



DIGITAL INSTANT HOT WATER DISPENSER INSTALLATION INSTRUCTIONS



We are delighted you have chosen the BTI Aqua-Solutions Digital Instant Hot Water Dispenser for use in your home. When used in conjunction with a Hot & Cold or Hot Only BTI Aqua-Solutions Filtration Faucet, or any other open vented 3-line filtration faucet, this unit will give you years of hot water whenever you require it.

Please read and follow this step-by-step guide to installation, operation, and care for the Digital Instant Hot Water Dispenser and you will soon be making your first cup of coffee, tea, soup, oatmeal or a variety of other items - instantly - and at optimal temperature!

TOOLS REQUIRED

- Adjustable wrench
- Phillips screwdriver

PARTS INCLUDED

- 3/8" x 5/16" hot-outlet adapter
- 3/8" x 1/4" cold-inlet adapter

IMPORTANT - WHAT YOU NEED TO KNOW BEFORE YOU START

For your safety and a worry-free installation, please read and follow all the instructions, cautions and warnings BEFORE installation or use of this Digital Instant Hot Water Dispenser. The BTI Aqua-Solutions Digital Instant Hot Water Dispenser is intended only for residential, not commercial use.

- Make sure all electrical wiring, connections and water connections conform to local codes.
- A standard 110V electrical outlet is required under the sink to power the Dispenser and must supply power CONTINUOUSLY to the Dispenser.
- The cord/plug supplied with the Dispenser must be connected to the power outlet.
- The Digital Instant Hot Water Dispenser is a non-pressurized, open vented system with a built-in pressure regulator valve (PRV) that limits operating pressure to 60 psi.
- A Hot & Cold or Hot Only Filtration Faucet must be installed before the Digital Instant Hot Water Dispenser, creating an "open vent" system, consequently, no pressure is built up inside the Dispenser.

SAFETY INSTRUCTIONS – READ BEFORE YOU START

These instructions are only intended as a guide. If there is any doubt about installation, please contact a licensed/certified plumber and/or electrician.

- ENSURE THE DIGITAL INSTANT HOT WATER DISPENSER IS NOT CONNECTED TO ELECTRIC POWER DURING THE INSTALLATION.
- Using an ungrounded or improper connection of the power supply to the product can cause serious injury or death from electrical shock. ALWAYS use the USA IEC Power Cord supplied with the unit.
- The Digital Instant Hot Water Dispenser must be mounted vertically and level. Because the Digital Instant Hot Water Dispenser is not under pressure, there is a slight delay in water flow after the Hot & Cold or Hot Only Filtration Faucet handle is turned on. This is normal and indicates the Digital Instant Hot Water Dispenser is functioning properly.
- It is recommended that a “handle spring-back” type Filtration Faucet, like the BTI Aqua-Solutions 2100, 2200 or 2400 Series Filtration Faucets, is used with the Digital Instant Hot Water Dispenser to protect the user from continuous dispensing of hot water and possible injury from same.
- Place the Digital Instant Hot Water Dispenser in position, check and ensure that the filtration faucet hoses and the power cord to the electrical outlet will reach without being stretched.
- The Digital Instant Hot Water Dispenser must be positioned so the hoses to and from the Filtration Faucet do not twist or kink.

ELECTRICAL REQUIREMENTS

- A 110V electrical power supply is required.
- It is recommended that a separate circuit serving only the Digital Instant Hot Water Dispenser be provided OR use an outlet that can be turned On/Off by a switch.
- The Digital Instant Hot Water Dispenser is equipped with a power supply cord with a power plug. To minimize possible shock hazard, the cord must be plugged into a mating ground-type outlet, grounded in accordance with all local codes and ordinances.

