

## Carlin 50824

# CARLIN 50824 24 Volt Gas Valve User Manual

Model: 50824

## INTRODUCTION

This manual provides essential instructions for the safe and efficient installation, operation, and maintenance of the Carlin 50824 24 Volt Gas Valve. Please read this manual thoroughly before attempting any procedures to ensure proper function and to prevent potential hazards.

## IMPORTANT SAFETY INFORMATION

**WARNING:** Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

- Installation and service must be performed by a qualified installer, service agency, or gas supplier.
- Always turn off the gas supply and electrical power before servicing the valve.
- Check for gas leaks after any service or installation.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

## PRODUCT OVERVIEW

The Carlin 50824 is a 24 Volt gas valve designed for controlling gas flow in compatible heating systems. It features a robust construction and is engineered for reliable performance. This valve is specifically designed for EZ Gas applications.



Figure 1: Carlin 50824 24 Volt Gas Valve. This image displays the gas valve unit, highlighting its main body, control knob, and electrical connection points.

## SETUP AND INSTALLATION

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Installation of the Carlin 50824 gas valve should only be performed by a qualified technician in accordance with all local codes and regulations.

### Pre-Installation Checks:

- Verify that the gas type and pressure match the valve's specifications.
- Ensure the electrical supply is 24 Volts AC.
- Inspect the valve for any signs of damage from shipping.
- Confirm all necessary tools and fittings (e.g., Barb connection type) are available.

### Installation Steps:

1. **Turn off Power and Gas:** Disconnect all electrical power and shut off the main gas supply to the appliance.
2. **Remove Old Valve (if applicable):** Carefully disconnect and remove the existing gas valve, if replacing.
3. **Mount New Valve:** Securely mount the Carlin 50824 valve in the correct orientation, ensuring it is level.
4. **Connect Gas Lines:** Connect the gas inlet and outlet lines to the valve using appropriate fittings. The valve uses Barb type connections. Ensure all connections are tight and leak-free.
5. **Wire Electrical Connections:** Connect the 24 Volt AC wiring to the designated terminals on the valve. Refer to the appliance's wiring diagram for correct connections.
6. **Check for Leaks:** After installation, slowly turn on the gas supply and check all gas connections for leaks using a suitable leak detection solution.
7. **Restore Power:** Once all connections are secure and leak-free, restore electrical power to the appliance.

## OPERATING INSTRUCTIONS

The Carlin 50824 gas valve operates in conjunction with your heating system's control board to regulate gas flow. Its primary function is to open and close to allow or restrict gas to the burner.

### Basic Operation:

- When the thermostat calls for heat, the control board sends a 24 Volt signal to the gas valve.
- The valve opens, allowing gas to flow to the burner.
- Once the desired temperature is reached, the signal is removed, and the valve closes, shutting off the gas supply.
- Some models may feature a manual ON/OFF knob (as seen in Figure 1). Ensure this knob is in the "ON" position for automatic operation. For service or extended shutdown, turn it to "OFF".

## MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your gas valve. All maintenance should be performed by a qualified service technician.

### Recommended Maintenance:

- **Annual Inspection:** Have a qualified technician inspect the gas valve annually for signs of wear, corrosion, or leaks.
- **Cleaning:** Keep the area around the valve clean and free from dust and debris. Do not use harsh chemicals for cleaning.
- **Operational Check:** During annual service, ensure the valve opens and closes smoothly and reliably.

*Do not attempt to disassemble or repair the gas valve yourself. Internal components are not user-serviceable.*

## TROUBLESHOOTING

If you experience issues with your Carlin 50824 gas valve, consult the table below for common problems and potential solutions. For complex issues, always contact a qualified service technician.

Problem	Possible Cause	Solution
No gas flow to burner	Gas supply off Valve manual knob in "OFF" position No 24V signal to valve Faulty valve	Check main gas supply. Turn manual knob to "ON". Verify thermostat call for heat and control board output. Contact qualified technician for diagnosis and replacement.
Irregular gas flow or burner ignition issues	Incorrect gas pressure Partial valve obstruction Electrical connection issues	Have gas pressure checked by a technician. Contact qualified technician for inspection. Check wiring for loose connections.

