

Traditional Water Softener

Basic Installation Guide

WaterGnome SKU: WG-SOFT | Farris SKU: SFTCWS110

IMPORTANT - BASIC REFERENCE ONLY

This guide is intended to help a qualified plumber or water-treatment installer identify the basic installation layout. It is not a substitute for professional training, local plumbing/electrical codes, permits, inspection requirements, product labels, or the current instructions supplied with the actual components. The installer is responsible for verifying the equipment, flow direction, operating limits, materials, connections, code compliance, and safe commissioning before placing the system in service. If this guide conflicts with markings or instructions on the equipment, the equipment/manufacture instructions control.

Before You Begin

- Inspect all cartons and components for shipping damage. Do not install a visibly damaged pressure-bearing component.
- Confirm the model/SKU and all components against the customer order before cutting plumbing.
- Locate and read all flow arrows, IN/OUT markings, pressure/temperature ratings, electrical labels, and component-specific warnings on the actual equipment.
- Verify a suitable installation location with access for future filter/media replacement and service.
- Verify the installation location is protected from freezing, direct weather exposure, impact, and other conditions outside the equipment ratings.
- Confirm the home plumbing can be isolated and depressurized safely and that required permits/backflow/thermal-expansion provisions are addressed under local code.
- Verify actual static and dynamic water pressure is within the ratings of every installed component. Add or adjust pressure regulation when required by the equipment or local plumbing conditions.

DO NOT GUESS

Do not assume flow direction, port function, controller programming, tubing connection, electrical requirement, or pressure rating. Verify each item from the actual component markings and current manufacturer documentation.

Scope of This Guide

This guide intentionally does not provide controller button sequences, regeneration timing, injector settings, or capacity programming values. Those settings depend on the exact control valve and actual water conditions. The installer must identify the valve/controller on the delivered unit and use the current instructions for that valve. Do not guess.

COLD WATER SUPPLY -> PRETREATMENT (IF REQUIRED) -> WATER SOFTENER -> HOME / WATER HEATER

Site Requirements to Verify

- Adequate floor space and vertical clearance for the resin tank/control valve and brine tank.

- A suitable code-compliant drain receptor for regeneration discharge and overflow provisions as required.
- Electrical power matching the actual control valve power supply, installed in accordance with local electrical code and protected from water exposure.
- A bypass arrangement that allows the home to receive water while the softener is isolated for service.
- Incoming water conditions appropriate for the softener. Iron, sediment, chlorine/chloramine, sulfur, microbiological concerns, or unusual pH may require pretreatment or different equipment.

Basic Plumbing Installation

1. Place the resin tank and brine tank on a firm, level surface where they are protected from freezing, flooding, impact, and outdoor exposure beyond equipment ratings.
2. Confirm the control valve INLET, OUTLET, DRAIN, and BRINE connections from the actual valve markings before plumbing.
3. Shut off the main water supply and relieve line pressure.
4. Install the bypass valve/connection supplied with the unit or an equivalent code-compliant bypass arrangement. Ensure the bypass operates freely before completing plumbing.
5. Connect the cold-water supply to the correctly marked inlet and the home service line to the correctly marked outlet. Support piping independently so the valve/tank is not carrying piping loads.
6. Connect the valve drain line using the size, routing, air-gap/backflow protection, and maximum run/elevation permitted by the identified valve manufacturer and local code. Do not reduce or obstruct the drain path.
7. Connect the brine line between the control valve and brine tank using the supplied fittings. Verify it is fully seated and cannot kink or pull loose.
8. Install any brine-tank overflow connection required by the equipment/local code to an approved drain location. The overflow line is not a substitute for the control-valve drain line.
9. Place the unit in BYPASS before initial pressurization. Slowly restore house water and inspect the new plumbing/bypass connections for leaks.
10. Commission the softener using the exact control-valve manufacturer instructions for the delivered unit. Program using verified water hardness/iron information, actual resin/system capacity, and household/site conditions. Do not use generic settings from another valve model.

CONTROLLER PROGRAMMING

If the installer cannot positively identify the control valve or does not have the correct programming instructions, leave the unit in bypass and obtain the correct valve documentation before programming or initiating regeneration.

Commissioning Checklist

- ☐ Valve INLET/OUTLET direction verified from actual markings.
- ☐ Bypass operates correctly and plumbing is mechanically supported.
- ☐ Drain and brine lines are secure, unobstructed, and routed per valve instructions/local code.
- ☐ Brine tank is level and positioned for future salt service.
- ☐ Actual controller/valve model identified before programming.
- ☐ Water hardness and other relevant water conditions used for programming are verified, not assumed.
- ☐ A complete regeneration/commissioning cycle is observed as required by the identified valve instructions, with no leaks or drain restrictions.

Do Not

- Do not connect inlet and outlet in reverse.
- Do not guess controller programming or copy settings from a different valve/system.
- Do not connect a drain line without required air-gap/backflow protection.
- Do not install where the unit or drain plumbing can freeze.
- Do not place the softener in service on water conditions outside the equipment/resin limitations without appropriate pretreatment.

Installation Responsibility & Warranty Note

WaterGnome does not supervise the installer and cannot verify site conditions. The installer/contractor is responsible for workmanship, code compliance, proper materials, leak-free connections, pressure control, support, drainage, electrical work, commissioning, and confirming the completed installation is safe and suitable for the property. Improper installation, freezing, pressure spikes, water hammer, misuse, unauthorized modification, or other external plumbing/site conditions may be excluded from warranty coverage. Refer to the current WaterGnome Returns & Lifetime Limited Parts Warranty for complete terms.