PLUMBING REQUIREMENTS

- If local codes permit, the Hot & Cold or Hot Only Filtration Faucet hoses should be connected to hot and cold water supply lines using shut-off valves.
- The use of filtered, clean water with impurities removed is advised. Place a point-of-use filtration unit such as the BTI Aqua-Solutions FL1000 in-line PRIOR to the Filtration Faucet.
- Unfiltered water with impurities, grains of sand, etc., can clog the Dispenser and Filtration Faucet and cause the Dispenser’s 5-year warranty to be voided.
- Connecting a standard, pressurized faucet may cause injury and will damage the electronic components of the Digital Instant Hot Water Dispenser and void the 5-year warranty.

ENVIRONMENT REQUIREMENTS

- DO NOT install the Instant Hot Water Dispenser outdoors or in a location where the temperature may fall below 32°F.
- The installation environment should be ventilated, with protection from direct sunlight, in a humidity range of 10–70%.

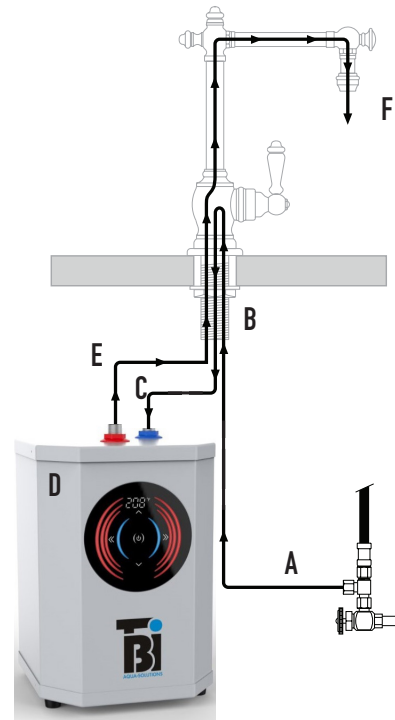
HOW A VENTED FAUCET WORKS

Water flows from supply line (A) into the faucet base (B).

Water is then diverted inside the faucet into line (C) and into the Digital Instant Hot Water Dispenser (D).

The fresh water displaces hot water in the Dispenser, causing it to flow freely through line (E) to the filtration faucet.

Hot water continues straight through the filtration faucet and exits the spout, (F).



IMPORTANT!

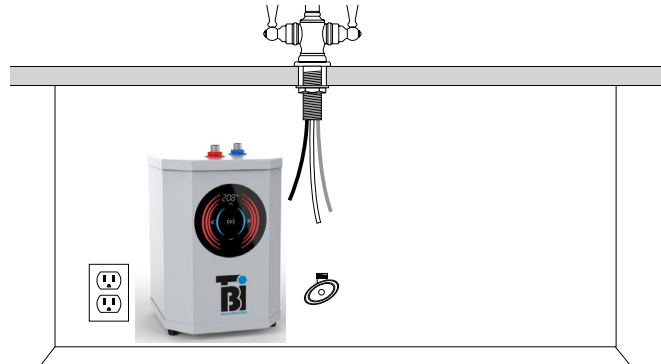
NEVER OPERATE THE FAUCET IF THE CLEAR OUTLET TUBE (E) IS KINKED!

NEVER CONNECT AN INSTANT HOT WATER DISPENSER DIRECTLY TO A STANDARD FAUCET. CONNECTION TO A FAUCET OTHER THAN A 3-LINE VENTED FAUCET CAN CAUSE INJURY, INTERNAL DAMAGE TO DISPENSER AND WILL VOID 5-YEAR WARRANTY.

INSTANT HOT WATER DISPENSER INSTALLATION PROCEDURE

1. FOR FLOOR-MOUNT INSTALLATION - CHOOSE LOCATION FOR DISPENSER

Find a location under the sink that has access to an electrical outlet and is close enough to connect the faucet lines without kinking them. For the unit to operate properly, it cannot be installed beyond the reach of the manufacturer-provided electrical cord. Leave 1-2" clearance around the Dispenser for air flow.

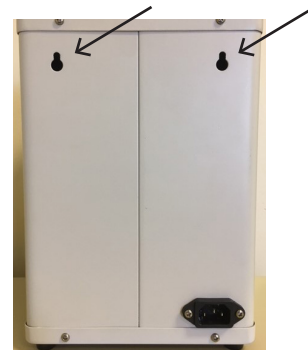


WARNING!

