

# SURE HEAT

## *Installation and Operating Instructions for*

# NATURAL & L.P. GAS VENTED GAS LOG SETS

Model: VMO24NG/LP



### **Sure Heat Manufacturing**

1861 West Oak Parkway  
Marietta, GA 30062  
Tel: 800-229-5647  
Fax: 770-424-3842

**WARNING:** It is very important to read the instructions in this manual before starting installation.

- Do not attempt to modify or alter the construction of the fireplace or its components. Any modification or alteration may void the warranty of these units.

**WARNING:** Solid fuel shall not be burned in a fireplace where a decorative appliance is installed.

**WARNING:** If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS:**
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's telephone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

**Batteries not included. Batteries required: 3 "AAA's" for remote and 4 "AA's" for remote receiver.**

# PARTS LIST



PART NO.	DESCRIPTION
1	Burner System
2	Damper Stop Clamp
3	3/8" Flared to 1/2" Gas Inlet Fitting
4	3/8" Flared Tubing
5	Granules
6	Glowing Embers
7	Pipe Dope

# IMPORTANT INFORMATION

- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- Do not place clothing or other flammable material on or near the appliance.
- Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room with the appliance.
- Please retain this manual for future reference.
- The installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code *ANSI Z223.1/NFPA 54*, or the *CSA B149.1, Natural Gas and Propane Installation Code*.
- This appliance must be installed only in a solid fuel fireplace with a working flue and constructed of non-combustible material.
- Installation and repair should be done by a qualified service technician.
- The appliance should be inspected before use and at least annually by a qualified service technician. More frequent cleaning may be necessary due to excessive dust or carpet lint. It is important that the circulating air passageways be kept clean.
- Keep appliance clear and free from combustible materials, gasoline and other flammable vapors and liquids.

## **FIREPLACE SIZING GUIDE:**

<u>Set Size</u> 24"	<u>Opening Height</u> 18"	<u>Front Width</u> 28"	<u>Rear Width</u> 20"	<u>Fireplace Depth</u> 15"	<u>Chimney Opening</u> 50 sq. in.
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The minimum opening that must be provided by the fireplace chimney to vent the unit properly is show above in the sizing chart.

It is necessary to provide adequate combustion and ventilation air. Air for combustion and ventilation must not be obstructed. Provide adequate clearance around air opening in the combustion chamber and adequate accessibility clearance for servicing and proper operation.

**NEVER obstruct the front opening of the fireplace.**

**WARNING:** Any safety guard remove for servicing and appliance must be replaced before operating the appliance.

## **INSTALLATION**

### **Unpacking**

Unpack the appliance carefully and inspect for missing parts or damages that may have occurred during shipping. If any part of the appliance is missing or damaged, please notify Sure Heat Manufacturing at (800) 229-5647.

### **Fireplace Preparation**

The fireplace needs to be properly prepared before installing this fireplace unit.

1. Turn off gas supply to the fireplace.
2. Clean chimney and fireplace floor of any combustible material to limit the smell from the system.

### **Gas Piping and Gas Pressure Requirements**

#### **PREPARATION**

- Check the type of gas that is supplied to your fireplace. Only install the unit that is equipped to operate on the gas that is supplied to your fireplace.
- All gas piping must be installed to comply with local and national fuel gas codes.
- Compounds used on threaded joints of gas piping must be resistant to the action of L.P. gas.
- Before installing the unit, it is necessary to close the main gas valve at the gas meter or L.P. tank. Ensure that there is proper ventilation in the area in which system is operating.

# IMPORTANT INFORMATION

The minimum inlet gas supply pressure is 5.5 inches water column for natural gas and 11.0 inches water column for propane. The maximum allowable inlet gas supply pressure is 10.5 inches water column for natural gas and 13.0 inches water column for propane. If this appliance is to be supplied with L.P. gas the tank or bottle supplying the gas must have a regulator that reduces gas pressure between 11 and 13 inches water column.

**WARNING:** This appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 PSIG.

The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during pressure testing of that system at test pressures in excess of 1/2 PSIG.

