

Ranein RA65L-W

RANEIN RV Tankless Water Heater User Manual

Model: RA65L-W

INTRODUCTION

This user manual provides comprehensive instructions for the installation, operation, maintenance, and troubleshooting of your RANEIN RV Tankless Water Heater, Model RA65L-W. Please read this manual thoroughly before installation and operation to ensure safe and efficient use of the appliance.

The RANEIN RV Tankless Water Heater is designed to provide on-demand hot water for recreational vehicles, offering a continuous supply without the limitations of a traditional tank heater. It features a 65,000 BTU power output and a maximum flow rate of 3.84 GPM.

SAFETY INFORMATION

Always adhere to local codes and regulations for gas and water installations. Failure to do so may result in property damage, personal injury, or death.

- Ensure proper ventilation during operation.
- Do not store flammable materials near the water heater.
- Regularly inspect gas and water connections for leaks.
- This appliance must be installed by a qualified professional.
- The unit is equipped with an anti-freeze device that automatically warms up when the temperature falls below 42.8°F (6°C) to prevent freezing.

PRODUCT OVERVIEW

The RANEIN RV Tankless Water Heater (Model RA65L-W) is a compact and efficient unit designed for RV use. Key features include:

- **High Capacity:** Produces up to 3.84 GPM of hot water with 65,000 BTU power.
- **Temperature Stability:** Features temperature fluctuation elimination technology to prevent scalding and an internal mixing tank for consistent water temperature.

- **Energy Efficiency:** Staged combustion technology optimizes gas usage.
- **Safety Features:** Built-in forced exhaust fan, automatic gas shut-off, and anti-freeze device.
- **Easy Replacement:** Designed to fit 12.62 x 12.8 inch openings, making it suitable for replacing many existing RV water heaters.



Figure 1: Front view of the RANEIN RV Tankless Water Heater, showing the black door and main components.

