



[Manuals.plus](#) /

> [VELPAX](#) /

> VELPAX Natural Gas Tankless Water Heater 16L (Model HWRSQ-001) Instruction Manual

## VELPAX HWRSQ-001

# VELPAX Natural Gas Tankless Water Heater

MODEL HWRSQ-001 USER MANUAL

## 1. Important Safety Information

---

Please read this manual thoroughly before installation, operation, or maintenance of your VELPAX Natural Gas Tankless Water Heater. Failure to follow these instructions could result in property damage, personal injury, or death. Keep this manual for future reference.

- **Professional Installation Recommended:** Installation, adjustment, alteration, service, or maintenance must be performed by a qualified installer or service agency.
- **Gas Safety:** This appliance uses natural gas. Ensure proper ventilation and check for gas leaks after installation. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **Ventilation:** Proper venting is crucial for safe operation. Install a smoke exhaust pipe as required and ensure adequate air supply.
- **Water Pressure:** The unit operates with a minimum water pressure of 3.6 PSI. Ensure your water supply meets this requirement.
- **Freezing Protection:** In cold weather, drain residual water from the unit if it will not be used for an extended period to prevent freezing damage.
- **Electrical Grounding:** Ensure the unit is properly grounded according to local electrical codes.

## 2. Product Overview

---

The VELPAX 16L Natural Gas Tankless Water Heater provides on-demand hot water with efficient performance and multiple safety features. Designed for indoor use, this unit delivers up to 4.21 gallons per minute (GPM) of hot water, suitable for 2-3 points of use simultaneously.



Figure 2.1: VELPAX 16L Natural Gas Tankless Water Heater and included installation accessories.

### Key Features:

- **Instant Hot Water:** Provides hot water on demand, eliminating the need for a storage tank.
- **High Efficiency:** 68,000 BTU per hour output for efficient heating.
- **Temperature Control:** Fahrenheit digital display allows temperature adjustments between 95°F and 149°F.
- **Multi-Protection System:** Includes flame failure device, anti-freeze protection, and overheating protection.
- **Durable Construction:** Stainless steel body for corrosion resistance and oxygen-free copper water tank for extended service life.
- **Low Noise Operation:** Advanced combustion technology reduces operational noise.

### 3. Package Contents

Verify that all components are present and undamaged before proceeding with installation.

# PRODUCT SIZE AND ACCESSORIES

Length 13.8inch

Width 6.3inch

Hight 21.7inch



Figure 3.1: Product dimensions and included accessories.

- VELPAX 16L Natural Gas Tankless Water Heater Unit
- Air Inlet Pipe
- Expansion Screws (x2)
- Water Inlet Pipe
- Water Outlet Pipe
- Duct (Vent Pipe components: straight sections and elbow)
- Small Wrench for connections

## 4. Specifications

Specification	Value
Brand	VELPAX

Specification	Value
Model Number	HWRSQ-001
Product Dimensions	13.8"W x 21.7"H
Color	White
Maximum Temperature	149 Degrees Fahrenheit
Efficiency	High Efficiency
Style	16L, Natural Gas (Indoor)
Mounting Type	Wall
Gas Type	Natural Gas (LNG)
Flow Rate	4.21 GPM
Minimum Water Pressure	3.6 PSI
Item Weight	21.7 pounds
UPC	717504332352

## 5. Installation (Setup)

---

This section provides general guidelines for installation. It is strongly recommended that installation be performed by a qualified professional to ensure safety and compliance with local codes.

### 5.1 Pre-Installation Checklist:

- Confirm the unit is designed for Natural Gas (LNG).
- Ensure the installation location is indoors, well-ventilated, and protected from freezing temperatures.
- Verify adequate water pressure (minimum 3.6 PSI) and flow rate.
- Ensure proper gas supply line and electrical outlet are available.
- Gather necessary tools and additional materials (e.g., sealant, pipe dope, shut-off valves) not included in the package.

### 5.2 Mounting the Unit:

1. Select a sturdy wall location capable of supporting the unit's weight.
2. Mark the drilling points for the mounting brackets using the unit as a template.
3. Drill holes and insert the provided expansion screws.
4. Securely mount the water heater to the wall.

### 5.3 Water Connections:

The unit comes with standard 1/2" NPT water fittings. Connect the water inlet and outlet pipes as shown in the diagram.

