

Ranein RHO13K-NG

Ranein 2025 GEN II Natural Gas Tankless Water Heater Instruction Manual

Model: RHO13K-NG | Brand: Ranein

1. SAFETY INFORMATION

Please read all safety instructions carefully before installation, operation, or maintenance of this appliance. Failure to follow these instructions could result in property damage, personal injury, or death.

- **Professional Installation:** Installation must be performed by a qualified and licensed professional in accordance with all local and national codes and regulations.
- **Gas Supply:** Ensure the correct type of gas (Natural Gas) is supplied to the unit. Verify gas pressure is within specified limits.
- **Ventilation:** This is an outdoor unit. Ensure proper clearance from combustible materials and adequate air circulation as per installation guidelines.
- **Water Drainage:** In cold outdoor conditions, open the pressure relief valve to drain any remaining water from the unit to prevent freezing damage.
- **Elevation Restriction:** Not recommended for installation above 2,000 feet elevation.
- **Leak Checks:** After installation, thoroughly check all gas and water connections for leaks.
- **Electrical Grounding:** Ensure the unit is properly grounded to prevent electrical shock.
- **Product Protection:** This unit features 8 types of security protection, including flame out protection, overheating protection, dry burning protection, over temperature protection, timeout protection, pipe blockage protection, high temperature lock protection, and excessive air pressure protection.

Outdoor Windproof & Waterproof

No smoke backflow smooth air Shield
internals from rain/splash

IPX4
Water Proof

10 Gale
Wind Proof



Image: The Ranein tankless water heater includes 2 years of service and 8 types of security protection for enhanced safety.

2. PRODUCT OVERVIEW

The Ranein 2025 GEN II Natural Gas Tankless Water Heater provides on-demand hot water with high efficiency. Designed for outdoor installation, this unit delivers a maximum flow rate of 5.3 Gallons Per Minute (GPM) and a heat output of 130,000 British Thermal Units (BTU), suitable for 3-5 taps in residential settings.



Image: Front view of the Ranein 2025 GEN II Natural Gas Tankless Water Heater.

Key Features:

- **High-Efficiency Endless Hot Water:** Max 5.3 GPM and 130,000 BTU, supporting 3-5 taps for various household needs.
- **Steady Temperature:** Advanced technology maintains stable water temperature by auto-adjusting flow and heat.
- **Powerful Blower:** Bottom-mounted blower prevents smoke backflow and adapts speed for full gas combustion, ensuring safety and low noise.
- **Energy-Saving:** Oxygen-free copper tank reduces heat loss; heats water on demand, eliminating standby waste.
- **Space-Saving Design:** Compact outdoor wall-mount unit with 1/2" NPT water and 3/4" NPT air inlets for quick installation.

130,000BTU

0.025 ~ 0.8MPa

Water Pressure Range

2,800Pa/2,000Pa

Gas Pressure

AC110V/60Hz

Rated Voltage

95°F - 149°F

Temp. Rise Range



Image: Detailed view of the water heater showing dimensions (14.2"W x 23.2"H), water pressure range (0.025~0.8MPa), gas pressure (2,800Pa/2,000Pa), rated voltage (AC110V/60Hz), temperature rise range (95°F-149°F), and connection sizes (Water Outlet: 1/2" NPT, Water Inlet: 1/2" NPT, Gas Inlet: 3/4" NPT).

Suitable for Single-Family Homes and Townhouses

5.3
GPM

130,000
BTU

3-5
Points



Image: Illustration showing the Ranein tankless water heater's suitability for single-family homes and townhouses, highlighting its 5.3 GPM, 130,000 BTU capacity for 3-5 points of use.

3. INSTALLATION

Proper installation is critical for the safe and efficient operation of your Ranein tankless water heater. Refer to the detailed installation guide included with your product for specific instructions. The following provides a general overview and highlights key steps.

Installation Steps Overview:

1. **Determine Location:** Choose an appropriate outdoor location, ensuring adequate clearance from windows, doors, and other structures.
2. **Mounting Template:** Use the provided quick installation guide as a template to mark drilling points on the wall.
3. **Drill Holes:** Drill holes at the marked locations using an impact drill. Insert plastic ribbed anchors into the holes.
4. **Mount Unit:** Securely mount the water heater to the wall using the provided screws and mounting bracket.

5. **Connect Exhaust Pipe:** Attach the flexible exhaust pipe to the top of the unit and extend it horizontally away from the wall.
6. **Water Connections:** Connect the hot water outlet and cold water inlet pipes to the corresponding ports on the unit. Ensure all connections are sealed with plumber's tape and tightened securely.
7. **Gas Connection:** Connect the natural gas supply line to the gas inlet port. Use gas-rated plumber's tape and ensure a tight, leak-free connection.
8. **Electrical Connection:** Plug the unit into a grounded electrical outlet.
9. **Leak Check:** After all connections are made, open the water and gas supply valves and check for any leaks using a soapy water solution on gas connections.

Your browser does not support the video tag.