Turn off and on Again for A Short Time The Water Will not Suddenly Hot

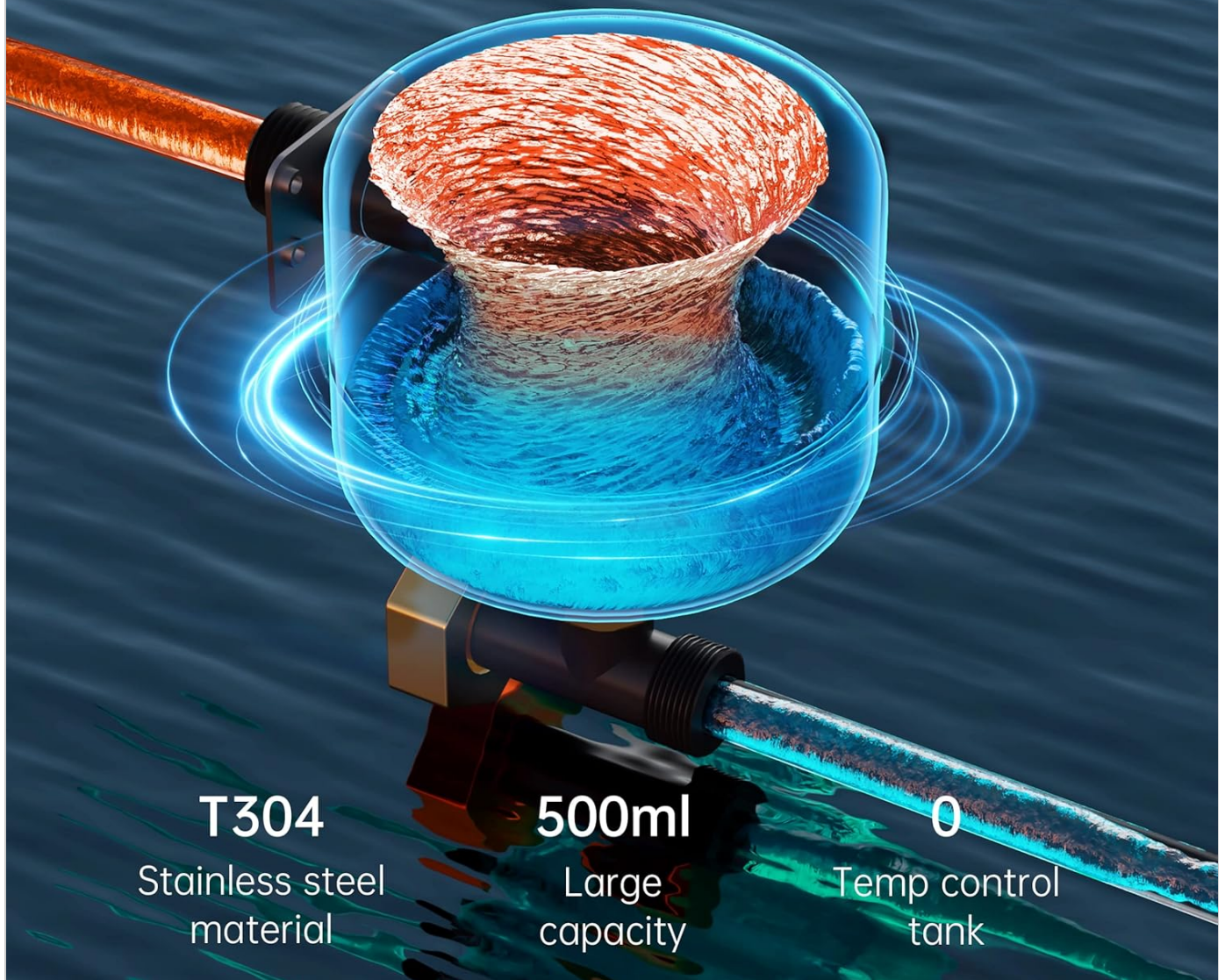


Figure 2: Diagram illustrating the internal components and water flow within the RANEIN RV Tankless Water Heater, highlighting the T304 stainless steel material, 500ml large capacity, and temperature control tank.



Figure 3: Visual representation of the RANEIN RV Tankless Water Heater's maximum power output, indicating 3.84 GPM (Max) high flow rate and 65,000 BTU high power.

SETUP AND INSTALLATION

Installation should only be performed by a qualified technician. Ensure all gas and water lines are properly connected and sealed according to local regulations.

Pre-Installation Checklist:

- Verify the opening size in your RV is compatible (12.62 x 12.8 inches).
- Ensure adequate clearance for ventilation and maintenance.
- Confirm availability of propane gas supply and water connections.
- Gather necessary tools and materials (e.g., sealant, wrenches, gas leak detector).

Installation Steps:

1. **Mounting:** Securely mount the water heater in the designated opening using appropriate fasteners. Ensure the unit is level.
2. **Water Connections:** Connect the cold water inlet and hot water outlet lines. The unit includes a built-in pressure relief valve, eliminating the need for a separate purchase.
3. **Gas Connection:** Connect the propane gas supply line. Use a gas leak detector to check all connections for leaks after tightening.
4. **Electrical Connection:** Connect the 12V DC power supply to the unit as per the wiring diagram (refer to the separate wiring diagram provided with the product).
5. **Remote Controller:** Install the intelligent remote controller (6.6 feet cable included) in a convenient location inside the RV.
6. **Door Installation:** Attach the included 15 x 15 inch door to cover the exterior opening.

OPERATING INSTRUCTIONS

Once installed, operating the RANEIN RV Tankless Water Heater is straightforward using the remote controller.

Initial Startup:

1. Ensure all water and gas connections are secure and leak-free.
2. Open the cold water supply valve to the RV.
3. Purge air from the hot water lines by opening a hot water faucet inside the RV until water flows steadily.
4. Turn on the propane gas supply.
5. Power on the water heater using the remote controller.

Temperature Adjustment:

Use the intelligent remote controller to set your desired hot water temperature. The temperature range is from 95°F (35°C) to 124°F (51°C).



