



[Manuals.plus](#) /

› [LiberLive](#) /

› LiberLive RV Tankless Water Heater Propane User Manual (Model FCRSQ-MS-BLACK)

LiberLive FCRSQ-MS-BLACK

LiberLive RV Tankless Water Heater Propane User Manual

Model: FCRSQ-MS-BLACK

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your LiberLive RV Tankless Water Heater. This propane-powered, on-demand unit is designed to provide continuous hot water for recreational vehicles and campers, featuring a 12V DC power supply and a 15 x 15 inch door for installation. Please read this manual thoroughly before installation and use.



Figure 1: LiberLive RV Tankless Water Heater, remote, and shower kit.

2. SAFETY INFORMATION

Your safety is paramount. This LiberLive RV Tankless Water Heater is CSA certified and incorporates multiple safety features. Adhere to all warnings and instructions to prevent injury or damage.

2.1 General Safety Precautions

- Ensure proper ventilation during operation to prevent carbon monoxide accumulation.
- Do not block any openings on the water heater unit.
- Only use propane gas as the fuel source.
- Verify all gas and water connections are secure and leak-free before operation.
- Keep flammable materials away from the water heater.

2.2 Integrated Safety Features

The unit is equipped with nine advanced safety protections:

- **Overheat Protection:** Automatically shuts off if water temperature exceeds safe limits.
- **Dry Burn Protection:** Prevents operation without sufficient water flow.
- **Flame Failure Protection:** Shuts off gas supply if the flame extinguishes.
- **Freeze Protection:** Helps prevent damage in cold temperatures.
- **Anti-Scald Protection:** Maintains stable water temperature to prevent sudden spikes.
- **High Water Pressure Protection:** Safeguards against excessive water pressure.
- **Low Air Pressure Protection:** Ensures adequate air supply for combustion.
- **Low Water Pressure Start-up:** Requires sufficient water pressure to initiate operation.
- **Flue Blockage Protection:** Detects and responds to exhaust obstructions.



Figure 2: Overview of the 9 integrated safety protections.

3. PRODUCT COMPONENTS

The LiberLive RV Tankless Water Heater package includes the following items:

- LiberLive RV Tankless Water Heater Unit
- Wired Remote Controller
- Showerhead Kit (for external use)
- Installation Manual (this document)

4. INSTALLATION

Proper installation is crucial for the safe and efficient operation of your water heater. If you are unsure about any step, consult a qualified professional.

4.1 Site Requirements

- The water heater requires a 13 x 13 inch cut-out for mounting. The exterior door measures 15.9 x 15.9 inches.
- Ensure the installation area provides proper ventilation and exhaust.
- The unit requires a 12-volt DC power connection.

4.2 Connections

- **Water Inlet & Water Outlet:** 1/2" NPT connections.
- **Gas Inlet:** 1/2" NPT, includes a 5/8" NPT adapter.
- Connect the wired remote controller to the designated port on the unit.

Opening Size for Installation

Cut-out: 13"x13" Door: 15.9"x15.9"



Figure 3: Installation dimensions for the water heater.



Figure 4: Water and gas connection points.

Important Note: If the hot and cold water pipes are reversed, the water heater will not respond when turned on. To identify the cold water pipe, simply turn on the pump and observe which pipe delivers cold water.

5. OPERATION

The LiberLive RV Tankless Water Heater provides on-demand hot water with precise temperature control via its wired remote.

5.1 Remote Control Functions

The smart remote control allows operation from up to 6.6 feet away. Its display shows water temperature, combustion status, fan operation, and spray status.

- **Power Switch Button:** Turns the unit on or off.
- **Temperature Unit Switch Button:** Toggles between Celsius and Fahrenheit.
- **Temperature Increase/Reduction Buttons:** Adjusts the desired water temperature.

Intelligent Digital Sensor Remote Control

Water temperature status can be safely controlled



Figure 5: Intelligent Digital Sensor Remote Control.

5.2 Temperature Adjustment

The temperature range is adjustable from 95°F to 124°F (35°C to 51°C). Use the up and down arrows on the remote to set your desired temperature. The built-in microcomputer control system ensures precise flame control and consistent hot water delivery.

