

Ranein RE27K

Ranein GEN II RE27K 27kW 240V Tankless Electric Water Heater User Manual

1. IMPORTANT SAFETY INFORMATION

Please read this manual thoroughly before installation and operation. Failure to follow these instructions could result in property damage, personal injury, or death. Keep this manual for future reference.

- This unit must be installed by a qualified electrician or plumber in accordance with all federal, state, and local electrical and plumbing codes.
- Ensure the water heater is connected to a reliable earth ground connection at all times.
- Make sure all circuit breakers and disconnect switches are off before installation and maintenance.
- DO NOT install this unit in a location where it may be subject to freezing temperatures, as this can cause severe damage not covered under your warranty.
- The wall for installation must be able to support the weight of the water heater.
- Keep the unit away from direct sunlight, moisture, dust, steam, and other liquids.
- The outlet water pipe can get very hot; make sure that the outlet water pipe is out of the reach of children.

2. SETUP AND INSTALLATION

2.1 Electrical Requirements

The Ranein RE27K model requires specific electrical infrastructure for safe and efficient operation:

- **Power:** 27 kW, 240V/60A
- **Breakers:** 3 dedicated 40A double-pole circuit breakers
- **Cables:** 3 x 8 AWG cables
- **Maximum Amperage:** 113 AMP

Ensure your electrical panel can accommodate these requirements. Professional installation is highly recommended.

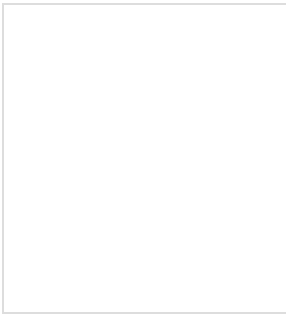


Image: Warning sign indicating the electrical requirements for the water heater, specifically 112 Amps and 3 x 40 AMP breakers.



Image: Table showing cable gauge and power requirements for different Ranein models, including 27kW requiring 3x8AWG cable and 3x40A breakers.

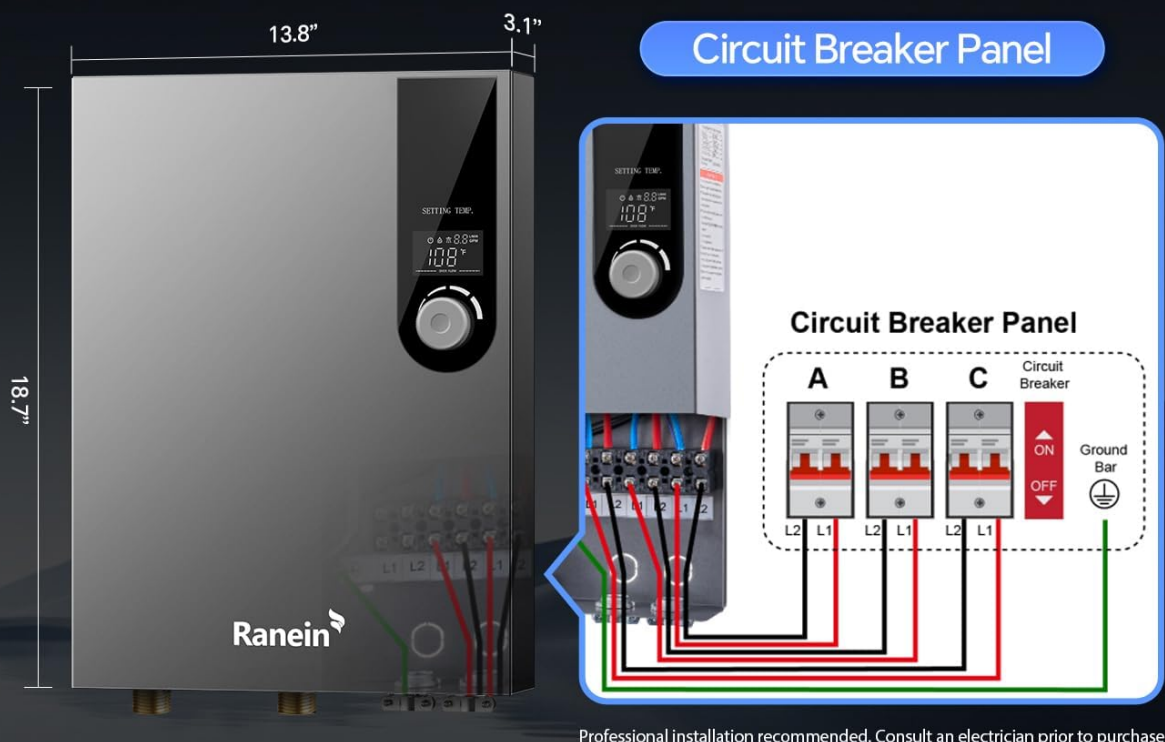
2.2 Physical Dimensions and Water Connection

