

Installation Instructions

Two-Port Digital Valve

Record your model number:
Noter le numéro de modèle:
Anoté su número de modelo: _____

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KOHLER[®]

Thank You for Choosing KOHLER

Need help? Contact our Customer Care Center.

- USA/Canada: 1-800-4KOHLER (1-800-456-4537)
- Mexico: 001-800-456-4537
- For service parts, visit kohler.com/serviceparts.
- For care and cleaning, visit kohler.com/clean.
- Patents: kohlercompany.com/patents

IMPORTANT INSTRUCTIONS

-  **WARNING:** When using electrical products, basic precautions should always be followed, including the following:
-  **DANGER: Risk of electric shock.** Connect only to a circuit protected by a Ground-Fault Circuit-Interrupter (GFCI)*.
-  **WARNING: Risk of electric shock.** Grounding is required. A qualified electrician should make all electrical connections.
-  **WARNING: Risk of electric shock.** A qualified electrician must route all electrical wiring for the product. Improper installation will create an electrical hazard and may not comply with local building and electrical codes.
-  **WARNING: Risk of electric shock.** Disconnect the power before servicing.
-  **WARNING: Unauthorized modification may cause poor performance.** Do not make modifications to the product other than instructed by this guide, as this could adversely affect product performance.
-  **WARNING: Risk of injury or property damage.** Read all instructions thoroughly before beginning installation.

NOTICE: Provide unrestricted service access to the valve. Provide access for servicing the valve and digital interface. This access must be located immediately next to the valve.

Follow all local plumbing, building, and electrical codes.

*Outside North America, this may be known as a Residual Current Device (RCD).

Specifications

Pressures

Maximum Static Pressure	125 psi, 862 kPa, 8.6 bar
Supply Pressure Differential*	Max 5 psi, 34.5 kPa, 0.34 bar (equal pressures recommended)
Minimum Flow Rate (less than 72 psi dynamic pressure, 500 kPa maintaining pressure)	1.6 gal/min (6 l/min)
Minimum Flow Rate (greater than 72 psi dynamic pressure, 500 kPa maintaining pressure)	2.1 gal/min (8 l/min)
Maximum Flow Rate	8 gal/min (30.3 l/min) per outlet, 13 gal/min (49.2 l/min) total at 45 psi, 310.3 kPa, 3.1 bar

Temperatures

Programmable Temperature	Max 120°F (49°C), Min 86°F (30°C) <i>Full cold may also be selected.</i>
Default Temperature at Start-up	100°F (38°C)
Minimum Mixed Temperature Differential from Hot Supply	3.6°F (2°C)
Temperature Stability at Recommended Supply Conditions	+/- 1.6°F (1°C)
Ambient Temperature	Greater than 34°F (1°C), Max 104°F (40°C)
Maximum Relative Humidity	95% non-condensing

Electrical

Electrical Rating	120 V, 0.16 A, 60 Hz
Digital Interface Cable Length (supplied)	20' (6.1 m)

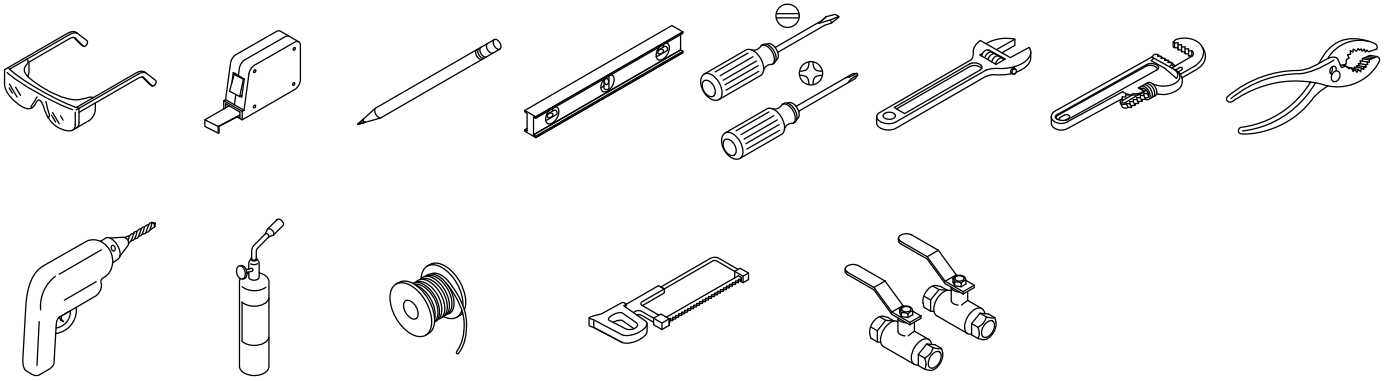
*In commercial applications where there is a large difference in hot and cold supply pressures or frequent fluctuation in either supply line is anticipated, it is strongly recommended that pressure regulators be installed.

This valve complies with ASME A112.18.1/CSA B125.1, ASSE 1016/ASME A112.18.1016/CSA B125.16, UL1951, CSA C22.2 No.14, CSA C22.2 No.68, and NOM 003. This valve is listed with ASSE, IAPMO/cUPC, and UL.

The digital valve is equipped with BLUETOOTH® technology allowing communication through the KOHLER Mode App.

The BLUETOOTH® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Kohler Co. is under license. Other trademarks and trade names are those of their respective owners.

