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› Rinnai FC824P Ventless Propane Heater Instruction Manual

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Model: FC824P Propane Gas Heater

1. PRODUCT OVERVIEW

The Rinnai FC824P is a vent-free convector heater designed for indoor installation, providing efficient and reliable warmth. This unit operates on propane gas and features a programmable thermostat for precise temperature control. Its compact, wall-mountable design makes it suitable for various indoor spaces.



Figure 1: Front view of the Rinnai FC824P Ventless Propane Heater.



Figure 2: Key features of Rinnai Vent-Free Fan Convectors, including indoor-only installation, flexible setup, no ductwork requirement, consistent heating, and suitability for supplemental or zone heating.

2. SAFETY INFORMATION

Read all instructions carefully before installation and operation. Failure to follow these instructions could result in property damage, personal injury, or death.

- **Professional Installation:** Installation of this heater requires connection to a propane gas supply. It is strongly recommended that a qualified technician perform the installation to ensure safety and proper function. Visit the Rinnai PRO page on our website to locate a certified technician in your area.
- **Vent-Free Operation:** This is a vent-free appliance. Ensure adequate ventilation in the installation area as specified in local codes and the full user manual.
- **Safety Devices:** The unit is equipped with multiple safety features including a flame failure device, overheat switch, oxygen depletion sensor (ODS), and tilt switch. These devices automatically disable gas/power if the unit overheats, overturns, or if the flame is extinguished, or if oxygen levels become too low.
- **Child Safety:** The cabinet is designed to be cool-to-touch and includes a safety lock feature to prevent accidental operation by children.
- **Carbon Monoxide:** Always install and maintain carbon monoxide detectors in your home, especially when using vent-free appliances.
- **Clearances:** Maintain proper clearances from combustible materials as specified in the installation manual.

3. SETUP AND INSTALLATION

The Rinnai FC824P heater is designed for wall-mounted indoor installation. Due to the nature of gas connections, professional installation is highly recommended.

3.1 Pre-Installation Checks

- Verify that the heater model (FC824P) matches your gas supply type (Propane).
- Ensure the installation location meets all local codes and provides adequate clearances.
- Confirm that the electrical supply (120V, 4A) is available at the installation site.

3.2 Mounting the Unit

The heater is designed for wall mounting. Refer to the detailed installation guide provided with your unit for specific mounting hardware and instructions. Ensure the wall can support the unit's weight (approximately 26.5 pounds).



Figure 3: Approximate dimensions of the Rinnai FC824P heater. Refer to the full manual for precise measurements.

3.3 Gas and Electrical Connections

- **Gas Connection:** Connect the heater to your propane gas supply line. This connection must be leak-tested by a qualified professional.
- **Electrical Connection:** Plug the heater into a standard 120V electrical outlet. The unit requires minimal power (29 Watts) for its electronic ignition and fan operation.

4. OPERATING INSTRUCTIONS

The Rinnai FC824P features user-friendly controls for comfortable heating.

4.1 Powering On/Off

- To turn the unit **ON**, press the Power button. The digital display will illuminate.
- To turn the unit **OFF**, press the Power button again. The display will turn off, and the heater will cease operation.

4.2 Setting the Temperature

- Use the Up/Down arrow buttons on the programmable thermostat display to adjust your desired room temperature.
- The digital adaptive control system will automatically adjust the heat output to maintain the set temperature efficiently.

4.3 Programmable Features

The integrated programmable thermostat allows you to set heating schedules to suit your daily routine, optimizing comfort and energy usage. Refer to the full user manual for detailed instructions on setting up daily schedules and utilizing the eco mode.

4.4 Fan Operation

The unit incorporates a fan convector to distribute warm air evenly throughout the space. The fan operates quietly and automatically adjusts its speed based on heating demand.

5. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your Rinnai FC824P heater.

- **Filter Cleaning:** Periodically clean the air filter to maintain efficient airflow and heating performance. The frequency depends on usage and environmental conditions, typically monthly during heating season. Refer to the full manual for filter access and cleaning instructions.
- **Exterior Cleaning:** Clean the exterior of the unit with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Professional Inspection:** It is recommended to have a qualified technician inspect the unit annually, especially the gas connections and safety devices, to ensure continued safe and efficient operation.
- **Self-Diagnostics:** The heater features a self-diagnostics system that can help identify potential issues. Error codes may appear on the display; consult the troubleshooting section of the full manual for their meaning and recommended actions.

6. TROUBLESHOOTING

If your Rinnai FC824P heater is not operating correctly, review the following common issues before contacting service.

Problem	Possible Cause	Solution
Heater does not turn on.	No power, gas supply off, safety device activated.	Check power cord connection and circuit breaker. Ensure propane supply valve is open. If a safety device (e.g., ODS, tilt switch) has activated, refer to the full manual for reset procedures or contact a technician.
Insufficient heat output.	Incorrect temperature setting, dirty air filter, unit too small for space.	Increase set temperature. Clean or replace air filter. Ensure the heater's BTU output is appropriate for the room size.
Unusual odors.	Initial burn-off, dust accumulation, gas leak.	A slight odor may occur during initial use. Ensure proper ventilation. If a strong gas odor is present, immediately turn off the gas supply, evacuate the area, and contact emergency services.
Error code displayed.	Internal fault detected by self-diagnostics.	Note the error code and consult the detailed troubleshooting section in the full user manual. Some codes may indicate a simple issue, while others require professional service.

For issues not covered here or if problems persist, contact Rinnai customer support or a qualified service technician.

7. SPECIFICATIONS

Detailed technical specifications for the Rinnai FC824P Ventless Propane Heater.



Figure 4: Rinnai FC824P product specifications.

Feature	Specification
Brand	Rinnai
Model Number	FC824P
Fuel Type	Propane
Heat Output	24,000 BTU
Heating Method	Forced Air (Convection)
Power Source	Propane (with electric ignition)
Voltage	120V
Amperage	4 A
Item Weight	26.5 pounds
Form Factor	Wall-mounted with cabinet
Indoor/Outdoor Usage	Indoor Only
Special Features	Programmable Thermostat, Digital Adaptive Control, Self-Diagnostics, Child-Safe Cabinet



Figure 5: Heating area size recommendations for the FC824P based on national heat zones.

8. WARRANTY AND SUPPORT

Rinnai stands behind the quality of its products with comprehensive warranty coverage.

- **Heat Exchanger Warranty:** 10 Years
- **Parts Warranty:** 5 Years
- **Labor Warranty:** 2 Years

For warranty claims, technical assistance, or to locate a qualified service technician, please visit the official Rinnai website or contact Rinnai customer support directly. Always provide your model number (FC824P) and serial number when seeking support.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question