

Ranein RH13K-NG

Ranein Propane Gas Tankless Water Heater User Manual

Model: RH13K-NG

INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Ranein Propane Gas Tankless Water Heater. Please read this manual thoroughly before installation or use and retain it for future reference. This appliance is designed to provide instant hot water for residential use, offering a maximum flow rate of 5.3 GPM and a heating capacity of 130,000 BTU.

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.

- Ensure proper ventilation. This is an indoor unit and requires a suitable venting system.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Installation must be performed by a qualified professional in accordance with local codes and regulations.
- In cold weather, if the water heater is not used for a long time, the pressure relief valve needs to be opened to drain the remaining water in the water heater to prevent freezing damage.
- This product is not recommended for use in areas over 2,000 feet in elevation without proper adjustments.

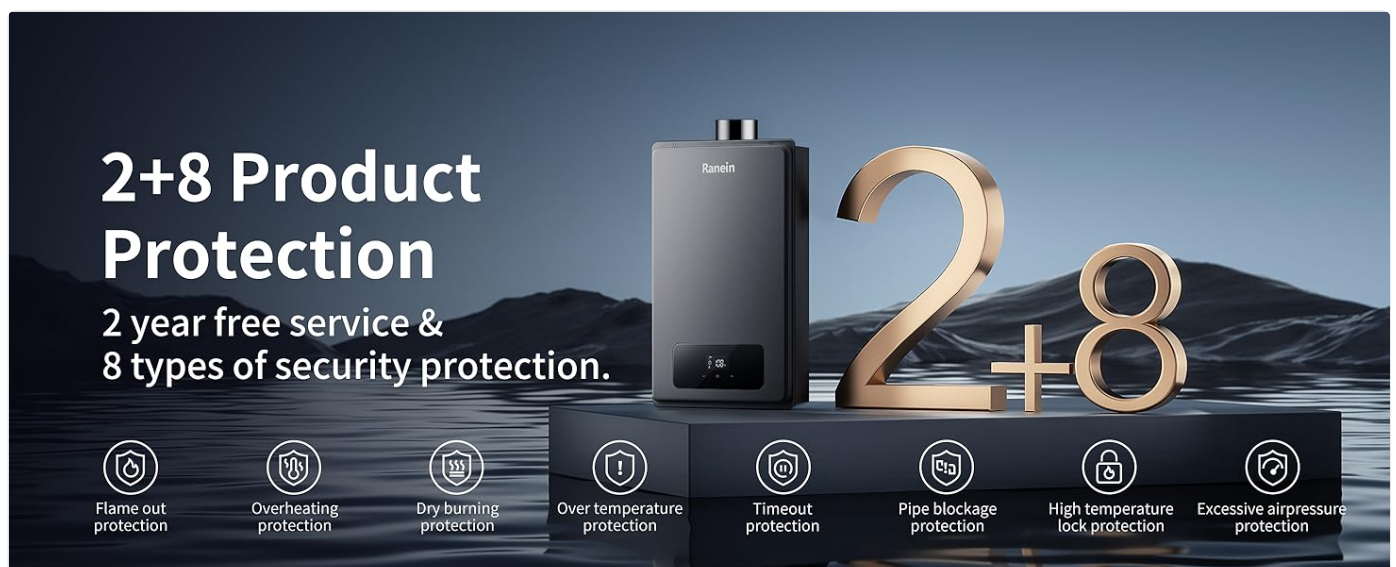


Figure 1: Overview of the 2+8 Product Protection System, highlighting various safety mechanisms integrated into the Ranein Tankless

Water Heater for enhanced user safety and appliance longevity.

PRODUCT OVERVIEW

The Ranein Tankless Water Heater is designed for efficiency and reliability, providing on-demand hot water without the need for a storage tank. Key features include a bottom-mounted fan for improved combustion, an oxygen-free copper heat exchanger for superior thermal conductivity, and a multi-stage burner for precise temperature control.



Figure 2: Front view of the Ranein Tankless Water Heater, showcasing its compact design and integrated digital display.