Tools and Materials



Solder

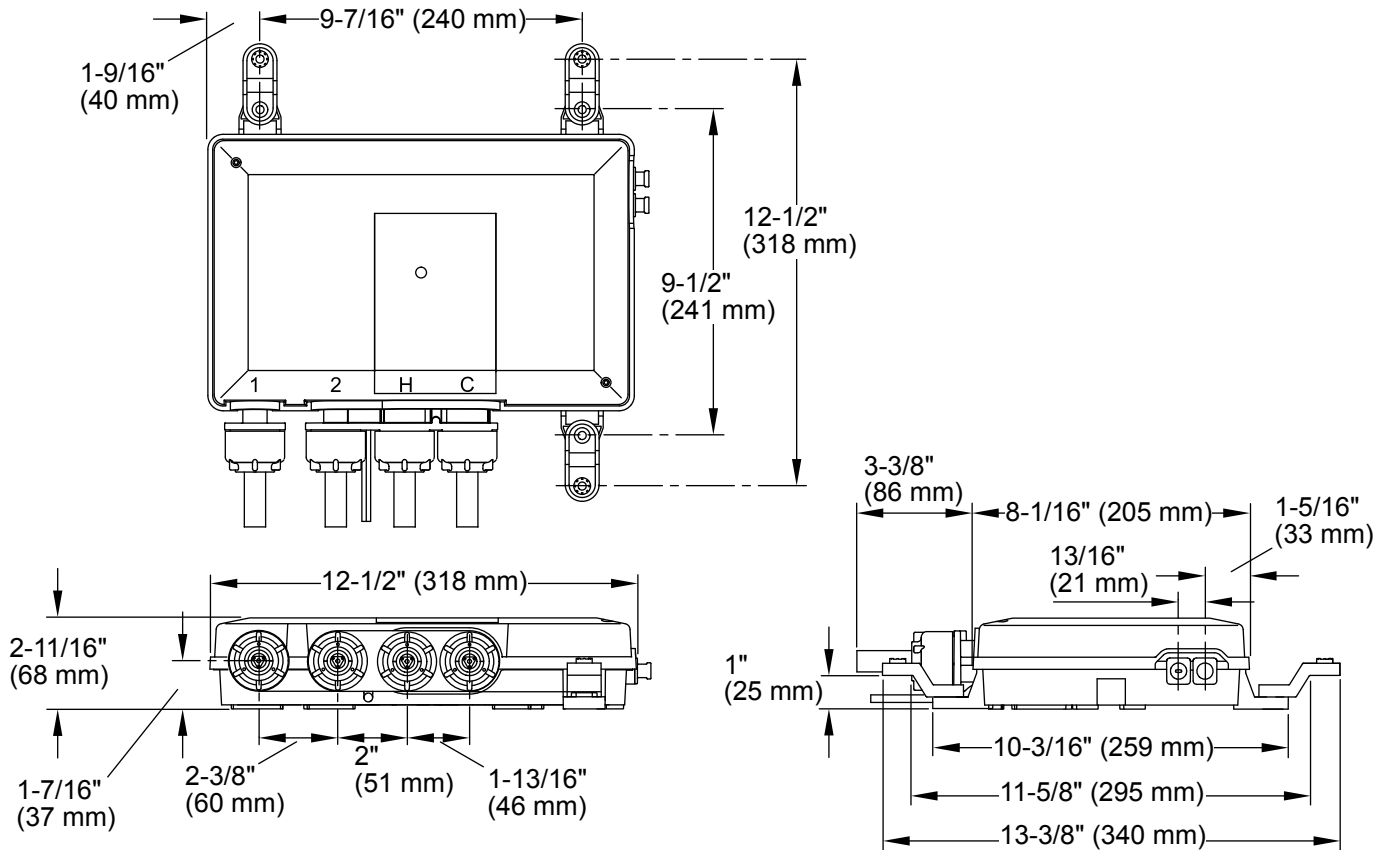
Hacksaw or Tube Cutter

Shut-Off Valves

Plus:

- Wood and Framing Materials
- (2) 1/2" Union Connectors
- 3/4" (inlets) and 1/2" (outlets) PEX Tubing, 1/2" Copper Tubing, or 1/2" (inlets) and 1/2" (outlets) CPVC
- (2) Water Hammer Arrestors (Recommended)

Before You Begin



⚠ CAUTION: Risk of product damage. Do not apply excessive heat near the valve. This valve contains plastic and rubber components that will melt if heat is directly applied.

NOTICE: Do not install the valve in any location where the temperature may exceed 104°F (40°C). The valve and its integrated power supply are rated to operate in temperatures up to 104°F (40°C).

NOTICE: Do not apply petroleum-based lubricants to the valve components. Doing so will damage the valve components.

IMPORTANT! Read these instructions and determine the locations for all required components before beginning installation.

This valve is not intended for single-outlet use unless pairing two outlets for a high flow bath filler.

For optimum performance, dedicated water supply lines are recommended.

If possible, install the valve before installing the digital interface(s).

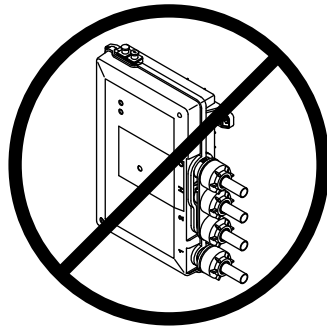
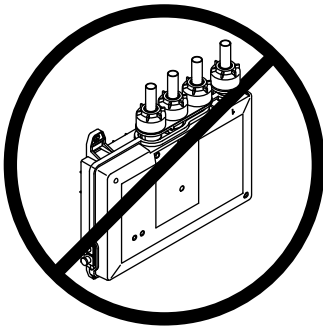
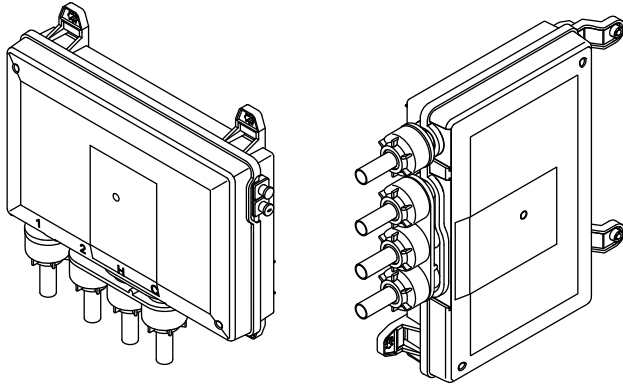
If possible, flush all piping thoroughly before installing the valve. If the pipes are flushed after the valve is installed, clean the inlet filters before using the system.