5.3 External Shower Function

This upgraded model features two water outlets: one for internal RV use and an additional outlet for external use. To use hot water outside the RV, open the water heater's exterior door and connect the included shower head kit to the additional water outlet.

Upgraded RV Water Heater

The upgraded RV water heater has an additional water outlet that allows you to use hot water outside the RV (shower head included in package)



Figure 6: Utilizing the external shower outlet.

6. PERFORMANCE FEATURES

The LiberLive RV Tankless Water Heater is engineered for high performance and efficiency.

- **High Heating Power:** Delivers up to 55,000 BTUs of thermal power.
- **High Flow Rate:** Produces 3.9 Gallons Per Minute (GPM) of hot water.
- **Rapid Heating:** Reaches 124°F in approximately 25 seconds, providing instant hot water without preheating.
- **Constant Water Temperature:** Equipped with high-efficiency heating coils and a microcomputer control system for stable water temperature, with a fluctuation of only $\pm 2^{\circ}\text{F}$. Staged combustion technology prevents overheating and ensures energy efficiency.
- **High Altitude Performance:** Designed to operate effectively at high altitudes, including up to 9,800 feet above sea level. An enhanced NIDEC fan provides 300Pa of power for reliable operation in various conditions.
- **Energy Efficiency:** Reduces propane consumption by up to 40% compared to traditional tank water heaters.