Figure 4: Graph illustrating the stable temperature output of the RANEIN water heater compared to other products, demonstrating minimal temperature fluctuation (within $\pm 3^{\circ}\text{F}$).

Normal Operation:

The unit will automatically activate when a hot water faucet is opened and deactivate when it is closed. The forced exhaust fan will operate during heating to ensure stable combustion.

MAINTENANCE

Regular maintenance ensures the longevity and efficient operation of your RANEIN RV Tankless Water Heater.

- **Annual Inspection:** Have a qualified technician inspect the unit annually, including gas connections, water lines, and the heat exchanger.
- **Cleaning:** Periodically clean the exterior of the unit. Do not use abrasive cleaners.
- **Winterization:** If the RV will be stored in freezing temperatures, ensure the unit is properly winterized to prevent

damage from freezing. Although the unit has an anti-freeze device, proper winterization of the entire RV water system is crucial.

- **Ventilation:** Ensure the exhaust and intake vents are clear of obstructions.

TROUBLESHOOTING

This section provides solutions to common issues. For problems not listed here, contact customer support.

Problem	Possible Cause	Solution
No hot water / Unit not igniting	No gas supply, low water flow, power issue, error code (e.g., E5)	Check propane tank, ensure water pressure is adequate, verify power connection, consult remote controller for error codes and refer to specific error code section (if available in full manual).
Water not hot enough	Temperature setting too low, excessive water flow, cold inlet water temperature	Increase temperature setting on remote, reduce water flow at faucet, allow unit more time to heat.
Unit cycles on/off frequently	Low water flow, air in lines, restricted exhaust/intake	Ensure adequate water flow, purge air from lines, check for obstructions in vents.
Error Code E5	Commonly indicates a flame failure or ignition issue.	Check gas supply, ensure proper ventilation, reset the unit by turning off and on. If persistent, contact customer support.

SPECIFICATIONS

Feature	Specification
Model Number	RA65L-W
BTU Output	65,000 BTU
Max Flow Rate	3.84 GPM
Temperature Range	95°F - 124°F (35°C - 51°C)
Opening Size Compatibility	12.62 x 12.8 inches
Dimensions (Product)	35.81 x 38.61 x 38.56 cm (14.1 x 15.2 x 15.18 inches)
Weight	15.65 kg (34.5 lbs)
Included Components	RV water heater, 15x15" door, 6.6 ft intelligent remote controller