A qualified electrician should install a 120 V GFCI electrical outlet, within the stud framing, above the valve.

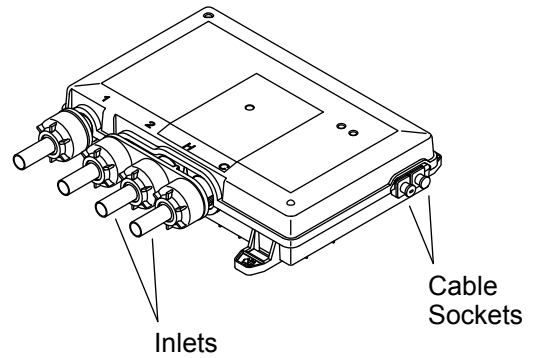
If possible, install the electrical outlet before installing the valve.

Mounting Configurations

Mounting on a Vertical Surface



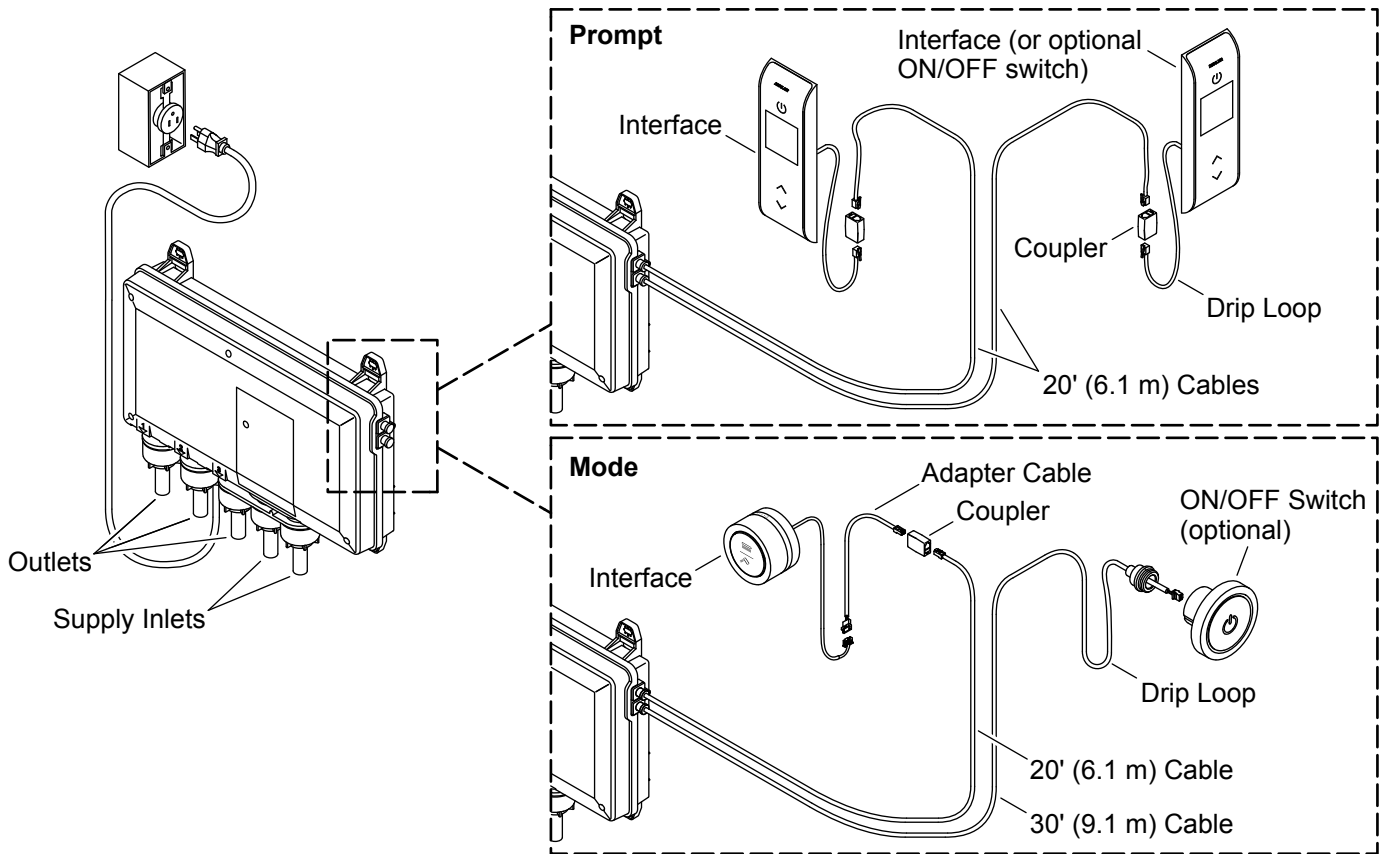
Mounting on a Horizontal Surface



⚠ CAUTION: Risk of product damage. Do not mount the valve with the inlet ports pointing up or positioned above the outlet ports. Ports must be oriented as shown to optimize water flow.