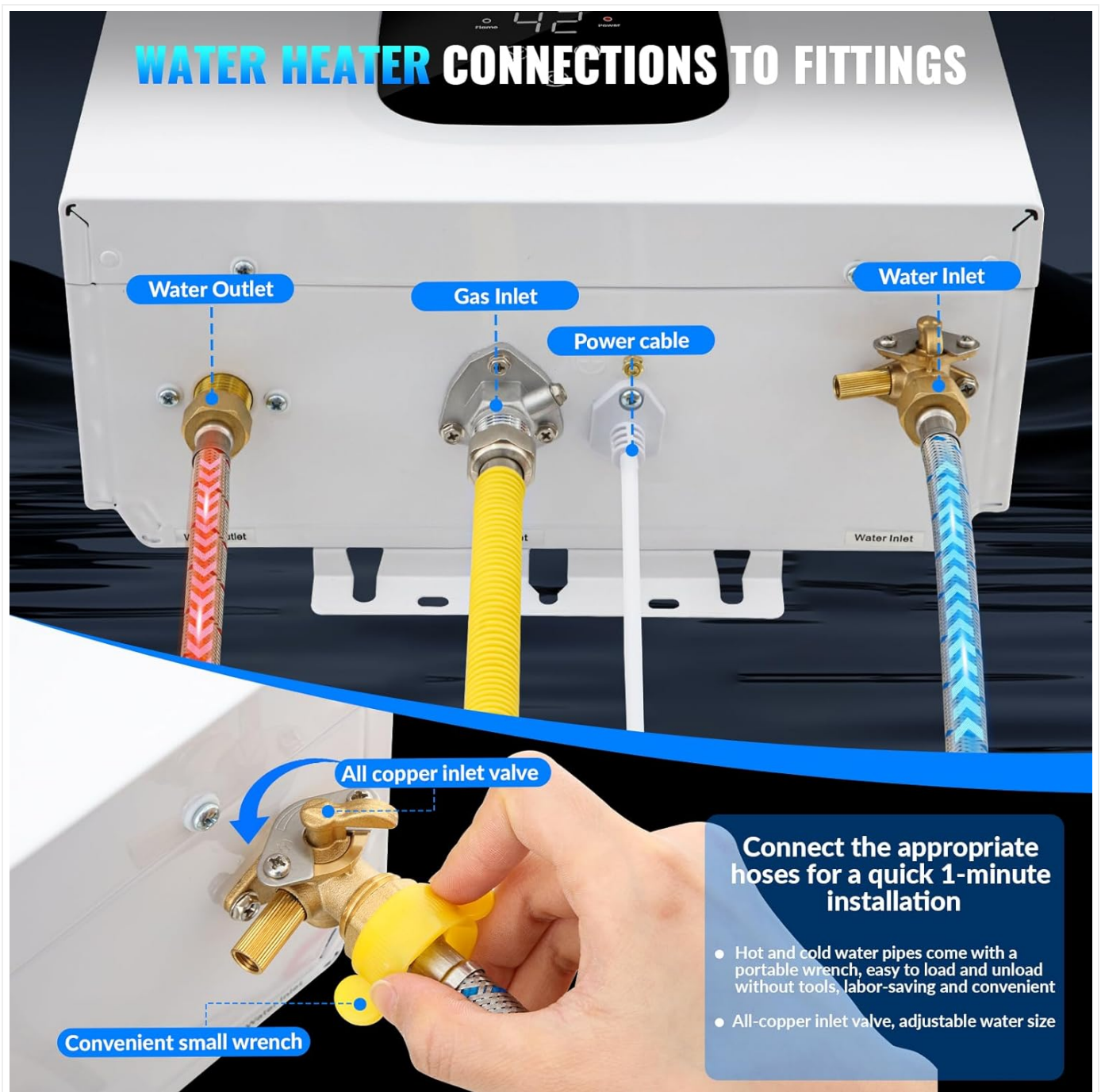


Figure 5.1: Water and gas connection points on the unit.

- Connect the cold water supply to the "Water Inlet" port.
- Connect the hot water output to the "Water Outlet" port.
- Use the provided small wrench for secure connections. Ensure all connections are watertight.

#### 5.4 Gas Connection:

Connect the natural gas supply line to the "Gas Inlet" port using the provided air inlet pipe. Ensure all gas connections are tight and sealed to prevent leaks. Use appropriate gas-rated sealant.

#### 5.5 Ventilation System Installation:

Proper ventilation is critical for safety. Install the 2.5" horizontal vent pipe (duct) components according to local codes and manufacturer guidelines. The stainless steel pipe design ensures safe suction and discharge.



