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Empire VFSR24LP

Empire Vent-Free Slope Glaze Burner VFSR24LP Instruction Manual

Model: VFSR24LP

1. INTRODUCTION

This manual provides essential information for the safe installation, operation, and maintenance of your Empire Vent-Free Slope Glaze Burner, Model VFSR24LP. This 24-inch propane burner features a Millivolt Safety Valve with an on/off switch and is designed for use with Empire "LS" log sets of the same size. It incorporates internal ceramic beads to enhance flame appearance and can produce up to 38,000 BTU.

2. IMPORTANT SAFETY INFORMATION

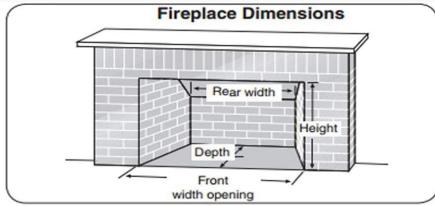
Read this entire manual carefully before installation and use of this vent-free gas burner. Failure to follow these instructions could result in property damage, personal injury, or loss of life.

- **Professional Installation:** Installation and service must be performed by a qualified installer, service agency, or gas supplier.
- **Vent-Free Appliance:** This is a vent-free appliance. It obtains combustion air from the room in which it is installed. Adequate ventilation must be provided.
- **Fuel Type:** This burner is designed for use with Propane (LP) gas only. Do not use any other fuel.
- **Clearances:** Maintain proper clearances to combustibles as specified in the installation instructions.
- **Carbon Monoxide:** Vent-free gas products produce carbon monoxide. Ensure proper room size and ventilation. Install a carbon monoxide detector in your home.
- **Hot Surfaces:** The burner and surrounding surfaces will become hot during operation. Keep children, pets, and clothing away.

3. SETUP AND INSTALLATION

3.1 Fireplace Requirements

Ensure your fireplace meets the minimum dimensions required for the 24-inch burner and associated log set. Refer to the diagram and table below for guidance.



Note: It is recommended that complete firebox dimensions (front width, back wall, and height) be obtained to ensure proper sizing.

Vent-Free Slope Glaze Burners

| Model | Description | Log Length (inches) | Btu Input | Non-Empire Minimum Firebox Dimensions | | | | Ship Wt. (lb) |
|---|--------------------|---------------------|-----------|---------------------------------------|---------------------|----------------|-----------------|---------------|
| | | | | Front Width (inches) | Rear Width (inches) | Depth (inches) | Height (inches) | |
| <i>Manual, Standing Pilot/Piezo</i> | | | | | | | | |
| VFSM-18 | Slope Glaze Burner | 18 | 32,000 | 32 | 21 | 14 | 17 | 22 |
| VFSM-24 | Slope Glaze Burner | 24 | 36,000 | 34 | 27 | 14 | 18 | 25 |
| VFSM-30 | Slope Glaze Burner | 30 | 38,000 | 38 | 30 | 14 | 20 | 32 |
| <i>On/Off Millivolt, Standing Pilot</i> | | | | | | | | |
| VFSR-16 | Slope Glaze Burner | 16 | 25,000 | 24 | 18 | 11 1/2 | 18 | 18 |
| VFSR-18 | Slope Glaze Burner | 18 | 32,000 | 28 | 17 | 14 | 17 | 24 |
| VFSR-24 | Slope Glaze Burner | 24 | 36,000 | 30 | 23 | 14 | 18 | 27 |
| VFSR-30 | Slope Glaze Burner | 30 | 38,000 | 34 | 26 | 14 | 20 | 30 |
| <i>Variable Flame, Includes Variable Remote, Standing Pilot/Piezo</i> | | | | | | | | |
| VFSV-16 | Slope Glaze Burner | 16 | 25,000 | 24 | 18 | 11 1/2 | 18 | 18 |
| VFSV-18 | Slope Glaze Burner | 18 | 32,000 | 28 | 17 | 14 | 17 | 24 |
| VFSV-24 | Slope Glaze Burner | 24 | 36,000 | 30 | 23 | 14 | 18 | 27 |
| VFSV-30 | Slope Glaze Burner | 30 | 38,000 | 34 | 26 | 14 | 20 | 30 |
| <i>Intermittent Pilot, Includes Thermostat Variable Remote</i> | | | | | | | | |
| VFSE-18 | Slope Glaze Burner | 18 | 32,000 | 28 | 17 | 14 | 17 | 25 |
| VFSE-24 | Slope Glaze Burner | 24 | 36,000 | 30 | 23 | 14 | 18 | 28 |
| VFSE-30 | Slope Glaze Burner | 30 | 38,000 | 34 | 26 | 14 | 20 | 31 |

Image Description: A diagram illustrating fireplace dimensions (front width opening, rear width, depth, and height) with a table below it. The table provides non-Empire minimum firebox dimensions for various Slope Glaze Burner models, including log length, BTU input, front width, rear width, depth, height, and shipping weight. For the VFSR-24 model, it specifies a 24-inch log length, 36,000 BTU input, 34-inch front width, 27-inch rear width, 14-inch depth, and 18-inch height.

3.2 Fuel Type Connection

This burner operates on Propane (LP) gas. Ensure your gas supply is correctly connected by a qualified professional.