NOTE: Vertical and horizontal mounting options are shown above.

1. Plan the Component Locations



IMPORTANT! When routing piping, the number marked at each valve outlet must correspond to the appropriate shower fitting for preprogrammed or custom showering experiences to function properly. Refer to the Homeowners Guide for more information.

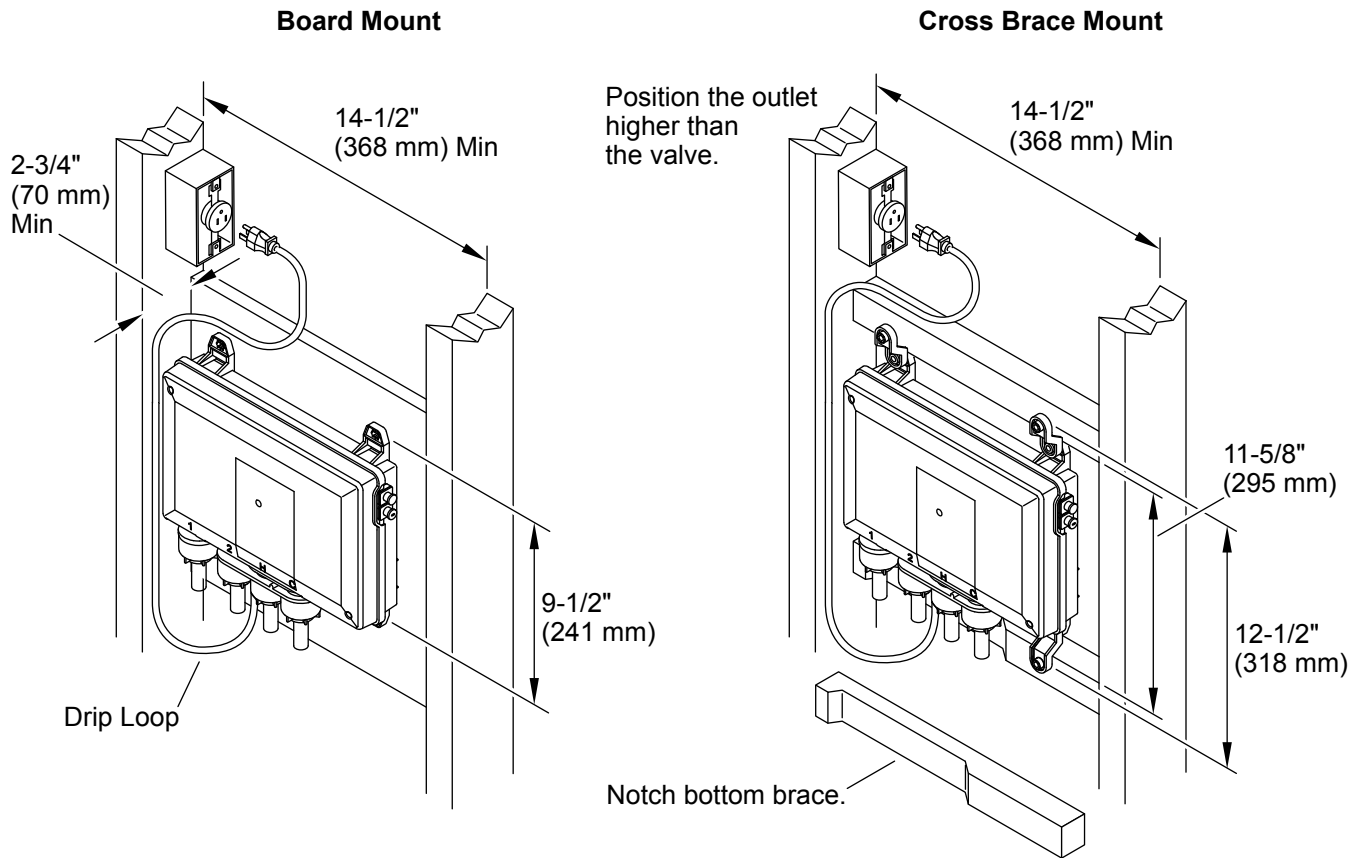
NOTICE: If the valve will be used for a bath/shower application, the bath fill supply line must be routed from the #1 outlet port.

NOTE: Only one digital interface is required inside the showering space. A second digital interface or ON/OFF remote can be installed outside of the shower area.

NOTE: Your digital interface may appear different than the one illustrated, however, the installation procedure for the valve remains the same. For the digital interface installation, follow the instructions packed with the digital interface.

- Determine the locations of all required components before beginning installation.