Figure 3: Internal components of the water heater, illustrating the design for safer and longer life through oxygen-free copper, closed combustion, and a bottom fan.

Key Components:

- **Bottom Fan:** Ensures more complete combustion and stable operation.
- **Oxygen-Free Copper Heat Exchanger:** Provides excellent thermal conductivity and corrosion resistance.
- **5-Stage Burner:** Allows for precise flame control and efficient heating.
- **Closed Combustion Chamber:** Enhances safety and combustion efficiency by isolating the combustion process.
- **Touch Panel with LED Display:** For easy monitoring and adjustment of settings.

SPECIFICATIONS

Feature	Specification
---------	---------------

Feature	Specification
Model Number	RH13K-NG
Power Source	Propane Gas
Heating Capacity	130,000 BTU
Maximum Flow Rate	5.3 Gallons Per Minute (GPM)
Installation Method	Wall Mounted (Indoor)
Rated Voltage	120 Volts (AC)
Water Pressure Range	0.025 ~ 0.8 MPa
Gas Pressure	2800Pa/2000Pa
Temperature Rise Range	95°F - 149°F
Water Inlet Fitting	Standard 1/2" NPT
Gas Inlet Fitting	Standard 3/4" NPT
Product Dimensions	23.15"L x 14.17"W x 5.9"H (53 x 53 x 22.5 cm)
Item Weight	15.9 kg (35 lbs)

130000BTU

0.025 ~ 0.8MPa

Water Pressure Range

2800Pa/2000Pa

Gas Pressure

AC110V/60Hz

Rated Voltage

95°F - 149°F

Temp. Rise Range



Figure 4: Detailed dimensions and connection specifications of the water heater.

SETUP AND INSTALLATION

Installation of the Ranein Tankless Water Heater should only be performed by a licensed professional to ensure compliance with all local and national plumbing and gas codes. This unit is designed for indoor installation.

Pre-Installation Checklist:

1. Verify that the installation location is indoors, has adequate ventilation, and is protected from freezing temperatures.
2. Ensure the wall structure can support the weight of the unit (approx. 15.9 kg).
3. Confirm availability of appropriate gas supply (Propane Gas) and water connections (1/2" NPT for water, 3/4" NPT for gas).
4. Ensure electrical supply (AC110V/60Hz) is available at the installation site.
5. Unpack the unit and inspect for any shipping damage.

Installation Steps (Summary - Professional Installation Required):

1. Mount the water heater securely to a suitable wall using appropriate fasteners.
2. Connect the cold water inlet and hot water outlet lines. Ensure all connections are watertight.
3. Connect the gas supply line to the gas inlet. Perform a leak test on all gas connections.
4. Install the required venting system according to manufacturer instructions and local codes.
5. Connect the electrical power supply.
6. Purge air from the water lines before initial operation.



Figure 5: Example of an indoor installation, emphasizing the compact size and aesthetic integration.

OPERATING INSTRUCTIONS

Once properly installed and connected, operating your Ranein Tankless Water Heater is straightforward via its intuitive touch panel and LED display.

Initial Startup:

1. Ensure all water and gas valves are open.
2. Turn on the electrical power to the unit.
3. Open a hot water faucet in your home. The unit will detect water flow and automatically ignite to heat the water.
4. Allow water to run for a few minutes to ensure all air is purged from the system.

Adjusting Temperature:

Use the touch controls on the LED display to set your desired water temperature. The display will show the current temperature setting. The unit maintains a precise temperature within $\pm 1^{\circ}\text{F}$ of your setting.



Figure 6: The touch panel and LED display for temperature control and status monitoring.

Precise Temperature Control

Enjoy a bath that relaxes you

5.3GPM

Hot Water Flow

$\pm 1^{\circ}\text{F}$

Temperature Control

All The Time

Instant Hot Water



Figure 7: Temperature stability graph, demonstrating the unit's ability to maintain a consistent hot water temperature.

Quiet Operation:

The sealed structure of the Ranein water heater is designed to minimize operational noise, ensuring a quiet experience even during ignition and continuous use.