Image Description: A circular grey icon with a white silhouette of a propane tank and the word "PROPANE" in white text below it, indicating the required fuel type.

3.3 Millivolt Wiring

The burner features a Millivolt Safety Valve. Refer to the wiring diagram for proper electrical connections, especially if installing an optional thermostat or remote control receiver.

MILLIVOLT WIRING

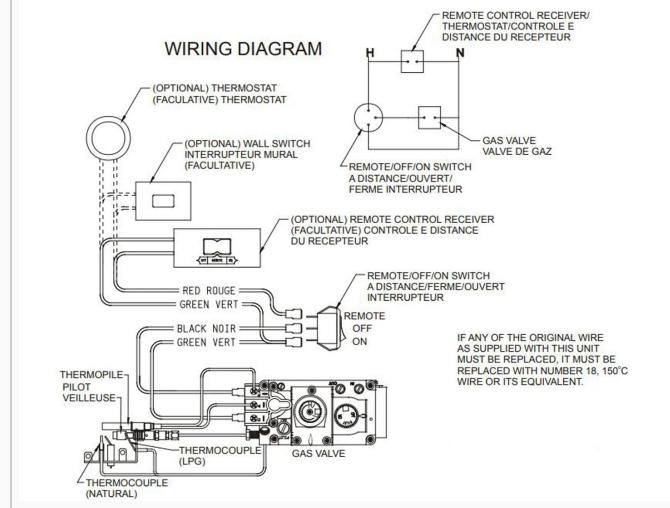


Image Description: A detailed wiring diagram titled "MILLIVOLT WIRING". It shows connections for a gas valve, thermopile, thermocouple, and optional components like a thermostat, wall switch, and remote control receiver. Wires are color-coded (red, green, black) and labeled with their functions. A note indicates that any original wire supplied with the unit must be replaced with number 18, 150°C wire or its equivalent if damaged.

3.4 Log Set Placement

This burner requires an Empire "LS" log set of the same size (24-inch) for optimal performance and appearance. Follow the log set manufacturer's instructions for proper placement on the burner.

4. OPERATING INSTRUCTIONS

4.1 Pilot Ignition (Standing Pilot/Piezo)

1. Ensure the gas supply to the unit is open.
2. Locate the control knob on the Millivolt Safety Valve.
3. Push the control knob in and turn it to the "PILOT" position.
4. While holding the knob in, repeatedly press the piezo igniter button until the pilot flame ignites.
5. Continue to hold the control knob in for approximately 30-60 seconds after the pilot ignites to allow the thermocouple to heat up. Release the knob; the pilot should remain lit. If it extinguishes, repeat steps 3-5.

4.2 Burner Operation

1. Once the pilot is lit, turn the control knob from "PILOT" to the "ON" position.
2. Use the integrated on/off switch on the Millivolt Safety Valve to turn the main burner on or off.
3. If a remote control or wall switch is installed, use that device to control the main burner.

4.3 Shutting Down the Burner

1. Turn the main burner off using the on/off switch or remote control.
2. To turn off the pilot, turn the control knob to the "OFF" position.
3. For extended periods of non-use, turn off the main gas supply to the appliance.

5. MAINTENANCE

Regular maintenance ensures safe and efficient operation of your burner.

- **Annual Inspection:** Have the burner and gas connections inspected annually by a qualified service technician.
- **Cleaning:** Keep the burner and log set free of dust and debris. Use a soft brush or vacuum cleaner. Do not use abrasive cleaners.
- **Pilot and Burner Ports:** Periodically check pilot and burner ports for obstructions. Clean gently if necessary.
- **Log Set:** Inspect the log set for cracks or damage. Replace any damaged logs.

6. TROUBLESHOOTING

If you experience issues, consult this section before calling for service.

| Problem | Possible Cause | Solution |
|------------------------------------|---|---|
| Pilot will not light | No gas supply Pilot orifice clogged Igniter not sparking | Check gas valve Clean pilot orifice Check igniter electrode gap |
| Pilot lights but will not stay lit | Thermocouple not heating Loose thermocouple connection | Hold pilot knob longer Tighten thermocouple connection |
| Main burner will not light | Pilot not lit Control knob not in "ON" position On/off switch off | Light pilot Turn control knob to "ON" Turn on switch |
| Burner produces yellow flame/soot | Clogged burner ports Incorrect gas pressure | Clean burner ports Contact a qualified technician |

7. SPECIFICATIONS

| Feature | Detail |
|---------------------|---------------------------------------|
| Model | VFSR24LP |
| Brand | Empire |
| Burner Size | 24-Inch |
| Fuel Type | Propane (LP) |
| BTU Input (Max) | 38,000 BTU |
| Valve Type | Millivolt with On/Off Switch |
| Pilot Type | Standing Pilot/Piezo Ignition |
| Log Set Requirement | Empire "LS" log sets of the same size |
| Material | Ceramic (internal beads) |

| Feature | Detail |
|--------------------|------------------------|
| Product Dimensions | 28.5"D x 16.75"W x 9"H |
| Item Weight | 27 Pounds |
| UPC | 720968265609 |

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your product or contact Empire customer service directly. Keep your purchase receipt for warranty claims.

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