2. Prepare the Site



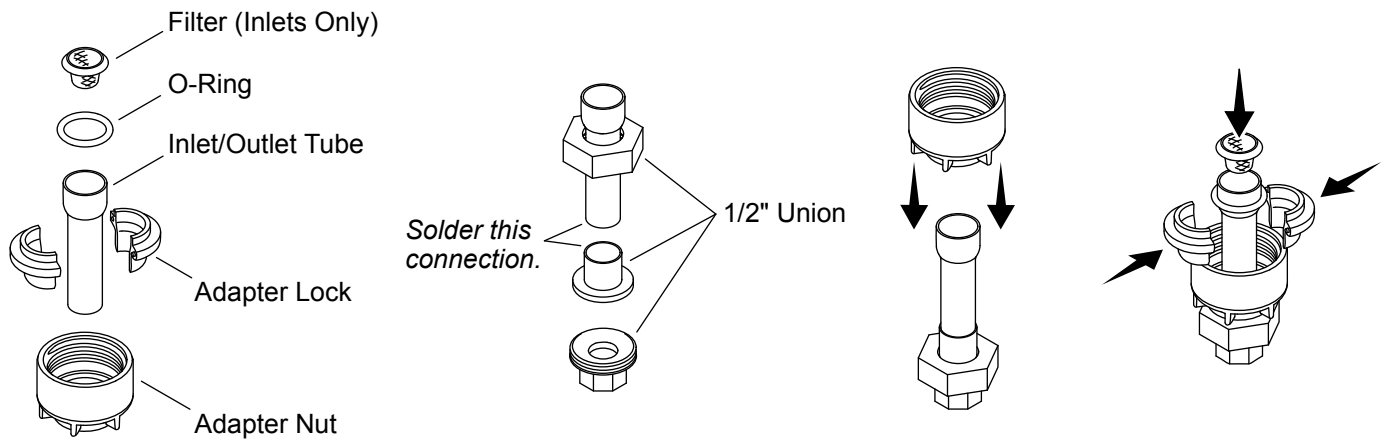
NOTICE: Do not install the valve in any location where the temperature may exceed 104°F (40°C). The valve and its integrated power supply are rated to operate in temperatures up to 104°F (40°C).

NOTE: Horizontal installation within a stud cavity is shown. The valve can also be mounted vertically or mounted to a horizontal surface. Refer to the "Mounting Configurations" section.

NOTE: This product is designed to fit within a minimum 14-1/2" (368 mm) 2x4 stud cavity.

- Install adequate bracing for mounting the valve.
- Notch the bracing as needed to accommodate the inlets and outlets.
- Install a 120 V GFCI electrical outlet within the stud framing, near the valve. Locate the electrical outlet above the valve.

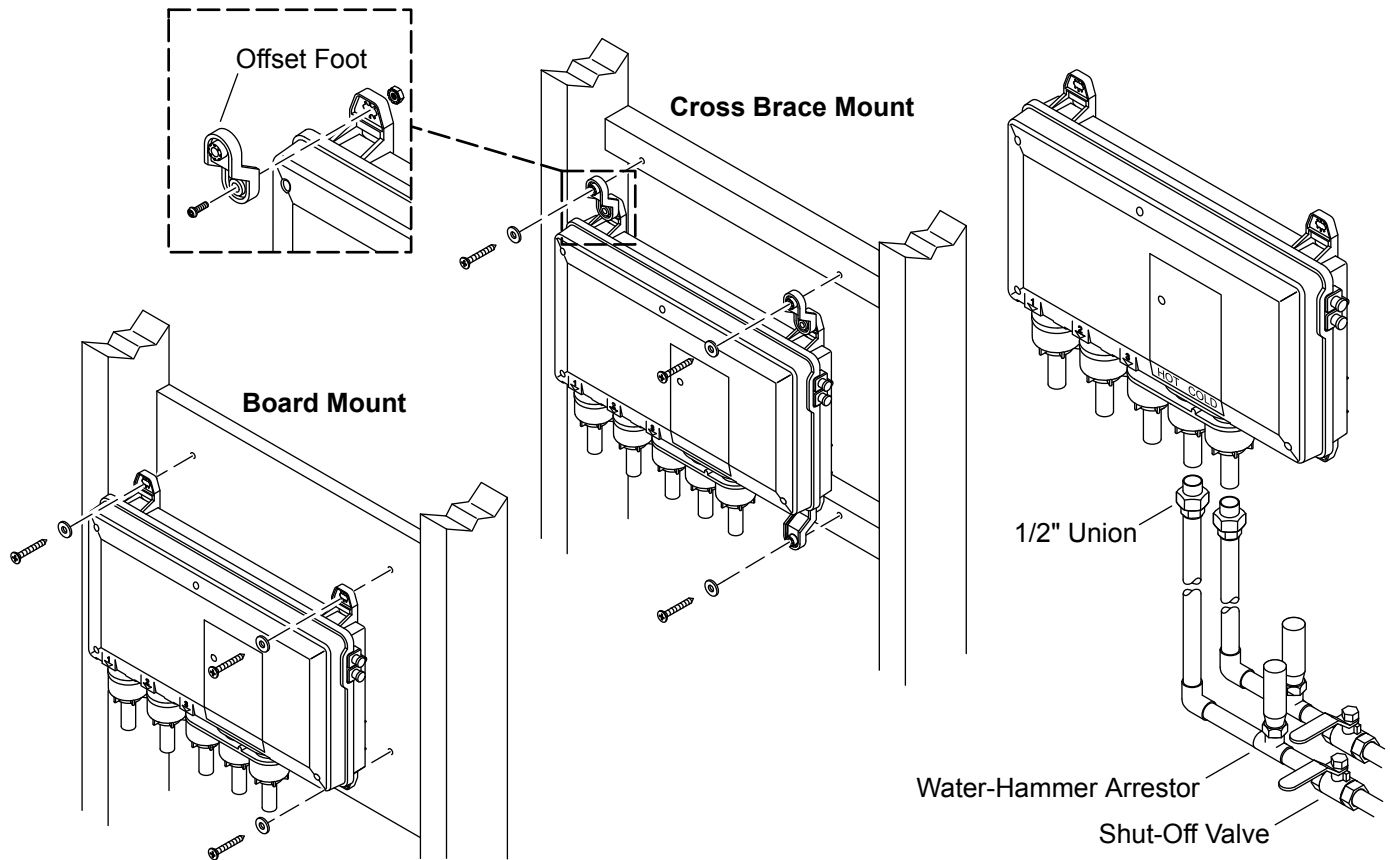
3. Assemble the Adapters and Unions



⚠ CAUTION: Risk of product damage. Do not apply excessive heat near the valve. This valve contains plastic and rubber components that will melt if heat is directly applied.

