

Ranein RH8K-NG

# Ranein Natural Gas Tankless Water Heater User Manual

Model: RH8K-NG | Brand: Ranein

## PRODUCT OVERVIEW

The Ranein Natural Gas Tankless Water Heater is designed to provide instant and continuous hot water for your household needs. With a heating capacity of 80,000 BTU and a hot water flow rate of 3.6 gallons per minute (GPM), it can efficiently supply hot water to multiple points of use, such as bathrooms, kitchens, and bar areas, simultaneously. Unlike traditional tank water heaters, this tankless unit eliminates the need for preheating, ensuring hot water on demand and contributing to energy savings. The unit comes with an exhaust pipe, and its oxygen-free copper water tank is designed to reduce heat loss and lower energy consumption.



Figure 1: Ranein Natural Gas Tankless Water Heater and included exhaust pipe.

## KEY FEATURES

- **HeatMaster 2.0 Water Heating System:** Features a stable combustion system with a DC high-speed fan, oxygen-free copper heat exchanger, sectional burners, and a precise temperature sensor for greater heat utilization and stable performance.
- **Whole House Use:** Capable of providing continuous hot water for 2-3 water supply points simultaneously, suitable for typical household demands.

- **Smart Modes:** Offers four convenient preset temperature modes:
  - Dish mode (100°F)
  - Fruit mode (95°F)
  - Elderly mode (104°F)
  - Infant mode (107°F)
- **Precision Control:** Equipped with an ADRC2.0 adaptive constant temperature algorithm and AI precision control for multi-point water supply without significant temperature fluctuations.
- **High Definition Liquid Crystal Display:** An intuitive touch panel with an LED display allows for easy switching between modes and precise temperature control.
- **Energy Efficiency:** The oxygen-free copper water tank minimizes heat loss, contributing to lower energy consumption.
- **Quiet Operation:** Designed for quiet performance, ensuring minimal disturbance.

# Our Advantages



Figure 2: Overview of Ranein Tankless Water Heater advantages, including HeatMaster 2.0, Whole House Use, Precision Control, Oxygen-Free Copper, Sectional Burners, and DC High-speed Fan.

# Whole House Use

3.6<sub>GPM</sub> | 80000<sub>BTU</sub>



Figure 3: Illustration of the water heater's capacity for whole house use, indicating 3.6 GPM and 80,000 BTU.



# HeatMaster 2.0 Water Heating System

More stable combustion. Greater heat utilization.