- **Product Size:** 13.8"W x 3.1"D x 18.7"H
- **Water Connection:** 3/4" NPT

2.3 Mounting the Unit

Use the provided template to mark drilling locations on the wall. Ensure the wall is sturdy enough to support the unit's weight. Securely fasten the mounting screws.

Installation Diagram



Requirements:

Mode	KW	Voltage	Maximum Amp	Breaker	Cable Required	Pipe Fitting	Weight
RE27K	27kW	240V/60A	113 AMP	3 x 40 AMP	3 x 8 AWG	3/4"NPT	18 lbs

Image: Installation diagram illustrating the unit's dimensions, electrical connections, and a table of requirements.

2.4 Plumbing Connections

Connect the 3/4" NPT water lines to the unit. Ensure all connections are tight and leak-free. The unit is designed for multi-point water supply, capable of serving 2-4 household water points.

Support Multi-Point Water Supply

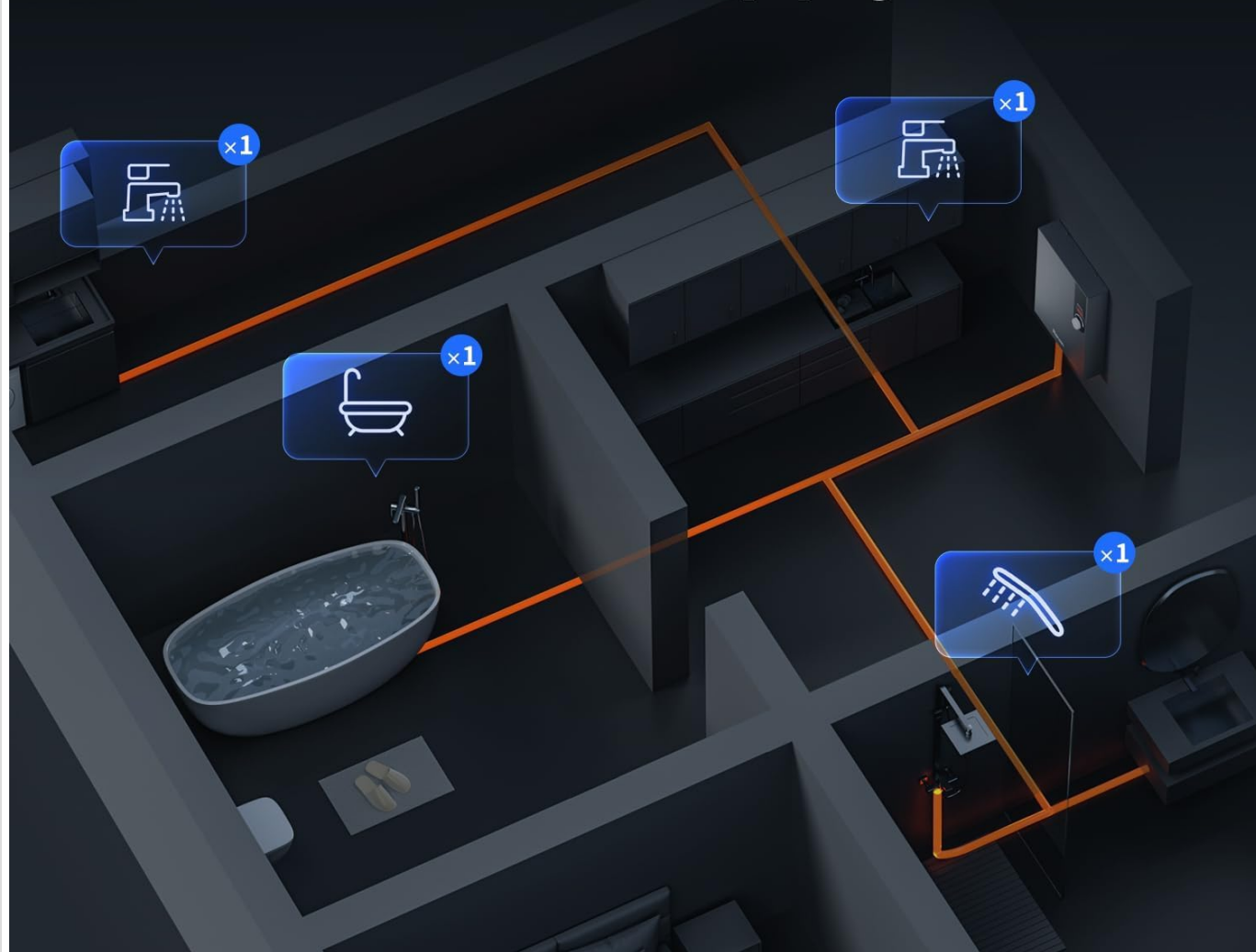


Image: Illustration of the Ranein water heater supporting multi-point water supply in a household setting.

2.5 Installation Video Guide

Your browser does not support the video tag.

Video: This video demonstrates the installation process of the Ranein 18/27 kW Electric Tankless Water Heater, including mounting, plumbing, and initial setup steps.

3. OPERATING INSTRUCTIONS

3.1 Powering On/Off

Press the power button on the unit's LED display to turn the water heater on or off.

3.2 Temperature Control

Adjust the water temperature seamlessly using the tactile control knob and LED display. The temperature can be set from