- Disassemble the adapter. Verify that all rubber and plastic components are removed.
- Slide the union nut onto the inlet/outlet tube.
- Solder the inlet/outlet tube to the union. Allow to cool completely.
- Assemble the union.
- Slide the adapter nut onto the inlet/outlet tube.
- Assemble the adapter lock onto the inlet/outlet tube and slide the assembly into the adapter nut.
- Slide the O-ring onto the inlet/outlet tube.
- For inlet tubes only:** Insert the filter into the end of the inlet tube.
- Reinstall the adapter assembly to the valve.
- Repeat for all inlet/outlet tubes as required.

4. Install the Valve



CAUTION: Risk of product damage. Do not apply excessive heat near the valve. This valve contains plastic and rubber components that will melt if heat is directly applied.

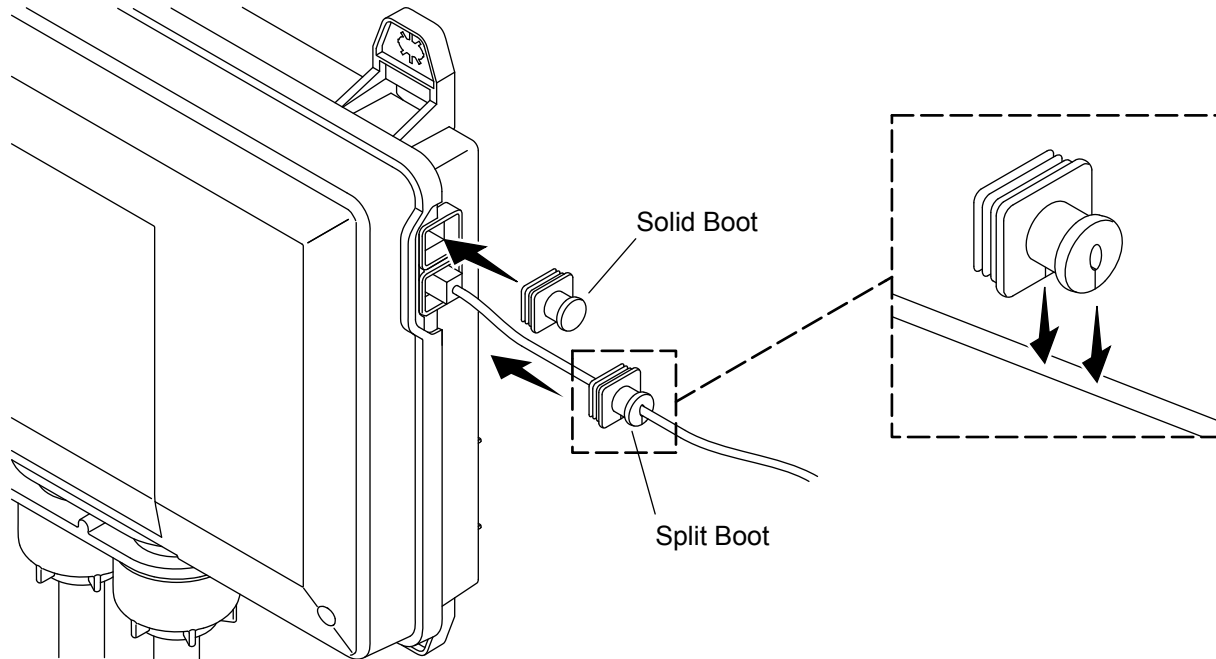
IMPORTANT! If your water supply has high amounts of particulates, install wye strainers in the supply lines.

- Route 1/2" (3/4" PEX) dedicated water supply lines. Use unions to install removable pipe segments to the valve inlets to allow access for periodic cleaning of the inlet filters.
- Install shut-off valves and water-hammer arrestors in the supply lines before the valve.
- Hold the valve up to the installation location. Verify fit and mark the hole locations.
- Predrill the holes.
- Secure the valve with the washers and screws. **Do not overtighten!**

IMPORTANT! When routing piping, the number marked at each valve outlet must correspond to the appropriate shower fitting for preprogrammed or custom showering experiences to function properly. Refer to the Homeowners Guide for more information.

- Route the piping from the valve outlets to the appropriate shower fitting following the recommended pipe fitting sizes listed.
- Connect the hot and cold supply lines to the appropriate valve inlets. Hot is red and marked with "HOT," cold is blue and marked with "COLD."
- Secure all piping to the framing.

5. Complete the Installation



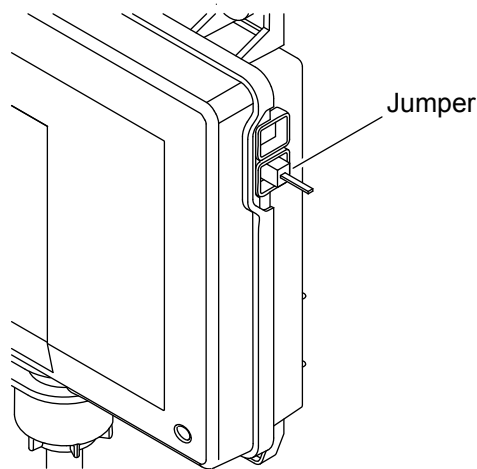
NOTICE: Do not plug in the power cord until all digital interface cables are connected.

IMPORTANT! Make drip loops in all cables and cords.

NOTE: If an interface is not available, proceed to the "Installation Checkout" section, and "Test for Leaks without an Interface."