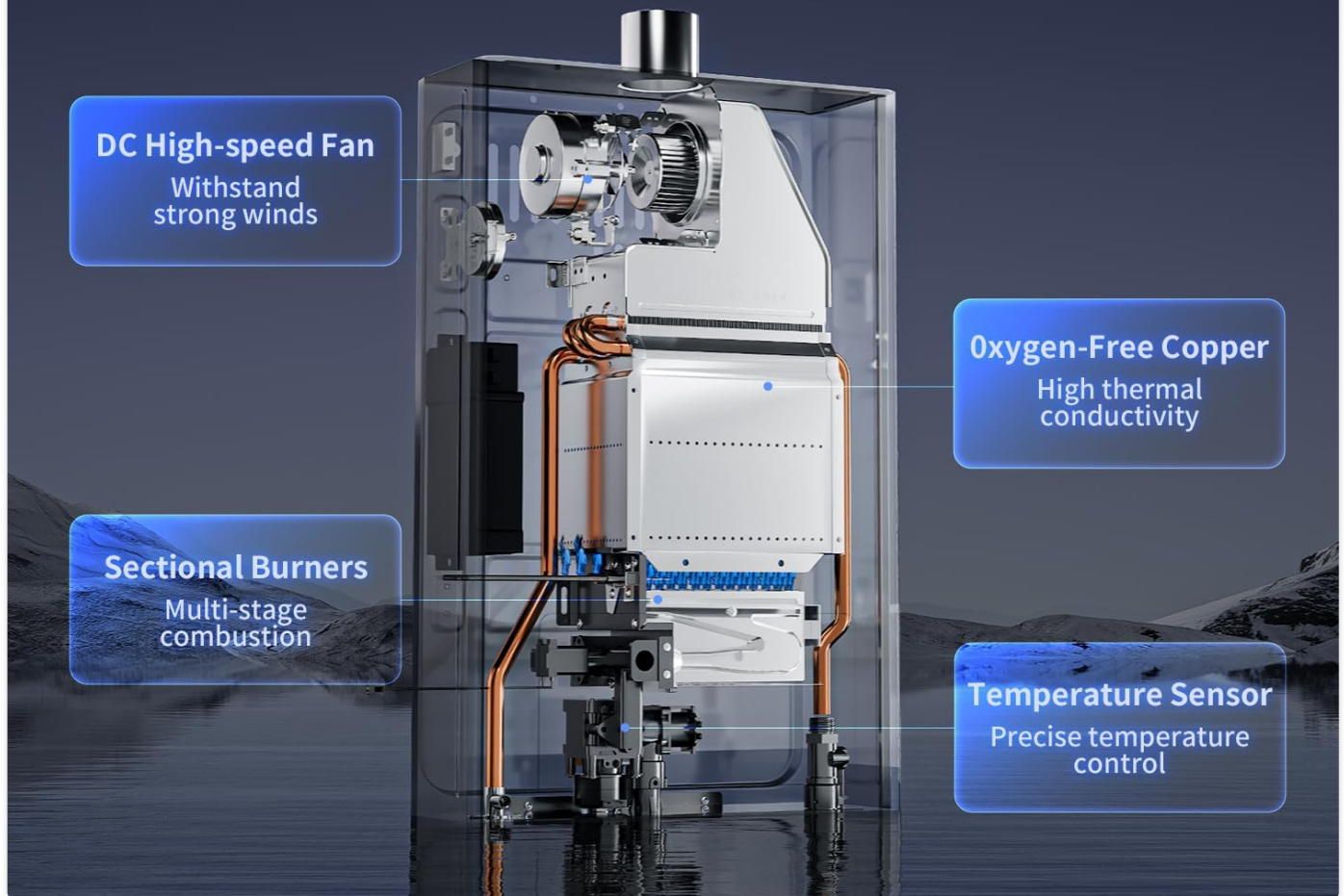


Figure 4: Detailed view of the HeatMaster 2.0 Water Heating System, highlighting the DC High-speed Fan, Oxygen-Free Copper, Sectional Burners, and Temperature Sensor.

# Smart Mode



**Washing Dishes**



**Washing Vegetables**



**Infant Mode**



**Elderly Mode**

Figure 5: Visual representation of the four Smart Modes: Washing Dishes, Washing Vegetables, Infant Mode, and Elderly Mode.



# Steady water, No waiting

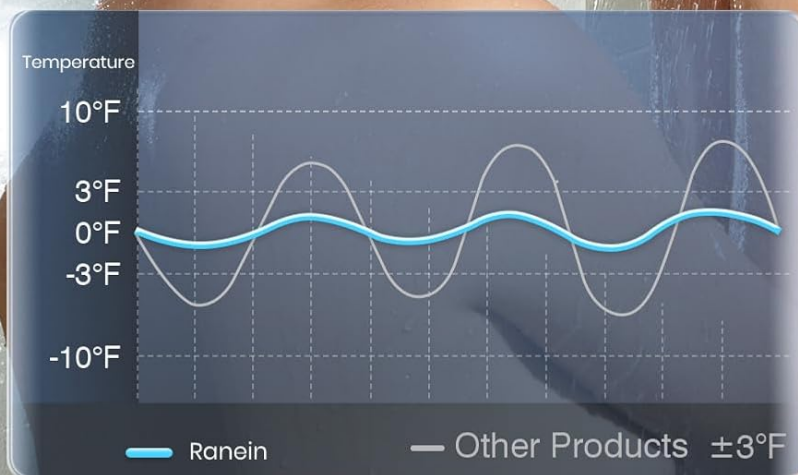


Figure 6: Graph illustrating the stable water temperature provided by the Ranein water heater, ensuring no waiting time for hot water.