55,000 BTU Heating Power

Reaches 124°F within 20 Seconds

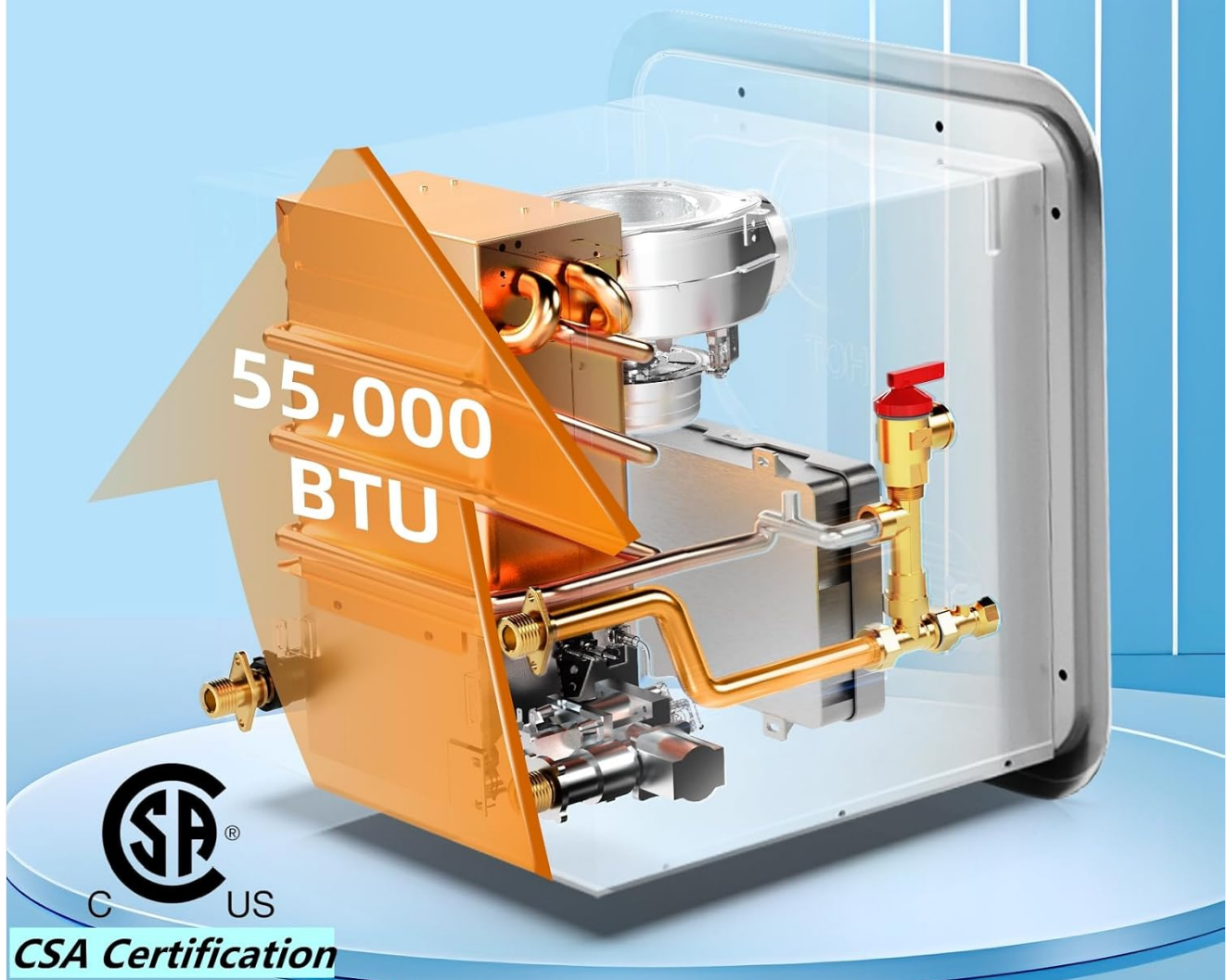


Figure 7: 55,000 BTU Heating Power.

3.9 GPM High Water Flow with Steady Temperature

No more worries about unstable temperature

±2°F Intelligent Thermostat

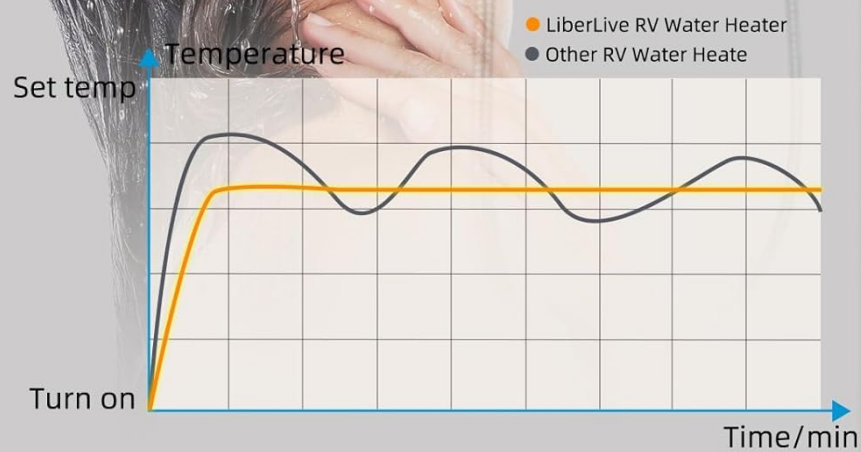
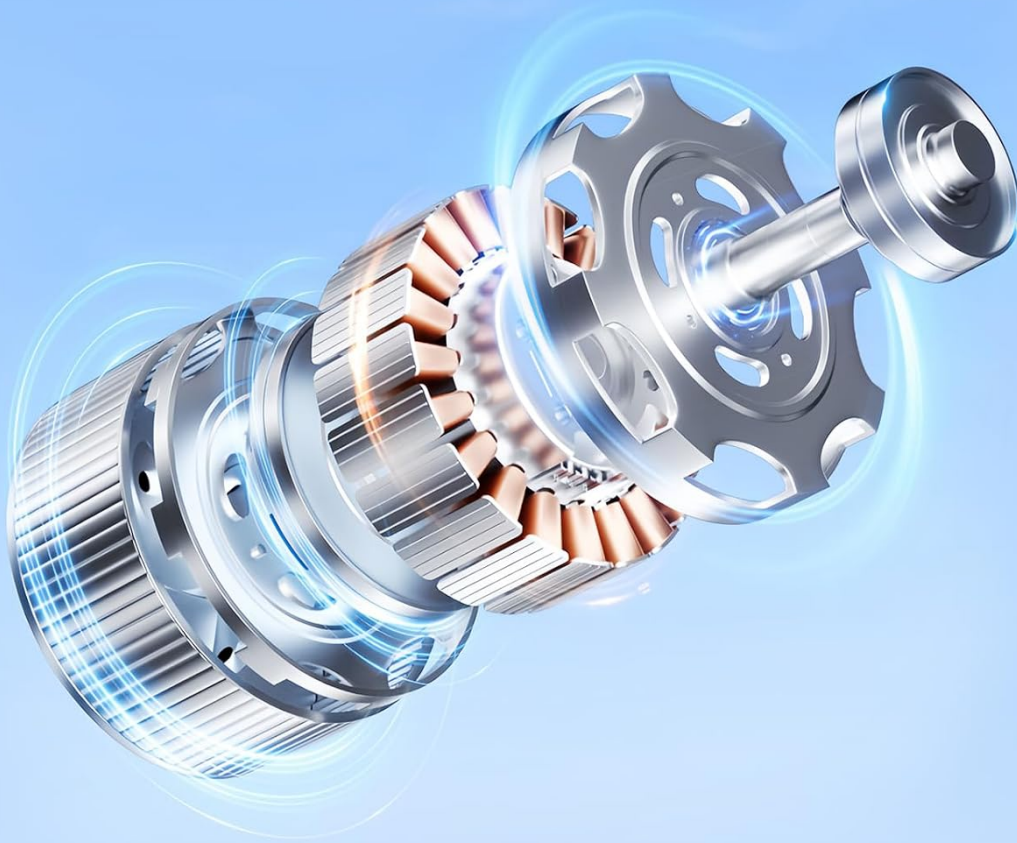