86°F to 131°F (30°C to 55°C) in 1°F increments. Set your ideal temperature once for consistent, stable output.

Why Choose Ranein



Visualizing
Temperature



Heats Up in
3 Seconds



Unlimited
Hot Water



Intelligent Constant
Temperature



Multiple
Protections



Compact

Image: Close-up of the unit's display, showing temperature visualization and the control knob for adjustment.

High-Power Electric Water Heater



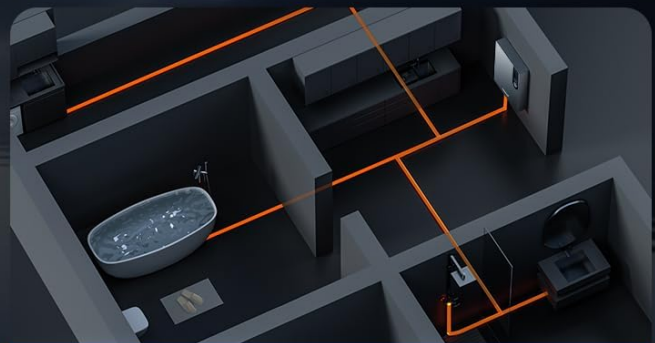
High Energy Efficiency



Faster Heating Speed



Large Water Volume and Flow Rate



Multiple Points Use Water to Maintain Temperature

Image: Demonstrates accurate temperature control, showing a stable temperature output during use.

3.3 Instant Hot Water Delivery

Equipped with rapid heating technology, the unit delivers near-instant hot water, minimizing wait time. Enjoy continuous hot water on demand.

Cable Gauge & Power Requirements

8AWG Thickness
(Roughly equivalent to two quarters)

0.13"

Quarter x 2 (0.13")

6AWG Thickness
(Thicker than two quarters)

0.16"

Power (Output)	Cable Required	Breaker
4.5kW / 120V	8AWG	40A
8kW / 240V	8AWG	40A
13kW / 240V	6AWG	60A
18kW / 240V	2x8AWG	40A*2
27kW / 240V	3x8AWG	40A*3

Image: Highlights key features including 3-second fast heating and unlimited hot water.

Precise Temperature Control

The sensor monitors the water temperature in real-time, and the chip regulates the power precisely.

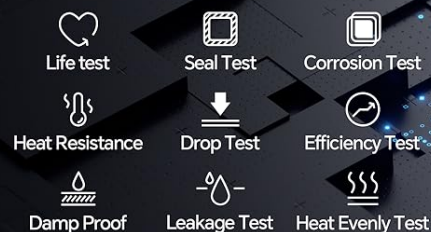


Image: Visual representation of the 3-second fast heating capability.