## BTU INFORMATION

Set  
24"

Natural Gas  
60,000 BTUs

L.P. Gas  
60,000 BTUs

## INSTALLATION TO EXISTING GAS LINE IN FIREPLACE

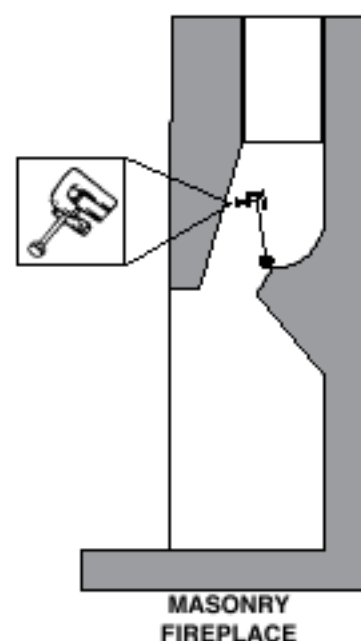
A manual ON/OFF valve should be present within easy reach of the Gas log set. If a manual valve is not present, one must be installed prior to the gas log installation.

## INSTALLATION IN A MASONRY FIREPLACE

A 1/2" gas supply line must be provided to the fireplace. Most installations require drilling an access hole through the Masonry wall. The supply line should be secured and sealed by mortar within the access hole. The supply line should also have an ON/OFF valve in the wall or inside the fireplace.

## DAMPER CLAMP INSTALLATION

This appliance is only to be installed and burned in a fully vented fireplace with a fully functional damper and chimney that is free of any obstructions. A damper clamp is provided to allow any pilot combustion products to vent. The unit must be operated with the damper in the fully opened position. (See Figure 1).



**Figure 1: Damper Stop Clamp**

# IMPORTANT INFORMATION

## BURNER SYSTEM LOCATION

1. The Burner System should be located towards the back and centered in the combustion chamber of the vented fireplace. The Burner System should be centered from left to right, with about an inch of space on either side.

## CONNECTING GAS SUPPLY TO BURNER PAN AND LOG GRATE PLACEMENT

1. Place Burner System in proper location.
2. Attach 3/8" to 1/2" gas inlet fitting to the 1/2" gas supply stub. (See Figure 2)
3. Carefully bend the flared tubing as needed to make the connection between the burner assembly and the gas inlet fitting.
4. Next attach the flared tubing to the burner assembly first, then to the gas inlet fitting.
  - Avoid kinking the flared tubing while bending. If tubing must be cut, use a tube cutter. Flare the cut end of the tube with a flaring tube.

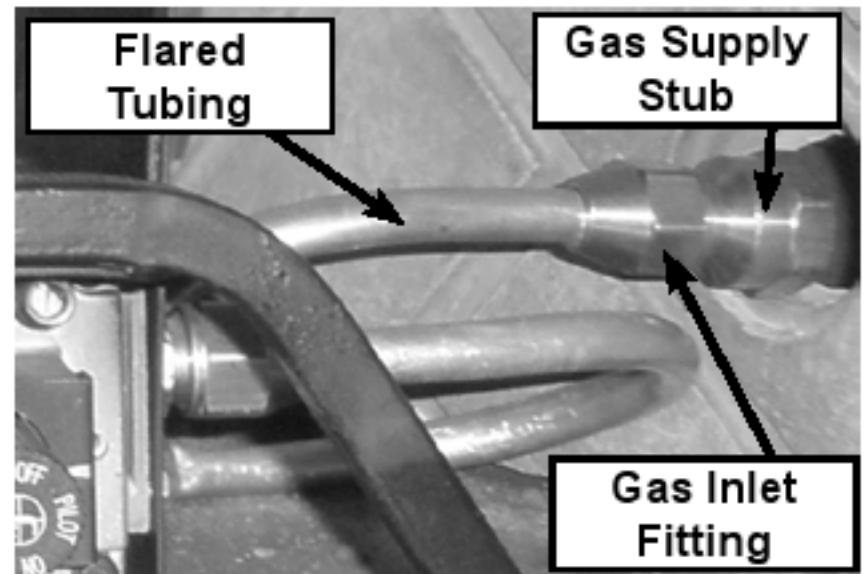


Figure 2

5. Be certain all connections are tight and use pipe compound on all male threads to seal joints.

**NOTE:** The pipe compound must be resistant to the action of L.P. gas. Test all connections with a soapy water solution with gas supply turned on. If bubbles appear on any connection, retighten and reset. Once it is determined there are no leaks whatsoever, turn off gas supply and move to next assembly step.