- Route the digital interface cable(s) in the wall from the valve location to the digital interface installation location(s).
- If not already installed, install the digital interface(s) according to the instructions packed with the product.
- Attach a split boot to each interface cable.
- Connect the digital interface cable(s) to the valve.
- Press the boot over the connection and into the valve socket. If only one digital interface is installed, insert a solid boot into the unused socket.
- Verify that there is power to the 120 V GFCI electrical outlet.
- Plug the power cord into the electrical outlet.

6. Installation Checkout



- Turn ON the water supply to the valve.

Test for Leaks Without an Interface

- Disconnect the power from the valve.
- Connect the jumper to the valve, then reconnect the power to the valve.
- Wait 10 seconds for the valve to initialize; the outlets will activate.
- Check all connections for leaks.
- Disconnect the power, then remove the jumper.
- Reconnect the power to the valve.

Test for Proper Operation (Requires an Installed Interface)

- Prompt interface:** Press the power icon. The interface screen should be illuminated.
- Mode interface:** Press one of the icons to turn ON the interface.
- If not already completed, refer to the digital interface Homeowners Guide to set up the interface.

NOTE: For more information about using the digital interface, refer to the digital interface Homeowners Guide.

- Use the interface to turn ON the water outlets.
- Check all connections for leaks, and make adjustments as needed.
- Verify that the water flow is sufficient for your showering needs.

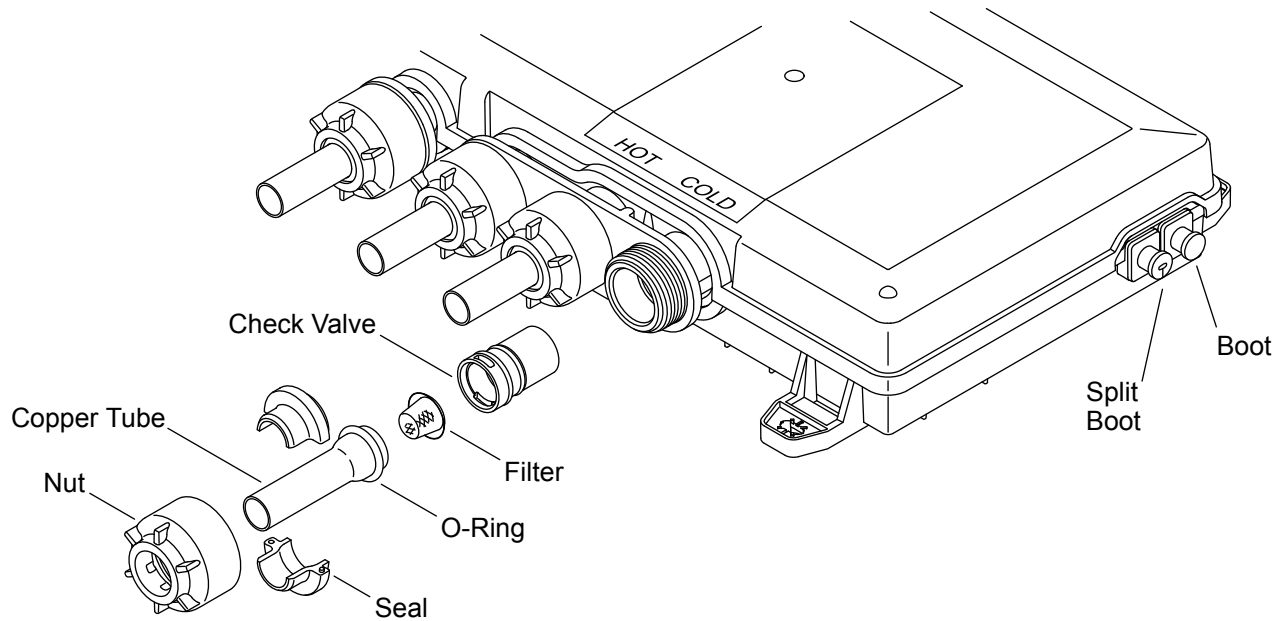
Exercise the Valve (Requires an Installed Interface)

NOTE: Recently installed or infrequently used valves should be exercised before setting the maximum temperature.

NOTE: The maximum water temperature to the outlets is limited to 120°F (49°C). The valve will automatically shut down if the temperature exceeds 120°F (49°C).

- Verify that the hot and cold water supply lines are connected to the appropriate valve inlets.
- Prompt interface:** Press the up and down arrow icons to adjust the temperature from cold to hot and back to cold several times, pausing for 30 seconds at each extreme.
- Mode interface:** Turn the outside ring to adjust the temperature.


7. Clean the Inlet Filters



⚠ CAUTION: Risk of personal injury. The valve may contain hot water. Be careful when draining any residual water.

- Turn OFF the water supply to both inlets.
- Disconnect the power.
- Unthread the plastic nuts from the hot and cold inlets.
- Remove the copper tubes. The O-ring and filter may be attached to the end of the tube.
- If the filter remains in the check valve, use a small flat-blade screwdriver to gently pull the check valve from the valve inlet.
- Remove the filters from the copper tubes or check valves.
- Clean the filters to remove any dirt or debris.
- Rinse or replace the check valves and filters.
- Reassemble the inlet connections.

Troubleshooting

 **WARNING: Risk of electric shock.** Disconnect the power before servicing.

NOTICE: Valve maintenance should be performed by a KOHLER Authorized Service Representative (ASR).

This troubleshooting guide is for general aid only. For service and installation issues or concerns, call 1-800-4KOHLER.