DO NOT PLUG IN THE INSTANT HOT WATER DISPENSER UNTIL IT IS FILLED WITH WATER. HEATING THE DISPENSER WHILE EMPTY WILL DAMAGE THE UNIT AND VOID THE 5-YEAR WARRANTY.

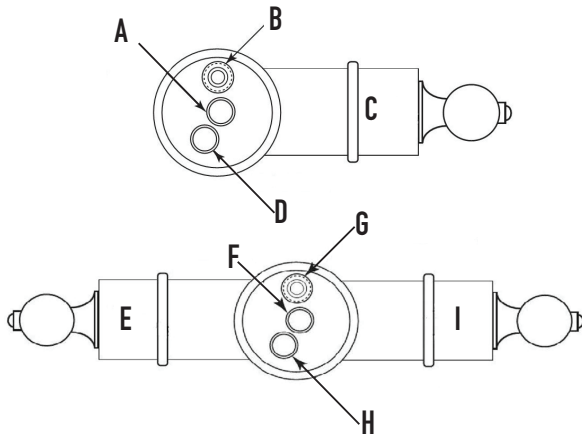
2. CABINET-SIDE MOUNT

If mounting on side of cabinet, install 2 screws into cabinet side that align with the mounting holes on the back of the Dispenser. Leave 1"-2" clearance around Dispenser for air flow.



3. BTI AQUA-SOLUTIONS HOT ONLY and HOT & COLD FILTRATION FAUCET W/ DIGITAL INSTANT HOT WATER DISPENSER

3a



Hoses are attached to faucet body as shown in diagram.

- A – Blue Label Cold Water-In Hose
- B – Faucet Stem
- C – Hot Only Faucet, Hot Handle
- D – Black Label Pressure Tank Hose
- E – Hot & Cold Faucet, Cold Handle
- F – Blue Label Cold Water-In Hose
- G – Faucet Stem
- H – Black Label Pressure Tank Hose
- I – Hot & Cold Faucet, Hot Handle

3b

Drill 1-3/8" hole in countertop. Maximum counter thickness is 2" Center the base plate with built-in O-ring over the mounting hole on the top of the countertop. Center the faucet body on the base plate.

If desired, apply a thin bead of silicone seal under the base plate for added sealing.

DO NOT USE PLUMBERS' PUTTY

3c

For Hot Only Faucet: Place faucet handle in desired position.

Fasten the faucet from under the countertop by first sliding the rubber washer, then the metal washer onto the faucet stem.

Make sure to place the 3 screws on the metal washer through the matching holes of the rubber washer and slide both washers up to the bottom of the countertop.

3d

Thread the mounting nut to the top of the faucet stem and hand tighten. Once the faucet is secure, tighten the 3 screws against the underside of the countertop. This will prevent the faucet from moving/spinning.

3e

Place a metal pinch clamp on one end of the clear hose and attach the clear hose to faucet stem end. Secure with pinch clamp.

3f

Attach the braided blue label cold-water-in hose to cold-water supply line.

Use plumbers' tape on the outside threads to provide a good seal.

3g

Attach the braided black label pressure tank hose to the blue cold-water inlet on the dispenser.

Screw the tapered adapter onto the red hot-water outlet. Use plumbers' tape on the outside threads of the outlet for a good seal.

Make sure that all lines are as straight as possible and not kinked as this may adversely affect the performance of the dispenser.

3h

Place the remaining metal pinch clamp on the open end of the clear hose. Push the clear hose onto the tapered adapter previously installed on the red hot-water outlet. Secure with pinch clamp.

Turn on the water supply and check for leak(s), ESPECIALLY at the water supply and connections points. If leak(s) are present, shut off the water supply, repair the leak and re-test the system as described. Turn on water supply. Open the hot handle of the faucet. Water will flow from the faucet when the dispenser is full. Plug in dispenser.