## GRANULE AND EMBER PLACEMENT

- A. Spread granules over the installed burner pan. Granules should not fill up the entire pan. The granules should stop 3/4" - 1" from the top of the pan. Slope the Granules down toward the front of the pan without overflowing them over the front lip of the burner pan. (See Figure 3)

**NOTE:** Any granules left over can be spread on the floor of the fireplace in front and on side of the log set. The stone should not be placed on or near the burner. Contact with the burner can cause the production of excessive carbon monoxide.

- B. Spread glowing embers over the top of the granules, covering the entire surface area, concentrating on the front and sides of the burner pan for the most realistic burning effect. (See Figure 3)

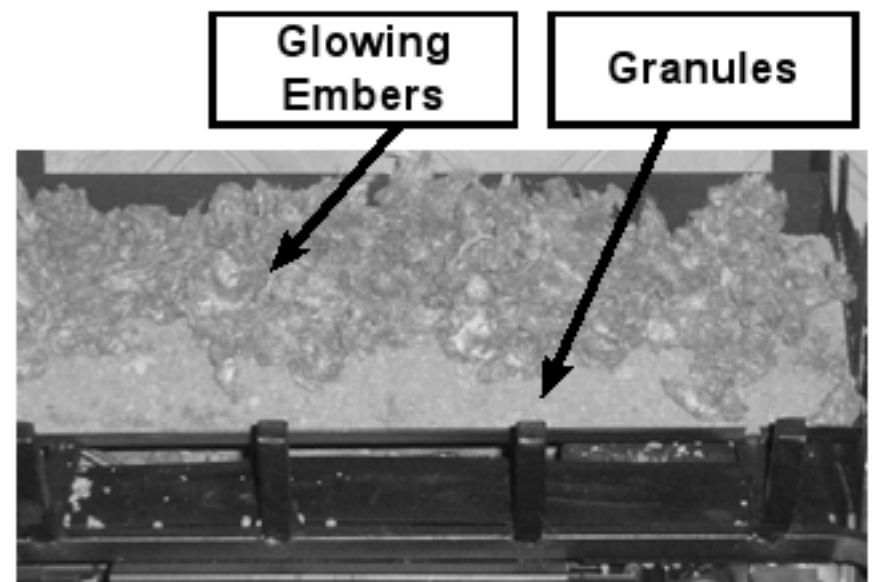


Figure 3

# IMPORTANT INFORMATION

## LOG PLACEMENT

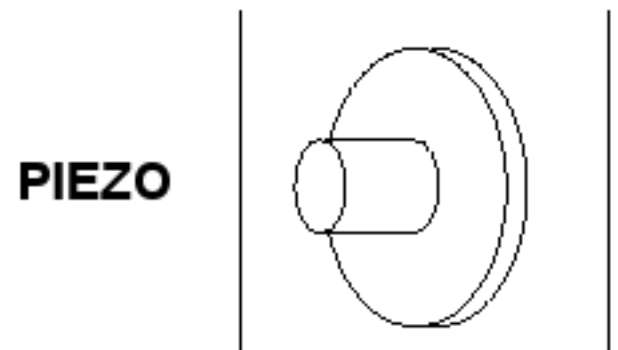


# IMPORTANT INFORMATION

FOR YOUR SAFETY READ BEFORE LIGHTING

**WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.**

- A. This appliance is equipped with an ignition device (piezo) which lights the pilot automatically. If the piezo fail to light the pilot, turn to "Match Lighting" Instructions on Page 9.



- B. BEFORE LIGHTING the unit, smell around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

## **WHAT TO DO IF YOU SMELL GAS:**

- Do not try to light any appliance.
  - Do not touch any electrical switch.
  - Do not use any telephone in your building.
  - Immediately call your gas supplier from a neighbor's telephone.
  - Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
  - Installation and service must be performed by a qualified installer, service agency or the gas supplier.
- C. Use only your hand to push in or turn the *Pilot Control Knob*. Never use tools. If the knob will not push in or turn by hand, do not try to repair, call a qualified service technician.