Figure 8: Consistent water temperature output.

High Performance Brushless DC Fan



Long Lifespan

Tested to 10,000 hours of operation



Strong Adaptability

Operates in environments from -4°F to 176°F



Rapid Air Exchange

Full combustion for faster heating



Vibration-Resistant

No failure after 3 hours of vibration

Figure 9: High altitude operational capability.

7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your water heater.

- **Freeze Protection:** The unit has built-in freeze protection. However, in extremely cold conditions or during prolonged storage, it is recommended to drain the water system to prevent potential damage.
- **Regular Inspection:** Periodically check all water and gas connections for leaks. Inspect the exhaust vent for any blockages.
- **Cleaning:** Keep the exterior of the unit clean and free from debris. Do not obstruct the air intake or exhaust vents.

8. TROUBLESHOOTING

If you encounter issues with your LiberLive RV Tankless Water Heater, refer to the following general troubleshooting steps. For specific error codes displayed on the remote, consult the detailed troubleshooting section in the full installation manual.

- **No Hot Water:** Check propane supply, 12V DC power connection, and water flow. Ensure hot and cold water lines are not reversed.
- **Inconsistent Temperature:** Verify adequate water pressure and flow. Ensure the remote control is set to the desired temperature.
- **Unit Not Turning On:** Check power supply, remote control connection, and ensure all safety features are not activated (e.g., low water pressure).
- **Unusual Noises or Odors:** Immediately turn off the unit and propane supply. Contact customer support or a qualified technician.

9. SPECIFICATIONS

Feature	Specification
Brand	LiberLive
Model Number	FCRSQ-MS-BLACK
Power Source	Propane Gas
Voltage	12 Volts (DC)
Wattage	55000 watts
Heat Output	55000 BTU per Hour
Maximum Flow Rate	3.9 Gallons Per Minute (GPM)
Temperature Range	95°F - 124°F
Maximum Operating Pressure	109 PSI
Product Dimensions	15 x 15 x 13.5 inches
Item Weight	30.5 pounds
Water Inlet & Outlet	1/2" NPT
Gas Inlet	1/2" NPT (with 5/8" NPT adapter)
Certifications	CSA Certified

10. WARRANTY AND SUPPORT

LiberLive stands behind the quality of its products.

10.1 Warranty Information

The LiberLive RV Tankless Water Heater comes with a comprehensive **1-year warranty** that covers the entire unit from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

10.2 Customer Support

Our dedicated customer support team is available to assist you with any questions, concerns, or technical issues you may

encounter. Please refer to the contact information provided with your product packaging or visit the official LiberLive website for support details.



Figure 10: LiberLive Customer Support Team.