

## Ranein RHO19K-LPG

# Ranein GEN II Propane Gas Tankless Water Heater (8.5 GPM, 190,000 BTU) Outdoor User Manual

Model: RHO19K-LPG

## 1. INTRODUCTION

This manual provides essential information for the safe installation, operation, and maintenance of your Ranein GEN II Propane Gas Tankless Water Heater. Please read this manual thoroughly before installation and use, and retain it for future reference. This outdoor unit is designed to provide continuous hot water for household needs, supporting 4-6 taps with a maximum flow rate of 8.5 GPM and a heat output of 190,000 BTU.



Image 1.1: Ranein GEN II Propane Gas Tankless Water Heater.

## 2. SAFETY INFORMATION

- **Professional Installation Required:** This appliance must be installed by licensed professionals in accordance with all local codes and regulations. Improper installation can lead to property damage, personal injury, or death.
- **Elevation Limit:** Not recommended for areas over 2,000 feet elevation.
- **Anti-Freeze Protection:** The unit includes a built-in anti-freeze unit that protects down to 14°F (-10°C). If temperatures are expected to drop below this, or if the unit will not be used for an extended period, completely drain the tank by opening the drain valve to prevent pipe cracking.
- **Outdoor Use Only:** This model is designed for outdoor installation. Ensure proper ventilation and clearance from combustible materials.
- **Gas Supply:** Ensure the correct type of gas (Propane) is supplied and that all gas connections are secure and leak-free.

## 3. PRODUCT FEATURES

- **High-Efficiency Endless Hot Water:** Max 8.5 GPM and 190,000 BTU, suitable for 4-6 taps.
- **Steady Temperature Control:** Advanced technology maintains stable water temperature by auto-adjusting flow and heat.
- **Powerful Blower for Outdoor Safety:** Bottom-mounted blower prevents smoke backflow and adapts speed to wind pressure for full gas combustion and low noise.
- **Energy-Saving Design:** Internal oxygen-free copper tank reduces heat loss. Heats water on demand, eliminating standby waste.
- **Space-Saving Wall-Mount:** Compact design for outdoor installation on walls, balconies, or corners. Standard 3/4" NPT ports for quick connection.
- **Durable Construction:** Features MicroPrecision Engineering 2.0, HydroArmor Copper Core 2.0, FortiCore Steel Protection 2.0, and HyperIgnite Burner System 2.0 for enhanced performance and longevity.



Image 3.1: Overview of Ranein GEN II performance upgrades.

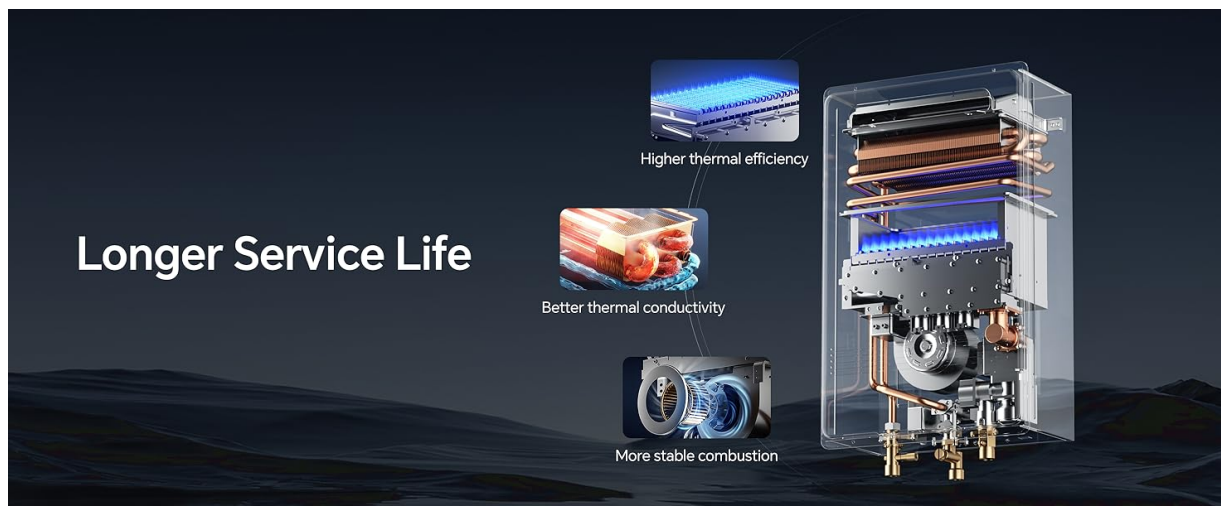


Image 3.2: Key advantages of the Ranein tankless water heater design.