**WARNING: THE USE OF FORCE OR ATTEMPTED REPAIR  
MAY RESULT IN A FIRE OR EXPLOSION**

- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control which has been under water.

# REMOTE CONTROL INFORMATION

## TECHNICAL DATA

### REMOTE CONTROL:

Supply voltage:

4.5V (three 1.5V "AAA" batteries)

Ambient Temperature Ratings:

0 - 60°C (32 - 140°F)

Radio frequency:

315 MHz

### RECEIVER:

Supply voltage:

6.0V (four 1.5 V "AA" batteries)

Ambient temperature ratings:

0 - 60°C (32 - 140°F)

Radio frequency:

315 MHz

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- 1). This device may not cause harmful interference, AND
- 2). This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **WARNING**

The transmitter and the receiver are radio frequency appliances. If the receiver is mounted inside metallic cases, severe loss of performances (reduction of the range working) may result.

### ATTENTION:

- Turn "OFF" main gas supply of the appliance during installation or maintenance of the receiver.
- Place the receiver's 3 position slider switch in the "OFF" position during installation or maintenance.
- Turn "OFF" main gas supply of the appliance prior to removing or reinserting the batteries in the receiver.



### COMMUNICATION BETWEEN THE REMOTE CONTROL AND THE RECEIVER

To program the transmitter to the receiver, move the three positions slider of the receiver in the REMOTE position and depress the ON/OFF key of the transmitter. The System has got an automatic learning mode that allows the receiver to mate with a new transmitter in the event that the transmitter must be replaced.

As soon as the receiver receives the first correct command from any remote control it captures the new address and then "beeps" 3 times to confirm the synchronization and command execution.



### CHILD SAFETY LOCK-OUT FEATURE

With this function it is possible to deactivate the remote control key.



### BACKUP FUNCTION

If the batteries of the Receiver are low, the appliance can be switched on manually by moving the 3 position slider switch on the Receiver to the ON position.

### INSTALLING BATTERIES (Batteries not included)



Install four (4) "AA" batteries into the remote receiver box as shown on the left.



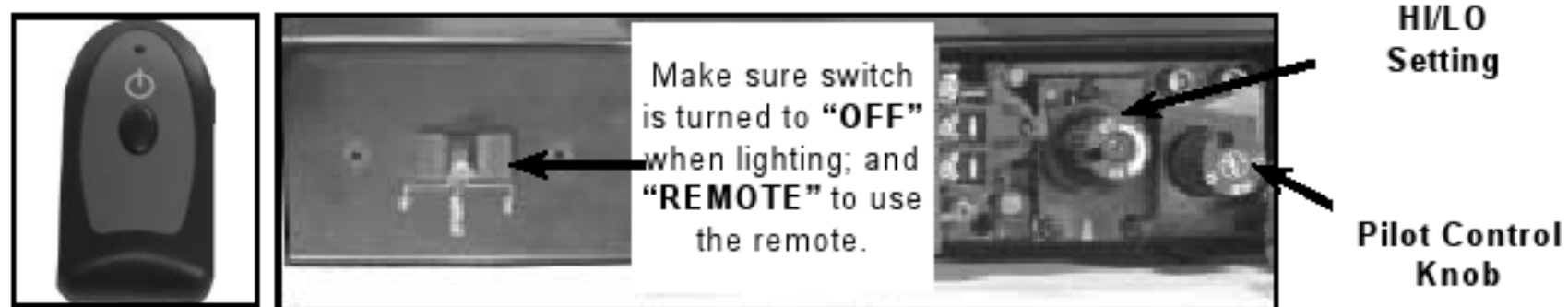
Install three (3) "AAA" batteries into the remote control as shown on the left.