Video: This video demonstrates the general installation process for Ranein Gas Tankless Water Heaters, including wall mounting, pipe connections, and securing the unit.

Outdoor Considerations:

This unit is designed for outdoor use and features anti-freeze protection. However, in extremely cold conditions, it is crucial to drain the unit to prevent damage.

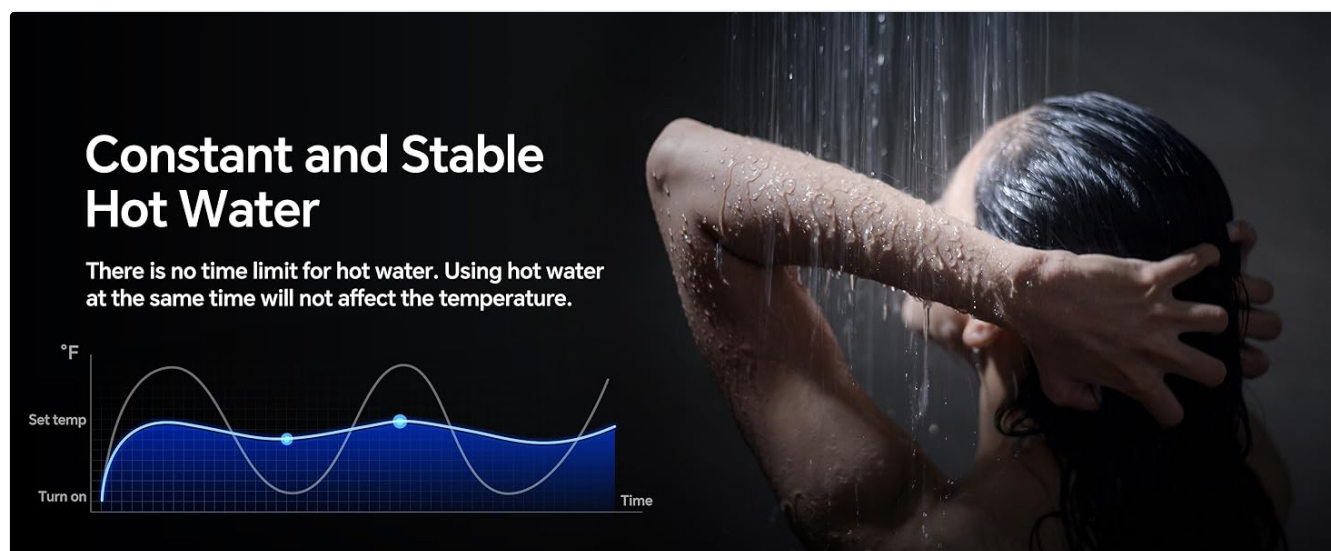


Image: Illustration of the water heater's internal anti-freeze unit, designed to protect against low temperatures. Note: Drain tank fully below -10°F (-23°C) for best protection.

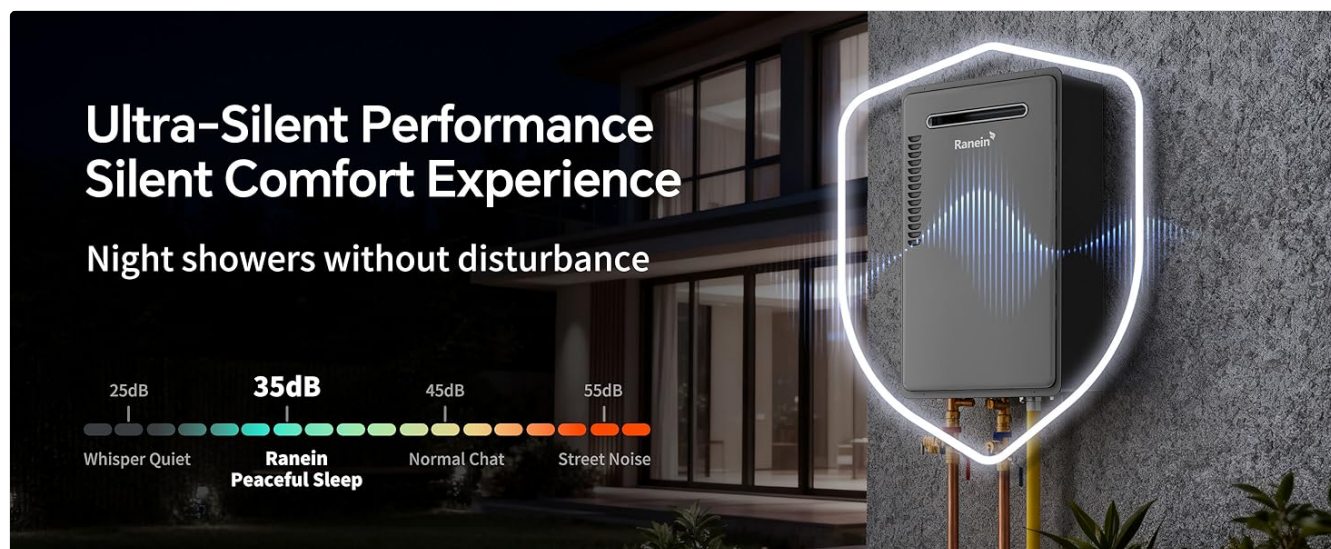


Image: The Ranein water heater is designed for outdoor use with IPX4 waterproof and 10 Gale windproof ratings, preventing smoke backflow and protecting internals from rain/splash.