More powerful heating power than others

The higher the BTU the higher the GPM

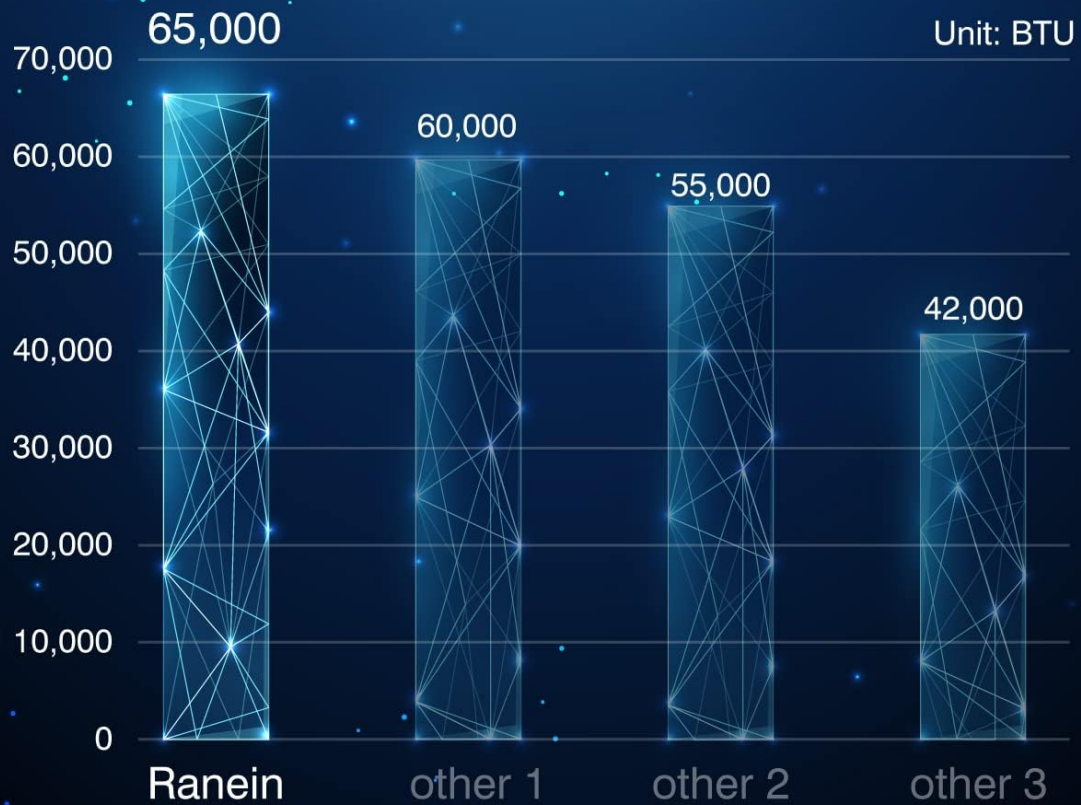


Figure 5: Bar chart comparing the heating power (BTU) of the RANEIN water heater (65,000 BTU) against other brands, illustrating its higher performance.