# LIGHTING INSTRUCTIONS

1. **STOP!** Read the safety information label found on the unit.
2. Make sure the switch (Not the *Pilot Control Knob*) is turned to "OFF" (See Figure 4)
3. Turn off all electrical power to the unit.
4. Push in *Pilot Control Knob* slightly and turn clockwise to "OFF".
5. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor.
  - If you smell gas, **STOP!** Follow "B" on the Safety Information label.
  - If you don't smell gas continue on to the next step.
6. The pilot is located by the main burner.
7. Push in the *Pilot Control Knob* slightly and turn counter-clockwise to "Pilot".
8. Hold the *Pilot Control Knob* slightly and turn counter-clockwise to "Pilot".
9. Continue holding the *Pilot Control Knob* for up to one (1) minute before releasing. The knob will pop back out upon release. Pilot should remain lit. If it goes out repeat steps 5 through 8.
  - If knob does not pop out when released, stop and immediately call your service technician.
  - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician.
10. Push in the *Pilot Control Knob* and turn counter-clockwise to "ON".
11. **It will take 2-3 minutes for thermocouple to heat up and flame to appear.**
12. This valve is equipped with a HI/LO feature. Set unit to desired flame height. The valve is also equipped with a safety lockout feature that will prevent the relighting of the pilot after it is extinguished. You must wait one (1) minute for valve to reset itself before relighting the pilot.
13. Then move switch to remote. You will then be able to switch the unit "ON" or "OFF" using the remote.
14. To operate unit with remote:
  - a. Make sure switch is turned to "REMOTE"
  - b. Make sure *Pilot Control Knob* is switched to "ON"
  - c. Press button **once** to turn unit "ON". You will hear a soft beep than the flame will appear.
  - d. To turn the unit "OFF". Press the button on the remote **once** after five (5) seconds the flame will disappear and the unit will turn off (NOTE: the pilot light will remain on).

Figure 4



## **MATCH LIGHTING INSTRUCTIONS**

If the pilot cannot be ignited with the piezo, it can be manually lit with a match. Follow steps 2 through 8 in the above Lighting Instructions then:

- Push the *Pilot Control Knob* in fully and hold it in.
- Immediately light the pilot with a match. Continue to hold the *Pilot Control Knob* in for about one (1) minute.
- After one (1) minute, release the knob and it will pop back out. The pilot should remain lit. If it goes out, repeat steps 2 through 8.
- If the control knob does not pop out when release, **STOP** and immediately call your service technician or gas supplier.
- If the pilot will not stay lit after several tries, turn the *Pilot Control Knob* clockwise to "OFF" and call your service technician or gas supplier.

## **TO TURN GAS OFF TO APPLIANCE**

1. Turn the switch to "OFF"
2. Push in the *Pilot Control Knob* slightly and turn clockwise to "OFF". **DO NOT FORCE.**

# IMPORTANT INFORMATION

## MAINTENANCE OF THE SYSTEM

- Under normal use, this unit will require only limited cleaning.
- To clean the unit, first turn the Pilot Control Knob to "OFF" and allow the system to cool down.
- The logs and grate can get very hot. Handle only when the system is cool.
- Keep the control valve, logs and burner area clean by vacuuming or brushing at least twice a year.
- Visually inspect the pilot. Dust or blow away any dust or lint accumulating.
- Sufficient space must be provided around this appliance to provide air for combustion and ventilation. Keep the front of the appliance clear of all obstacles and materials.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- During the manufacturing process this appliance is treated with certain coloring agents. These agents are not harmful, but may produce annoying smell and smoke as they are burned off. This is a temporary occurrence that ceases after two (2) to three (3) hours of use.

If your unit shuts down, and the above does not work, please do the following:

- Locate your thermocouple.
- Follow the copper line to the back of the control box. It is connected with a 3/16" nut.
- Disconnect and clean with a dry paper towel.
- Re-connect and tighten finger tight, then turn with a wrench.