*Always ensure gas and electrical power are off before inspecting connections. If you suspect a gas leak, immediately shut off the main gas supply and ventilate the area. Do not operate any electrical switches or phones. Contact your gas supplier and a qualified technician.*

## SPECIFICATIONS

Feature	Detail
Brand	Carlin
Model Number	50824
Voltage	24 Volts
Application	EZ Gas
Inlet Connection Type	Barb
Outlet Connection Type	Barb
Number of Ports	2
Item Dimensions (L x W x H)	3 x 2 x 2 inches
Item Weight	2.37 pounds

## WARRANTY AND SUPPORT



For specific warranty information regarding the Carlin 50824 24 Volt Gas Valve, please refer to the documentation provided with your purchase or contact Carlin directly. Warranty terms typically cover manufacturing defects for a specified period from the date of purchase.


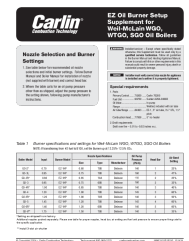

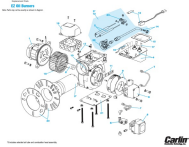
For technical support, replacement parts, or service inquiries, please contact your authorized Carlin dealer or a qualified HVAC technician. You may also visit the official Carlin website for further assistance:

[www.carlincombustion.com](http://www.carlincombustion.com)

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## Related Documents - 50824

 <p><b>Carlin</b> Combustion Technology</p> <p><b>MODEL 702GAS</b> Low High-Fire Gas Modulating 850 to 1600 MBH Gas Furnace</p> <p><b>Instruction Manual</b></p>	<p><a href="#">Carlin Model 702GAS Instruction Manual</a></p> <p>Detailed instruction manual for the Carlin Model 702GAS modulating gas burner, covering installation, setup, operation, maintenance, and repair procedures for qualified service technicians.</p>
 <p><b>Carlin Gas Burner Selection Guide</b></p>	<p><a href="#">Carlin Gas Burner Selection Guide: Find the Right Burner for Your Appliance</a></p> <p>Comprehensive guide to selecting Carlin gas conversion burners for residential and commercial applications. Includes detailed specifications and compatibility information for various boiler and furnace models.</p>

	<p><a href="#">Carlin EZ Oil Burner Manual Supplement &amp; Instruction Manual for EZ 1,2,3 and LF Oil/Bio-Fuel Burners</a></p> <p>Comprehensive guide for Carlin EZ series oil and bio-fuel burners, including a supplement for Weil-McLain boilers. Covers nozzle selection, burner specifications, installation, preparation, wiring, startup, adjustment, verification, maintenance, and repair parts. Designed for qualified service technicians and installers.</p>
	<p><a href="#">Carlin EZ Oil Burner Setup Supplement and Instruction Manual</a></p> <p>Comprehensive guide for installing, setting up, and maintaining Carlin EZ Oil/Biofuel Burners, including specifications, troubleshooting, and best practices for various boiler models and fuel types. Covers setup supplements for Weil-McLain WGO, WTGO, SGO oil boilers and detailed instructions for EZ 1, 2, 3, and LF models.</p>
	<p><a href="#">Carlin Gas Burner Selection Guide: Appliance Compatibility and Specifications</a></p> <p>Comprehensive guide to selecting Carlin gas conversion burners for various residential and commercial appliances. Features detailed specifications, model numbers, and compatibility information for HVAC professionals.</p>
	<p><a href="#">Carlin EZ Oil Burners Replacement Parts</a></p> <p>A comprehensive list of replacement parts for Carlin EZ Oil Burners, including motors, electrodes, combustion heads, air tubes, ignitors, fuel units, and more. The document provides part numbers and descriptions for each component.</p>