MAINTENANCE

Regular maintenance is crucial for the longevity and efficient operation of your tankless water heater. It is recommended to have the unit inspected and serviced by a qualified professional annually.

User Maintenance:

- **Exterior Cleaning:** Wipe the exterior with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Winterization (if applicable):** If the unit will not be used for an extended period in freezing temperatures, ensure the pressure relief valve is opened to drain all remaining water from the system to prevent freeze damage.

Professional Maintenance (Recommended Annually):

- **Descaling:** Hard water can lead to mineral buildup (scale) in the heat exchanger, reducing efficiency. A professional can descale the unit using a descaling solution.
- **Vent System Inspection:** Check for any blockages, leaks, or corrosion in the exhaust venting system.
- **Gas Line Inspection:** Verify gas connections are secure and free of leaks.
- **Burner and Ignition System Check:** Ensure proper operation and cleanliness of the burner and ignition components.

TROUBLESHOOTING

This section provides solutions to common issues you might encounter. For problems not listed here or if solutions do not resolve the issue, contact a qualified service technician.

Problem	Possible Cause	Solution
No hot water / Unit not igniting	No water flow, gas supply off, power off, or ignition failure.	Ensure hot water faucet is open, check gas valve, verify power supply, or consult a technician for ignition issues.
Water not hot enough	Temperature setting too low, insufficient gas pressure, or scaling in heat exchanger.	Increase temperature setting on display. Check gas supply. Consider professional descaling.
Unit cycles on and off rapidly	Insufficient water flow, or flow sensor issue.	Ensure adequate water flow (e.g., open faucet fully). Check for kinks in water lines.
Error code displayed	Specific system malfunction.	Refer to the full manual (if available) for specific error code meanings, or contact customer support.

WARRANTY AND SUPPORT

Ranein provides a **2-year warranty** for this tankless water heater. This warranty covers defects in materials and workmanship under normal use and service.


For warranty claims, technical assistance, or any questions regarding installation and operation, please do not hesitate to contact Ranein customer support. Our team is dedicated to serving you wholeheartedly.

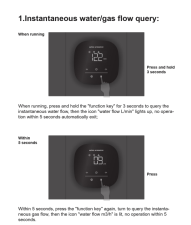


Please have your model number (RH13K-NG) and purchase date available when contacting support.



© 2024 Ranein. All rights reserved.

Related Documents

	<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 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 Tankless Gas Water Heater Installation and Use Manual</p> <p>Comprehensive guide for Ranein Tankless Gas Water Heaters, covering installation, operation, safety precautions, maintenance, and troubleshooting for models RH13K and RH19K.</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>

Documents - Ranein – RH13K-NG

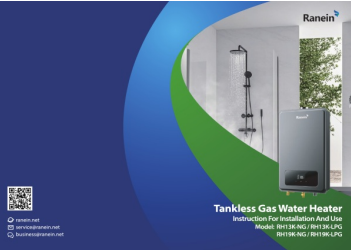


[pdf] User Manual Instructions

Tankless Gas Water Heater You re All Set! Thanks for purchasing your new Ranein RH13K RH18K residential tankless water heater This convenient safe and high efficiency product C1Z0Qt64RL m media amazon images I |||

Contact Service Tankless Gas Water Heater Instruction For Installation And Use Model: **RH13K-NG** / RH13K-LPG RH18K-NG / RH18K-LPG DANGER CARBON MONOXIDE HAZARD This appliance can produce carbon monoxide which has no odor. Using it in an enclosed space can kill you. Never use this appliance in an en...

lang:en score:33 filesize: 4.13 M page_count: 26 document date: 2024-05-20



[Ranein Tankless Gas Water Heater Installation and Use Manual](#)

Comprehensive guide for Ranein Tankless Gas Water Heaters, covering installation, operation, safety precautions, maintenance, and troubleshooting for models RH13K and RH19K.

lang:en score:22 filesize: 10.4 M page_count: 26 document date: 2025-05-23