# High Definition Liquid Crystal Display

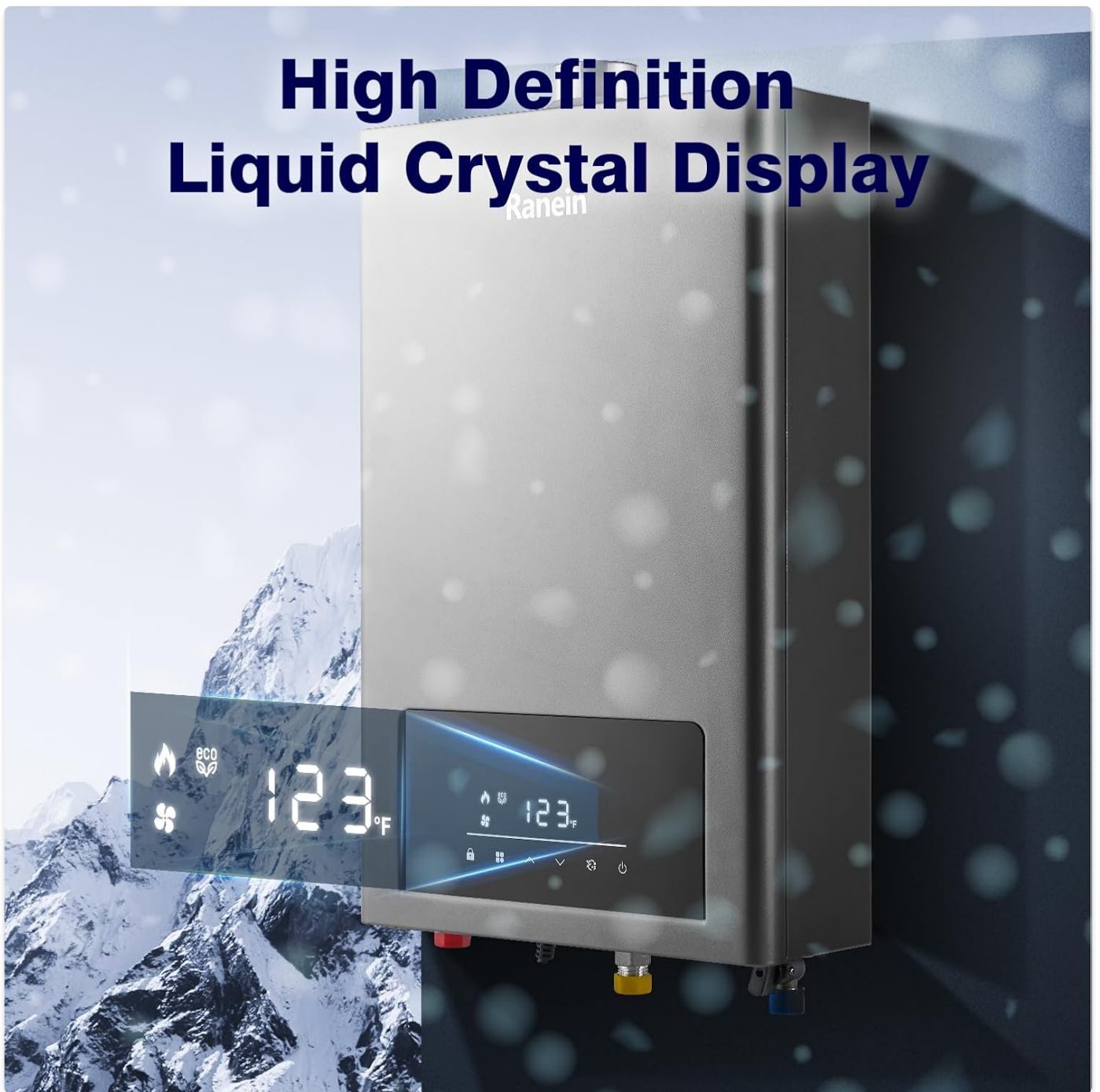


Figure 7: Close-up of the High Definition Liquid Crystal Display, showing temperature and control icons.