3.4 Operating Video Guide

Your browser does not support the video tag.

Video: This video demonstrates the operation of the Ranein 18/27 kW Electric Tankless Water Heater, including temperature adjustment and display functions.

4. MAINTENANCE

The Ranein tankless water heater is designed for minimal maintenance:

- **Anti-scale Design:** Stainless steel heating elements help prevent scale buildup, reducing the need for frequent descaling.
- **General Cleaning:** Keep the exterior of the unit clean and dry. Avoid using abrasive cleaners.
- **No Special Maintenance:** Unlike tank heaters, this unit does not require flushing to remove sediment.

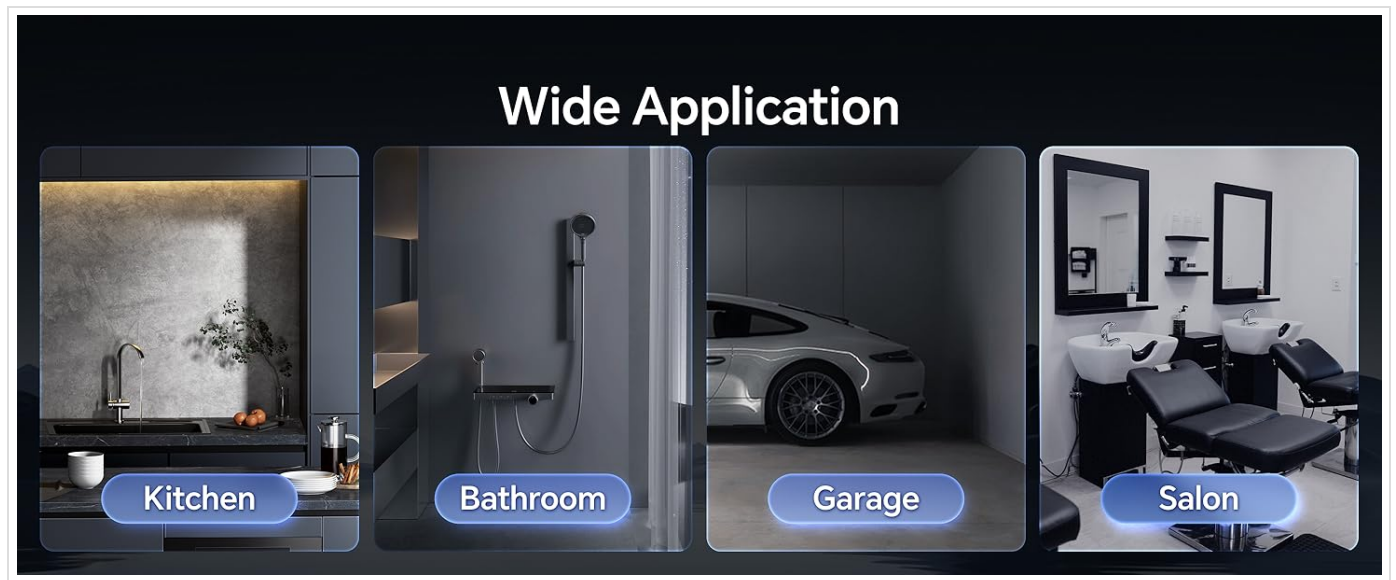


Image: Highlights multiple protection features, including anti-scale design, contributing to low maintenance.

5. TROUBLESHOOTING

If you encounter issues with your Ranein tankless water heater, consider the following:

- **No Hot Water:** Check if the unit is powered on and if the circuit breakers are not tripped. Ensure water flow is sufficient to activate the heater.
- **Temperature Fluctuations:** The thermostatic system is designed to keep water stable. If fluctuations occur, ensure proper water pressure and flow rate.
- **Error Codes:** Refer to the specific error codes displayed on the LED screen and consult the full product manual for detailed solutions.
- **Installation Concerns:** Professional installation is recommended for safety and optimal performance. If issues arise post-installation, contact a qualified professional.
- **Safety Features:** The unit includes multiple built-in safety protections (leakage protection, overheat safeguards, damp-proof design). If any safety feature is triggered, the unit may shut down.