Figure 5.2: Illustration of the stainless steel exhaust pipe system, highlighting wind resistance and air leakage prevention.

- Ensure the vent pipe is securely connected to the unit and extends safely to the outside.
- Verify that the vent system is free from obstructions and has no air leakage.

## 6. Operating Instructions

### 6.1 Initial Startup:

1. After installation, slowly open the main water supply valve to fill the unit. Check for any leaks.
2. Slowly open the main gas supply valve.
3. Plug the unit into a grounded electrical outlet.
4. Open a hot water faucet in your home. The unit should detect water flow and ignite, providing hot water.

### 6.2 Adjusting Water Temperature:

The unit features an LED digital display for easy temperature control. You can adjust the desired hot water temperature

between 95°F and 149°F.

## LED DISPLAY INTELLIGENT THERMOSTAT FOR ALL SEASONS

OUR WATER HEATERS	TRADITIONAL WATER HEATER
✓ Constant supply of hot water	✗ Long heating time
✓ Water and gas can be adjusted individually	✗ Not individually adjustable
✓ Supplied with accessory hose and pipe	✗ There's only a pipe for smoke evacuation.
✓ Energy efficient with more safety protection	✗ Continuous gas consumption

Figure 6.1: LED digital display for temperature adjustment and status indicators.

- Use the **Up** and **Down** arrows on the control panel to increase or decrease the set temperature.
- The display will show the current set temperature.
- The unit will automatically adjust its heating to maintain the desired temperature.

The unit is designed for multi-scenario application, providing hot water for bathrooms, kitchens, and laundry rooms with minimal temperature fluctuation.