# ADRC2.0 adaptive constant temperature algorithm

## AI precision control multi-point water without cold feeling

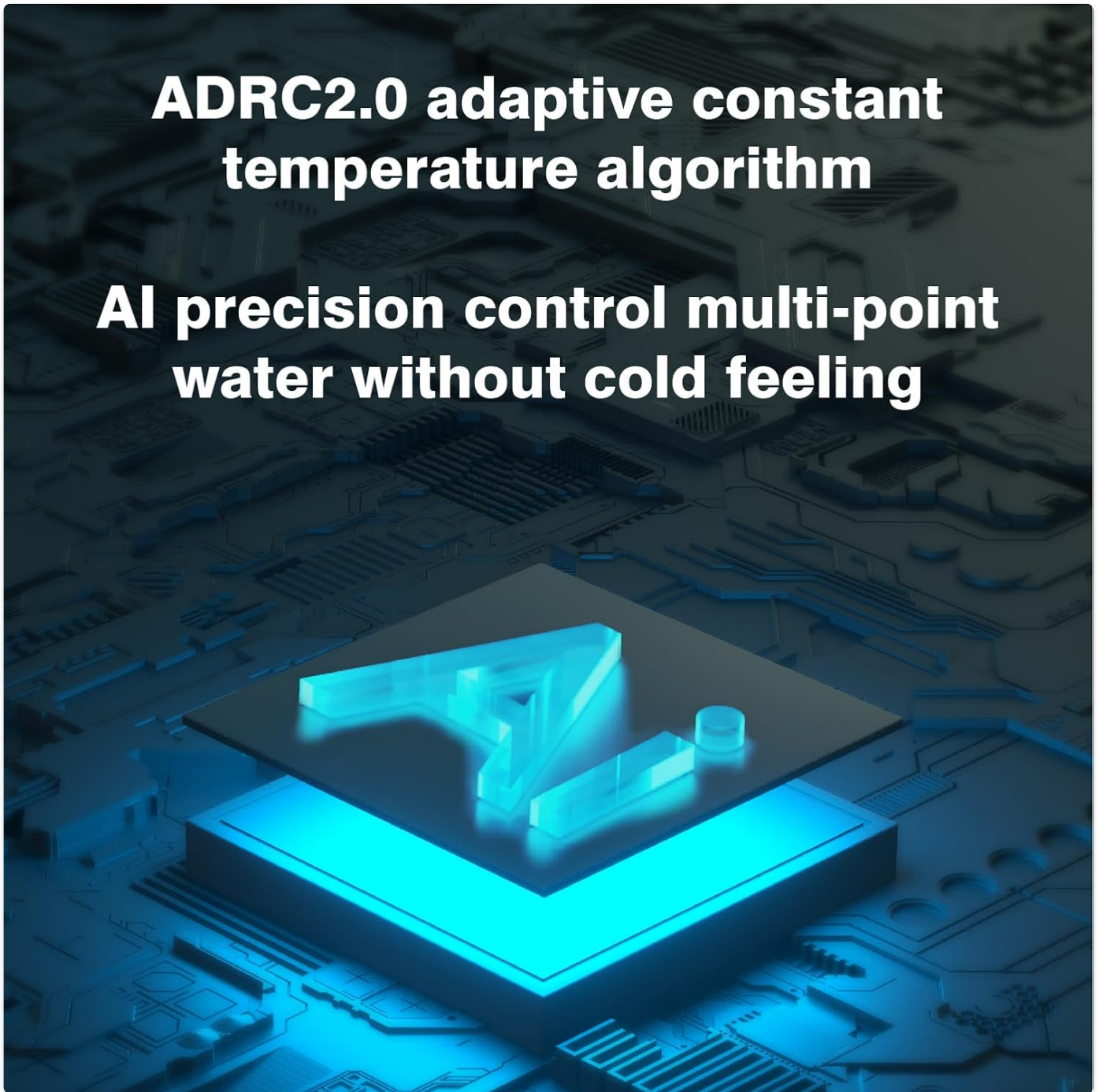


Figure 8: Representation of the ADRC2.0 adaptive constant temperature algorithm and AI precision control for consistent water temperature.