6 Dimensions: Constant temperature

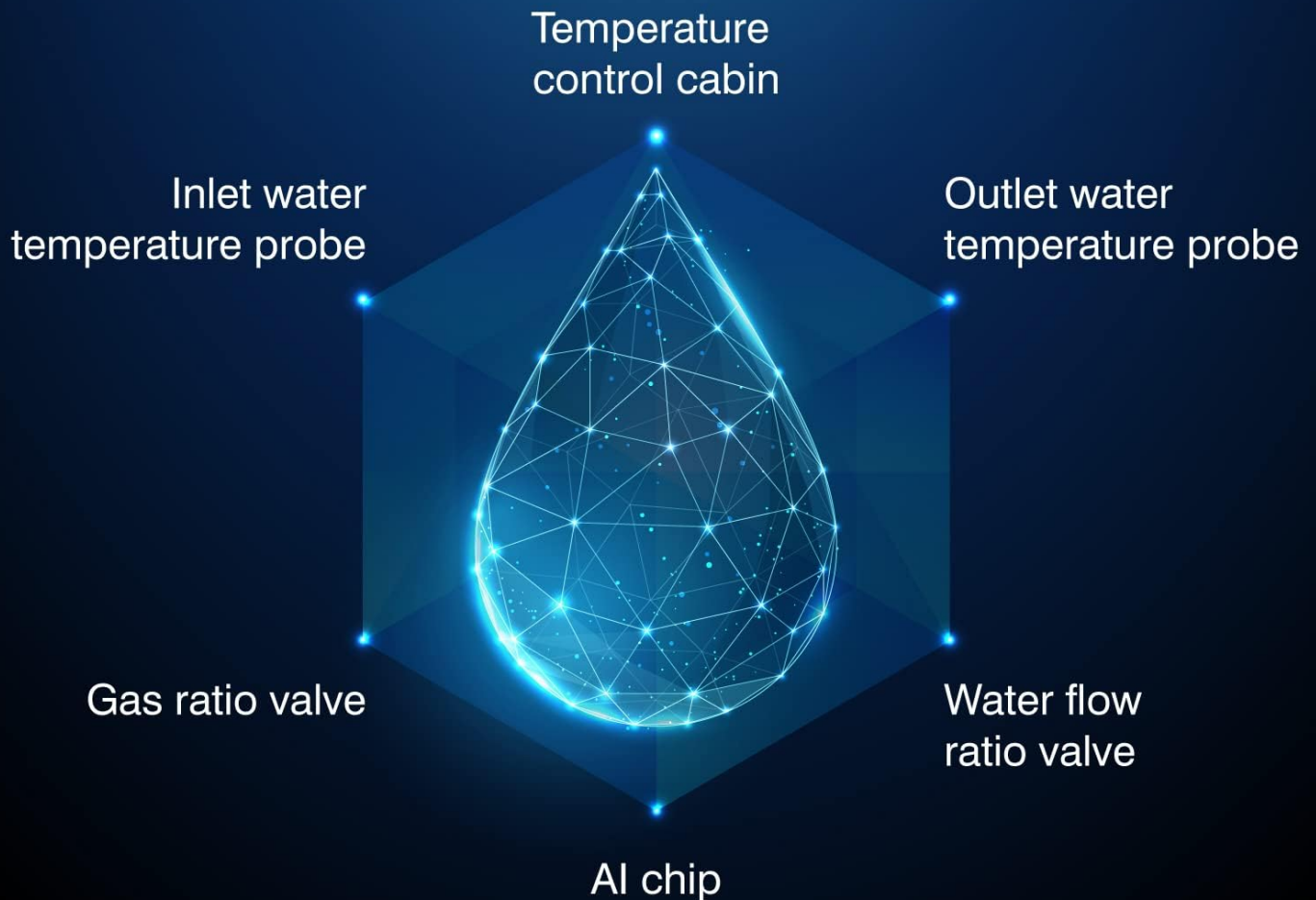


Figure 6: Diagram showing the "6 Dimensions: Constant temperature" system, including temperature control cabin, inlet/outlet water temperature probes, gas ratio valve, water flow ratio valve, and AI chip, all contributing to stable temperature.

WARRANTY INFORMATION

Ranein provides a limited warranty for this product against defects in materials and workmanship under normal use and service. The duration and terms of the warranty may vary. Please retain your proof of purchase for warranty claims. For detailed warranty terms and conditions, please refer to the warranty card included with your product or visit the official Ranein website.

CUSTOMER SUPPORT

If you have any questions, require technical assistance, or need to report an issue, please contact Ranein customer support.

Online Support: Visit the Ranein official website for FAQs and support resources.



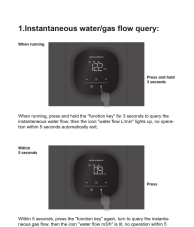



Email Support: Refer to your product packaging or warranty card for the customer service email address.

Phone Support: Refer to your product packaging or warranty card for the customer service phone number.

When contacting support, please have your product model number (RA65L-W) and purchase date available.

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Related Documents - RA65L-W

	<p>Ranein 12L Propane Tankless Water Heater Installation Manual</p> <p>Installation manual for the Ranein 12L propane gas tankless water heater, providing up to 3.18 GPM and 68,000 BTU for on-demand hot water.</p>
	<p>Ranein RV Tankless Water Heater: Installation and Operation Guide</p> <p>Comprehensive guide for installing, operating, and maintaining the Ranein RA65L and RA65S series RV tankless water heaters, including safety guidelines, troubleshooting, and specifications.</p>
	<p>RANEIN Tankless Water Heater User Guide</p> <p>This guide provides instructions for operating the RANEIN Natural Gas Tankless Water Heater, covering features like instantaneous flow query, cumulative flow query, four seasons temperature function, kitchen function, bathtub function, and high-temperature lock function.</p>
	<p>Ranein RA65L RV Tankless Water Heater: Installation, Operation, and Safety Manual</p> <p>Comprehensive guide for the Ranein RA65L RV Tankless Water Heater, covering installation, operation, safety precautions, maintenance, and troubleshooting. Essential information for RV owners.</p>
	<p>Ranein RV Tankless Water Heater Installation and Use Manual</p> <p>Comprehensive instructions for installing and using the Ranein RV Tankless Water Heater. Covers safety warnings, product features, installation steps, operation, winterizing, and troubleshooting for models RA65EH, RA65LH, RA65SH, and RA65ZH.</p>
	<p>Ranein Tankless Electric Water Heaters: Installation and Use Manual</p> <p>Comprehensive guide for Ranein RE18K and RE27K tankless electric water heaters, covering safety, installation, operation, maintenance, and troubleshooting.</p>