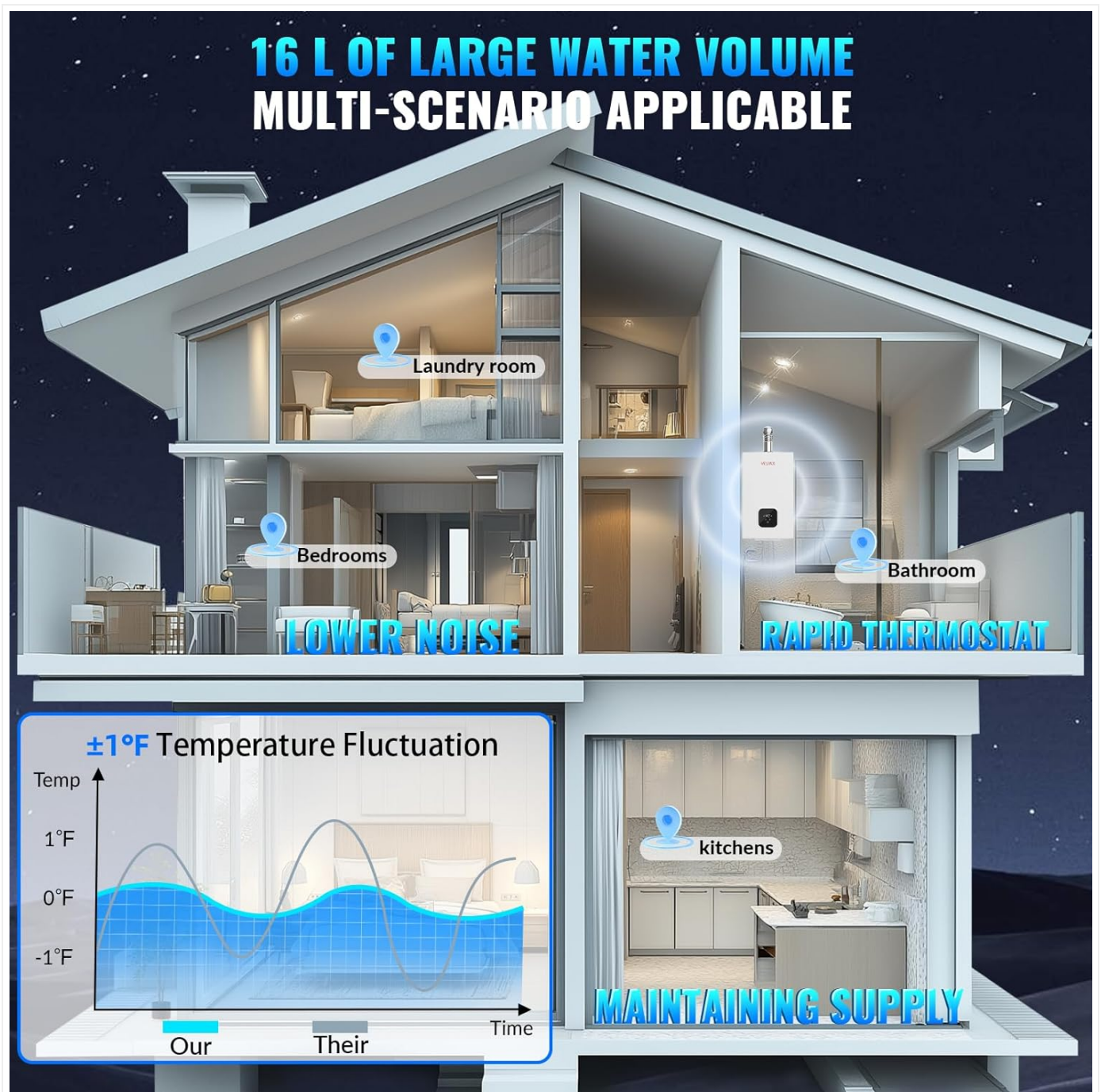


Figure 6.2: Multi-scenario application and stable temperature performance.

## 7. Maintenance

Regular maintenance ensures optimal performance and extends the lifespan of your water heater. Always turn off the gas and water supply to the unit before performing any maintenance.

### 7.1 General Cleaning:

- Wipe the exterior of the unit with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- Periodically inspect the vent pipe for any blockages or damage. Ensure it is clear for proper exhaust.

### 7.2 Winterization (Freezing Protection):

If the unit will not be used for an extended period in cold weather, it is essential to drain all residual water to prevent freezing and damage.

1. Turn off the gas supply to the water heater.

2. Turn off the cold water supply to the water heater.
3. Open a hot water faucet in your home to relieve pressure.
4. Locate the pressure relief valve on the unit and open it to drain the water. Ensure all water is drained from the unit and pipes.
5. Once drained, close the pressure relief valve and the hot water faucet.

*Note: For re-commissioning after winterization, follow the "Initial Startup" procedure in Section 6.1.*

### 7.3 Professional Inspection:

It is recommended to have the unit inspected by a qualified service technician annually to ensure safe and efficient operation, especially for gas and combustion components.

## 8. Troubleshooting

---

This section provides solutions for common issues. For problems not listed here or if issues persist, contact a qualified service technician.

Problem	Possible Cause	Solution
No hot water / Unit not igniting	<ul style="list-style-type: none"> <li>◦ No gas supply</li> <li>◦ No water flow/pressure</li> <li>◦ Power supply issue</li> <li>◦ Flame failure device activated</li> </ul>	<ul style="list-style-type: none"> <li>◦ Check gas valve is open.</li> <li>◦ Ensure water supply is on and pressure is sufficient (min 3.6 PSI).</li> <li>◦ Verify unit is plugged in and power is available.</li> <li>◦ Consult a technician if flame failure persists.</li> </ul>
Water not hot enough	<ul style="list-style-type: none"> <li>◦ Temperature setting too low</li> <li>◦ High incoming water temperature</li> <li>◦ Insufficient gas flow</li> </ul>	<ul style="list-style-type: none"> <li>◦ Increase the temperature setting on the digital display.</li> <li>◦ Ensure gas supply is adequate.</li> <li>◦ Reduce hot water flow rate at the faucet.</li> </ul>
Unit cycles on and off frequently	<ul style="list-style-type: none"> <li>◦ Low water flow</li> <li>◦ Overheating protection activated</li> </ul>	<ul style="list-style-type: none"> <li>◦ Ensure sufficient water flow.</li> <li>◦ Check for blockages in water lines or unit.</li> <li>◦ Allow unit to cool if overheating.</li> </ul>
Unusual noises	<ul style="list-style-type: none"> <li>◦ Air in water lines</li> <li>◦ Sediment buildup</li> <li>◦ Loose components</li> </ul>	<ul style="list-style-type: none"> <li>◦ Run hot water for several minutes to purge air.</li> <li>◦ Consider professional descaling if sediment is suspected.</li> <li>◦ Contact a technician for inspection.</li> </ul>

## 9. Warranty and Support

---

VELPAX products are manufactured to high-quality standards. For specific warranty details, please refer to the warranty card included with your purchase or contact VELPAX customer support.

If you require technical assistance, have questions about installation, or need to report a problem, please contact the manufacturer or your authorized service provider. Please have your model number (HWRSQ-001) and purchase date available when contacting support.