**For further assistance, please contact our Customer Service Department at 800-229-5647**

## FINAL CHECKS

### ***Things To Do:***

1. Use only the type of gas for which your system is designed. The type of gas the system is equipped for is stamped on the rating plate.
2. Install appliance and all gas piping according to local codes.
3. Disconnect or isolate the system during line pressure testing.
4. Make sure 1/2" gas line is run to the fireplace to ensure sufficient gas volume to the appliance.
5. Install the system only in a fireplace suitable for burning solid fuel.
6. Use pipe sealant on threaded joints of gas piping that is resistant to the action of LP gas.
7. Install a manual shutoff valve, union and 1/8" NPT plugged pressure tap ahead of controls.
8. Use mild soap and water solution when checking for leaks.
9. Keep the area around the appliance clear and free of combustible materials, gasoline and any flammable or explosive material.
10. Follow the lighting and operation procedures given in this manual.
11. Periodically inspect the pilot and burner flame.
12. Clean the appliance as described in this manual.
13. Keep the logs properly positioned.

### ***Things NOT To Do:***

1. Do NOT modify or alter this appliance in any way.
2. Do NOT use this appliance with any gas other than that for which it is equipped.
3. Do NOT install the appliance in any area where gasoline or any flammable material is used or stored.
4. Do NOT use open flame to check for leaks.
5. Do NOT operate this system with glass doors in the CLOSED position.
6. Do NOT block or restrict any grilles of a factory build fireplace in which the appliance is installed.
7. Do NOT burn solid fuels in a fireplace where this appliance is installed.

# TROUBLESHOOTING

## Problem

1. No pilot ignition

## Cause

- pilot valve not on
- gas line not clear
- air in gas line
- no gas supply to the fireplace
- no L.P. gas
- main shutoff valve closed
- valve partially closed

## Corrective Action

- Turn valve to PILOT and depress, keep match near pilot burner until ignition.
- Inspect supply lines for tube kinks or obstructions.
- turn valve to PILOT and depress, keep match near pilot burner until ignition.
- allow air to purge through the line, may take up to five (5) minutes.
- check to see if the fireplace is hooked to the gas supply.
- fill tank
- turn valve on
- open valve fully

2. Inadequate flame

- gas line obstruction

- burner inspection for tube kinks or obstructions.

3. Unit shuts off

- thermocouple is overheating

- reposition logs to keep main burner flame off the thermocouple assembly.

4. Unit ON/OFF issues

- unit will not turn "ON"

- After the pilot has been lit make sure to wait **2-3 minutes for flame to appear.**
- Make sure to only press button on remote ONCE, wait for soft beep, after 5 seconds the flame will go out and the unit will be "OFF" but the pilot light will still be "ON".
- If you want to completely turn "OFF" the unit make sure to turn the Pilot Control Knob to "OFF" and the Remote Sensor Switch to "OFF".

5. Remote control transmitter/receiver

- low battery detection (transmitter/receiver)

- When the transmitter/receiver batteries are low, depressing the ON/OFF key the light intensity of the LED is weak to alert of a low battery condition before losing battery power at all. As soon as the depleted batteries are replaced, the transmitter/receiver will restart its normal operation.

# WARRANTY

**Warranty shall apply to the original purchaser at the original installation point only.**

All logs are guaranteed for three years against manufacturer's defects.

The burner assembly system is guaranteed for a period of (3) years from the date of purchase and will be replaced for freight costs only.

Safety Pilot, valves and thermocouples are guaranteed for a period of one (1) year under the original manufacturer's warranty.

General Warranty: This warranty does not apply in the case of improper installation, neglect, accident, misuse or as a result of modifications of the original product.

All costs for removal and re-installation are the expressed responsibility of the purchaser.

For repair, replacement, or service to defective part/parts please contact our Customer Service Hotline number below. Thereafter with valid warranty registration and proof of purchase, call the Customer Service Hotline for authorization to ship defective part prepaid and insured in original carton to Sure Heat Manufacturing, 1861 West Oak Parkway, Marietta, GA 30062. Goods returned improperly packaged are the sole responsibility of purchaser.

It is agreed that any repair or replacement is the exclusive remedy from Sure Heat Manufacturing. In no case shall Sure Heat be liable for any consequential damage or breach of this or any other warranty expressed or implied whatsoever. This limitation as to consequential damages shall not apply in states where prohibited.

Purchased From: \_\_\_\_\_ Date: \_\_\_\_\_

Size:  24"      Model:

Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

***Please photocopy and return to Sure Heat  
within 14 days of purchase.  
If you have other questions, please contact our  
Customer Service Hotline at (800) 229-5647.***