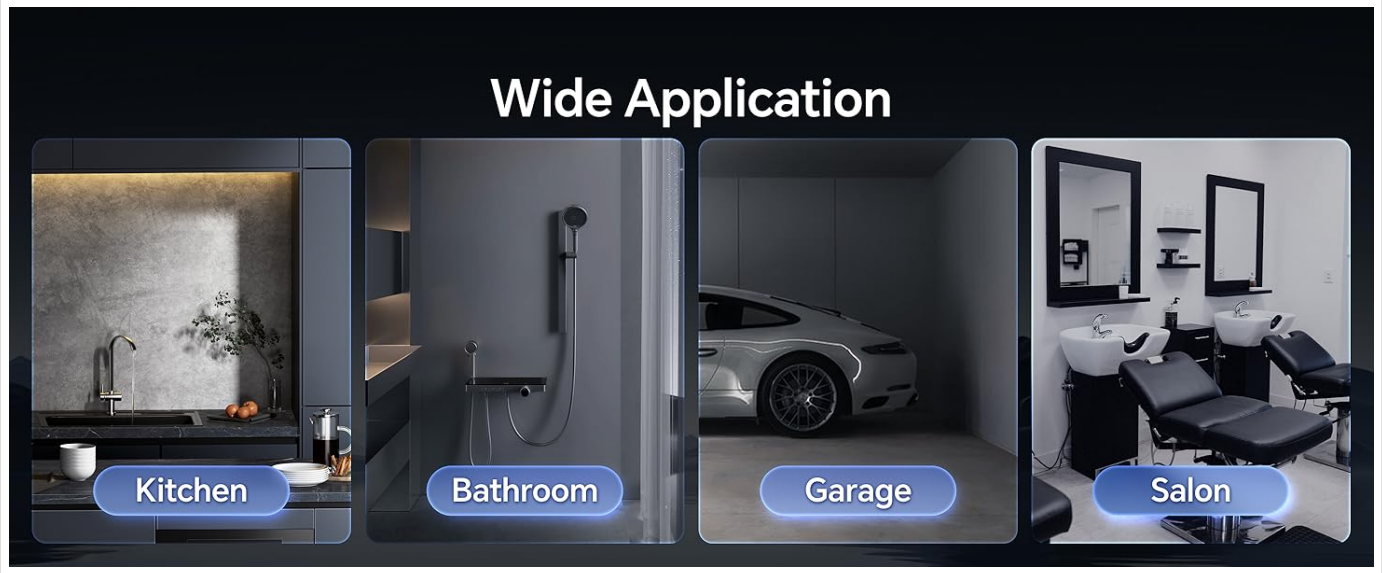


Image: Illustrates the comprehensive 8-layer protection system, including leakage and overheat protection, which can aid in troubleshooting.

6. SPECIFICATIONS

Feature	Detail
Brand	Ranein
Model Number	RE27K
Power Source	Electric
Product Dimensions	13.8"W x 3.1"D x 18.7"H
Color	Gray
Special Feature	LED Display
Maximum Temperature	131 Degrees Fahrenheit (55°C)
Efficiency	99%
Mounting Type	Wall
Item Weight	17.41 pounds
Included Components	Water heater x1

7. WARRANTY AND SUPPORT

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

- **Warranty:** This product comes with a 2-year warranty against manufacturing defects.
- **Support:** For comprehensive product problem-solving, installation guidance, or product consultation, please contact our professional after-sales team.
- **Email:** service@ranein.net
- **US Phone:** (424)-452-2630

A dark blue graphic with a light blue beam of light shining from the top left. The Ranein logo is at the top, followed by 'Service Support'. Below this, a statement says 'The Ranein Team offers the following service support:'. Three service items are listed in rounded rectangular boxes, each with an icon: a smiley face for 'Comprehensive product problem-solving service', a shield with '2 YEAR WARRANTY' for '2-year war-ranty against manufacturing defects', and an envelope with '»' for 'After-sales contact'. The contact details 'service@ranein.net' and 'US:(424)-452-2630' are at the bottom.

Ranein
Service Support

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-  2-year war-ranty against manufacturing defects
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Image: Ranein Service Support information, including warranty details and contact methods.