heater stops	The cylinder gas tap is closed	Open the gas tap
	The cylinder is empty	Use a new cylinder
	The nozzle is obstructed	Remove the nozzle and clean it.
	The solenoid gas valve is not open	Check that the solenoid valve works
The burner lights up but after few seconds the heater stops	There is no spark	Check the position of electrode
	No connection with the earthing system	Check and connect properly
	Defective connection between sensor and safety device	Check and connect properly
The heater stops during operation	Defective safety device	Replace the safety device
	Excessive gas supply	Check the pressure reducer and if required replace it
	Insufficient air flow	Check that the motor works properly
	Insufficient gas supply due to ice formation on the cylinder	Check and use a larger cylinder or two cylinders connected together.