### INSTALLATION AND SETUP

Installation of the Ranein Natural Gas Tankless Water Heater should strictly adhere to local building and plumbing regulations. It is strongly advised that installation be carried out by licensed professionals to ensure safety and proper functionality.

The unit is designed with standard 1/2" NPT water fittings and gas inlet for compatibility. The kit includes the tankless water heater, a user's manual, a vent pipe, and an assembly kit. Please refer to the detailed [Installation Manual \(PDF\)](#) for comprehensive instructions.

*Note: This product is not recommended for areas over 2,000 feet in elevation.*

# Interface Size In Line With National Standards



Figure 9: Dimensions and interface sizes of the Ranein Tankless Water Heater, showing 1/2" NPT connections.

## OPERATING INSTRUCTIONS

The water heater features a user-friendly touch panel with an LED display for easy operation. You can select from four pre-set modes or adjust the temperature manually to your preference.

- **Power On/Off:** Use the power button on the touch panel to turn the unit on or off.
- **Mode Selection:** Press the mode button to cycle through the preset modes (Dish, Fruit, Elderly, Infant) for quick temperature settings.
- **Temperature Adjustment:** Use the up and down arrows on the display to fine-tune the water temperature to your desired level. The maximum temperature is 149°F.
- **Continuous Hot Water:** Once activated, the unit provides hot water on demand without the typical waiting period associated with tank-style heaters.

## MAINTENANCE

Regular maintenance is crucial for the longevity and efficient operation of your tankless water heater. While specific maintenance schedules are detailed in the full user manual, general practices include:

- Periodically inspect the vent pipe for any obstructions or damage.
- Ensure the area around the unit is clear of debris and allows for proper ventilation.
- Consider annual flushing of the heat exchanger to prevent mineral buildup, especially in areas with hard water. This should ideally be performed by a qualified technician.
- In cold climates, take precautions to prevent freezing of the unit and associated pipes, as outlined in the comprehensive installation manual.

## TROUBLESHOOTING

If you encounter issues with your Ranein tankless water heater, refer to the detailed troubleshooting section in the complete user manual. Common issues and their potential solutions often involve:

- **No Hot Water:** Check gas supply, water flow, and power connection. Ensure the unit is turned on and not displaying any error codes.
- **Inconsistent Temperature:** Verify water pressure and flow rate. Ensure proper mode selection.
- **Error Codes:** Consult the user manual for specific error code definitions and recommended actions.
- **Leaks:** Immediately shut off water and gas supply to the unit and contact a qualified professional.

For complex issues or if you are unsure about a solution, it is always recommended to contact a licensed professional or Ranein customer support.

## SPECIFICATIONS

Attribute	Value
Brand	Ranein
Model Number	RH8K-NG
Product Dimensions	19.09"W x 7.67"H
Color	Gray
Voltage	120 Volts (AC)
Maximum Temperature	149 Degrees Fahrenheit
Mounting Type	Wall
Item Weight	22.9 pounds
Included Components	Tankless Water Heater x1, User's Manual x1, Vent Pipe x1, Assembly Kit x1

## WARRANTY AND SUPPORT



Ranein offers a 2-year free service for this product, along with 8 types of security protection features to ensure safe and reliable operation. For detailed warranty information, technical support, or service inquiries, please refer to the contact information provided in your comprehensive user manual or visit the official Ranein website.

A digital copy of the full installation manual is available for download:[Installation Manual \(PDF\)](#).