## 4. SETUP AND INSTALLATION

Proper installation is critical for the safe and efficient operation of your tankless water heater. Always ensure installation is performed by a licensed professional.

### 4.1 Mounting the Unit

Use the provided quick installation guide template to mark drilling locations on the wall. Drill holes, insert plastic ribbed anchors, and secure the mounting screws. Hang the water heater onto the anchor screws and tighten them securely.

Video 4.1: Installation process for the Ranein 190,000 BTU Outdoor Tankless Water Heater.

### 4.2 Connecting Water and Gas Pipes

Connect the hot water outlet, cold water inlet, and gas inlet pipes. Ensure all connections are sealed with Teflon tape and tightened to prevent leaks. The unit features standard 3/4" NPT ports.



Image 4.2: Detailed view of water and gas connections, along with product dimensions.

#### 4.3 Connecting the Remote Control Panel

Connect the remote LED temperature control panel to the designated port on the water heater. This panel allows for convenient temperature adjustments and monitoring.

### 5. OPERATING INSTRUCTIONS

The water heater is operated via the sensitive touch screen interface on the unit or the remote LED control panel.

#### 5.1 Power On/Off

Press the power button on the control panel to turn the unit on or off.

#### 5.2 Temperature Adjustment

Use the up and down arrows on the control panel to adjust the desired water temperature. The temperature range is 95°F - 149°F (35°C - 65°C).

Video 5.1: Demonstration of the Ranein 190,000 BTU Outdoor Tankless Water Heater Display and temperature adjustment.



# Control Water Heater from Anywhere Indoors



Image 5.2: The LED temperature control panel for the water heater.

## 6. MAINTENANCE

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

- **Annual Inspection:** Have a licensed professional inspect the unit annually, including gas connections, water connections, and the exhaust system.
- **Draining for Freezing Temperatures:** If the unit is exposed to temperatures below 14°F (-10°C) or will be unused for an extended period, completely drain the water from the unit to prevent freezing and damage.
- **Cleaning:** Keep the exterior of the unit clean and free from obstructions. Do not use abrasive cleaners.

## 7. TROUBLESHOOTING

If the water heater displays an error code, refer to the table below for common issues and solutions. For persistent problems, contact customer service.

Error Code	Fault Name
E0	Outlet Water Temperature Sensor is Faulty
E1	Ignition Failure
E2	Accidental Flameout
E3	Overtemperature Fault
E4	Inlet Water Temperature Sensor is Faulty
E5	DC Fan Malfunction
E7	Solenoid Valve Malfunction
E8	Fan Speed Exceeds The Limit
Eb	Residual Flame Fault
En	Timer Timeout
Ec	Signal Communication Failure

For any error not listed or if troubleshooting steps do not resolve the issue, please contact Ranein customer support.

## 8. SPECIFICATIONS

Feature	Specification
Brand	Ranein
Model Number	RHO19K-LPG
Product Dimensions	20.9"W x 28.8"H
Color	Gray
Power Source	Propane Gas
Voltage	120 Volts
Maximum Flow Rate	8.5 Gallons Per Minute
Maximum Temperature	149 Degrees Fahrenheit
Heat Output	190,000 British Thermal Units
Efficiency	High Efficiency
Maximum Operating Pressure	150 Pound per Square Inch

Feature	Specification
Mounting Type	Wall
Item Weight	49 pounds

9. WARRANTY AND SUPPORT

Ranein offers a **2-year manufacturer's warranty** against manufacturing defects. For comprehensive product problem-solving services, installation guidance, or product consultation, please contact our professional after-sales team.

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



Image 9.1: Ranein customer service and support details.