Symptoms	Probable Cause	Recommended Action
1. Valve will not turn on.	<ul style="list-style-type: none"> A. Valve is not plugged into the electrical outlet. B. Interface cable connections may be loose or disconnected. C. Circuit breaker has tripped. D. The valve memory may require resetting. E. A “straight-through” cable or coupler was used to connect the interface to the valve. F. If none of the recommended actions for the above issues correct the symptom, the interface or valve requires servicing. 	<ul style="list-style-type: none"> A. Plug the valve into an electrical outlet. B. Check all interface cable connections, connect if needed. C. Reset the circuit breaker. D. Disconnect and reconnect the valve power supply from the electrical outlet. E. Connect the interface to the valve using a “cross-over” cable and coupler. F. Contact your Kohler Co. Authorized Service Representative (ASR).
2. The Prompt interface is lit, but the system will not turn ON.	<ul style="list-style-type: none"> A. Interface cable connections may be loose. B. If the above recommended action does not correct the symptom, the interface or valve requires servicing. 	<ul style="list-style-type: none"> A. Check all interface cable connections, and connect if needed. B. Contact your Kohler Co. Authorized Service Representative (ASR).
3. The interface functions normally but no water flows from the shower fittings.	<ul style="list-style-type: none"> A. Valve outlets may be blocked. B. Fittings/sprayfaces may be blocked. C. Hot and cold water supplies are not turned ON. D. The valve memory may require resetting. E. System error. F. If none of the recommended actions for the above issues correct the symptom, the interface or valve requires servicing. 	<ul style="list-style-type: none"> A. Check the valve outlets for blockage or debris. Clean the outlet filters. B. Clean the sprayfaces and any filters in your fittings. C. Turn ON the water supply to the valve. D. Disconnect and reconnect the valve power supply from the electrical outlet. E. Check the Prompt user interface for an error code. Refer to the digital interface Homeowners Guide for error code diagnosis. F. Contact your Kohler Co. Authorized Service Representative (ASR).

Symptoms	Probable Cause	Recommended Action
4. Maximum blend temperature too hot or too cold.	<p>A. Incorrect maximum temperature setting.</p> <p>B. If the above recommended action does not correct the symptom, the interface or valve requires servicing.</p>	<p>A. Refer to the digital interface Homeowners Guide for maximum temperature adjustment instructions.</p> <p>B. Contact your Kohler Co. Authorized Service Representative (ASR).</p>
5. Continuous flow.	<p>A. System will not switch OFF.</p> <p>B. Flow rate exceeds 10 gal/min (45.5 l/min) from one outlet.</p>	<p>A. Turn OFF the water and power supply and contact your Kohler Co. Authorized Service Representative (ASR).</p> <p>B. Ensure that flow restrictors are installed in both outlets.</p>
6. Only cold water flows from the outlets.	<p>A. Hot water supply is either not turned ON or not connected to the valve inlet.</p> <p>B. Hot water inlet is blocked.</p> <p>C. The hot water supply is exhausted.</p> <p>D. If none of the recommended actions for the above issues correct the symptom, the valve requires servicing.</p>	<p>A. Check if the hot water supply is turned ON and connected to the valve inlet.</p> <p>B. Check the hot water inlet filter for blockage. Clean or replace the inlet filter.</p> <p>C. Allow time for the water heater to come up to temperature.</p> <p>D. Contact your Kohler Co. Authorized Service Representative (ASR).</p>
7. Fluctuating or reduced flow rate. Valve is functioning properly.	<p>A. Valve inlets may be blocked.</p> <p>B. Fittings/sprayfaces may be blocked.</p> <p>C. Water outlet pressure is low.</p> <p>D. Fluctuating supply pressure.</p> <p>E. Water supply temperatures are not within the recommended range.</p>	<p>A. Check the valve inlets for blockage or debris. Clean the inlet filters. Refer to the "Clean the Inlet Filters" section.</p> <p>B. Clean the sprayfaces and any filters in your fittings.</p> <p>C. Check that the flow rate is at or above the minimum rate required. Refer to "Specifications" section.</p> <p>D. Verify that the dynamic inlet pressures are within specifications. Refer to "Specifications" section.</p> <p>E. Check if inlet water temperatures are within the recommended range.</p>
8. Blend temperature drift or temperature cycling.	<p>A. Fluctuating water supply temperature.</p> <p>B. Pressure difference greater than 5 psi (34.5 kPa) between the hot and cold supply lines.</p> <p>C. If none of the recommended actions for the above issues correct the symptom, the valve requires servicing.</p>	<p>A. Check the inlet temperature differentials and verify that they are sufficient. Refer to "Specifications" section.</p> <p>B. Install pressure regulators to bring the supplies within 5 psi (34.5 kPa) of each other.</p> <p>C. Contact your Kohler Co. Authorized Service Representative (ASR).</p>
9. Water leaking from the valve. CAUTION: Risk of personal injury or product damage. Turn off the main power and water supply.	<p>A. Connections are not secure.</p> <p>B. Seals are worn or damaged.</p> <p>C. Internal leak.</p>	<p>A. Check all connections. Make adjustments as needed.</p> <p>B. Order a seal service pack and replace all seals.</p> <p>C. Unit requires overhaul. Contact your Kohler Co. Authorized Service Representative (ASR).</p>

Symptoms	Probable Cause	Recommended Action
<p>10. Hot water only, the valve shuts down.</p>	<p>A. Hot and cold lines are reversed.</p>	<p>A. Switch hot and cold water supply connections. Verify that the hot water supply is connected to the "Hot" inlet and the cold water supply is connected to the "Cold" inlet.</p>
<p>11. The interface icons are flashing a communication error.</p>	<p>A. Interface cable connections may be loose. B. The interface cable or coupler is damaged. C. If none of the recommended actions for the above issues correct the symptom, the valve requires servicing.</p>	<p>A. Check all interface cable connections, connect if needed. B. Replace the cables or coupler. C. Contact your Kohler Co. Authorized Service Representative (ASR).</p>