4. OPERATING INSTRUCTIONS

Your Ranein tankless water heater features an intuitive LED temperature control panel for easy operation.

Control Panel Functions:

- **Power On/Off:** Press the power button to turn the unit on or off.
- **Temperature Adjustment:** Use the 'Up' and 'Down' arrows to set your desired water temperature. The LED display shows the current and set temperatures.
- **Temperature Indicator:** Displays temperature in Celsius (°C) or Fahrenheit (°F).
- **Signal Indicators:** Icons for water signal, fan signal, and flame signal provide operational status.
- **Error Code Display:** In case of a malfunction, an error code will be displayed. Refer to the troubleshooting section for guidance.



Image: Close-up of the LED control panel showing output temperature, set temperature, error code, and control buttons for power, temperature up/down, and fan/flame signals.

Indoor Touch Panel (Optional):

An optional indoor touch panel allows you to control the water heater from anywhere indoors, with a cable length of up to 50 feet.



Image: A user interacting with the indoor touch panel to pre-adjust water temperature, demonstrating indoor control and the 50ft cable length.

5. MAINTENANCE

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

- **Descaling:** Periodically descale the unit to remove mineral buildup, especially in areas with hard water. Follow the descaling procedure outlined in the full user manual.
- **Filter Cleaning:** Check and clean the water inlet filter regularly to prevent debris from entering the unit.
- **External Cleaning:** Keep the exterior of the unit clean and free from obstructions.
- **Winterization (Cold Climates):** In regions prone to freezing temperatures, ensure the unit is properly drained if it will be exposed to temperatures below -10°F (-23°C) or if it will be inactive for an extended period. Open the pressure relief valve to drain all water.
- **Professional Inspection:** It is recommended to have a qualified technician inspect the unit annually to ensure all components are functioning correctly.

6. TROUBLESHOOTING

If you encounter issues with your water heater, refer to the following common troubleshooting tips. For specific error codes displayed on the control panel, consult the comprehensive troubleshooting section in your full user manual.

- **No Hot Water:** Check if the unit is powered on, gas supply is open, and water supply is active. Ensure the set temperature is appropriate.
- **Fluctuating Temperature:** Verify that the water flow rate is within the unit's operating range. Check for mineral buildup that might affect heat exchange.
- **Low Water Pressure:** Inspect the water inlet filter for clogs. Ensure all water valves are fully open.
- **Unit Not Igniting:** Confirm gas supply is open and there are no gas leaks. Check for proper electrical connection.

- **Error Codes:** If an error code appears on the LED display, note the code and refer to the detailed troubleshooting guide in the main manual or contact customer support.

If problems persist after attempting these steps, please contact Ranein customer support for assistance.

7. SPECIFICATIONS

Detailed technical specifications for the Ranein 2025 GEN II Natural Gas Tankless Water Heater (Model RHO13K-NG).

Brand	Ranein
Model Number	RHO13K-NG
Product Dimensions	14.2"W x 23.2"H
Power Source	Natural Gas
Maximum Flow Rate	5.3 Gallons Per Minute (GPM)
Heat Output	130,000 British Thermal Units (BTU)
Voltage	120 Volts
Efficiency	High Efficiency
Maximum Operating Pressure	150 Pound per Square Inch (PSI)
Mounting Type	Wall
Item Weight	34 pounds
Special Feature	LED Display
Included Components	Assembly Kit x1, Manual x1, Tankless Water Heater x1

Gas Water Heater Selection Guide

Match BTU & GPM to your needs



3.1 GPM

68,000BTU 1-2outlet points

3.6 GPM

80,000BTU 2-3outlet points

4.3 GPM

100,000BTU 3-4outlet points

5.3 GPM

130,000BTU 3-5outlet points

7.5 GPM

170,000BTU 4-5outlet points

8.5 GPM

190,000BTU 4-6outlet points

Image: A selection guide for Ranein gas water heaters, showing different GPM and BTU ratings and their corresponding outlet points.

This model (5.3 GPM, 130,000 BTU) is suitable for 3-5 outlet points.

8. WARRANTY AND SUPPORT

Ranein is committed to providing reliable products and excellent customer service.

Warranty Information:

- This product comes with a **2-Year Manufacturer Warranty** against manufacturing defects.


Customer Support:

For any questions, installation guidance, product consultation, or issues, please contact Ranein customer support:

- **Email:** service@ranein.net
- **Phone (US):** (424) 452-2630

RHO13K (Outdoor)

 130,000BTU

 5.3 GPM


 3-5 outlet points

Image: Ranein Service Support details, including comprehensive product problem-solving, 2-year warranty, and after-sales contact information.