**ENJOY YOUR BTI AQUA-SOLUTIONS FILTRATION
FAUCET AND DIGITAL INSTANT HOT WATER DISPENSER!**

4. INSTALLATION IF NOT USING BTI AQUA-SOLUTIONS FILTRATION FAUCET**4a**

Screw 3/8" x 1/4" cold-inlet adapter onto blue cold-water inlet (A) on top of Dispenser.

Screw 3/8" x 5/16" hot-outlet adapter onto red hot-water outlet (B) on top of Dispenser.

Make sure larger 5/16" adapter is put onto the red hot-water outlet (B) on top of Dispenser.

4b

Connect cold-water line to BLUE cold-water inlet fitting.

Connect hot-water line to RED hot-water outlet fitting.

Push lines securely into fittings.

Turn water supply back on.

IMPORTANT!

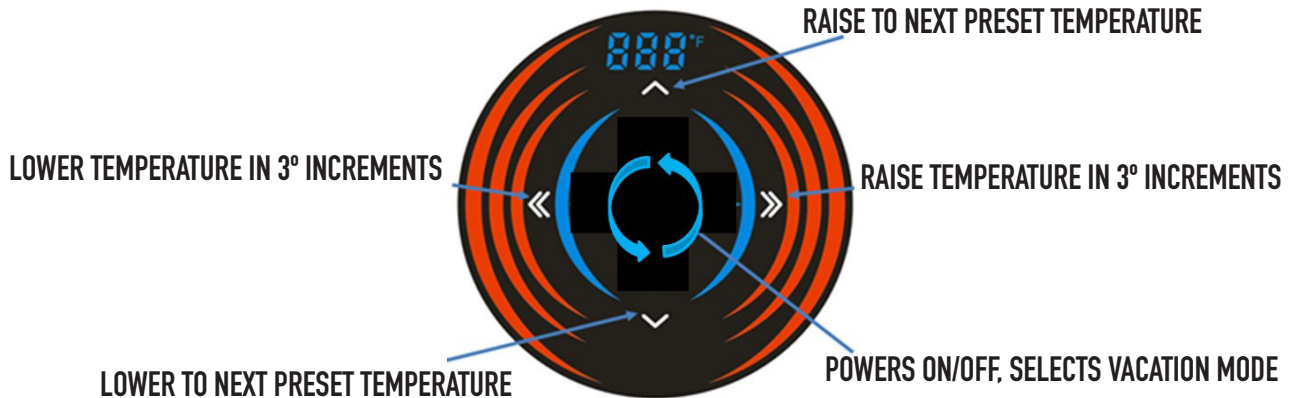
BEFORE the Instant Hot Water Dispenser is plugged into the power outlet, it must be filled with water and checked for tightness and leaks. **FOLLOW THIS PROCEDURE BEFORE CONNECTING DIGITAL INSTANT HOT WATER DISPENSER TO POWER.**

1. Open all water valves to allow water to flow to the Filtration Faucet.
2. Turn the "spring-back handle" of any BTI Aqua-Solutions Hot Only or Hot & Cold Faucet (or equivalent) to the open position and hold until the Dispenser is full and water flows through the faucet spout.
3. Release and close the "spring-back handle" and check all connections for water tightness and leaks.
4. Correct any leaking joints and re-test for water-tightness and leaks before connecting to power outlet.
5. Ensure the installation area is dry and no water is present.
6. Connect the plug to the power outlet and turn on the power outlet at the switch or breaker box.
7. The Digital Instant Hot Water Dispenser display panel will now light up with the On/Off button in the center illuminated.

BTI AQUA-SOLUTIONS DIGITAL INSTANT HOT WATER DISPENSER GUIDE TO OPERATION

REMEMBER TO ONLY PLUG THE DISPENSER IN AFTER THE UNIT IS COMPLETELY FILLED WITH WATER

GETTING TO KNOW YOUR INSTANT HOT WATER DISPENSER



- To power ON/OFF or to select VACATION MODE, simply press and hold center button for 3 seconds.
- When the Dispenser is in heating mode, there will be a sequence of red/blue rings illuminating individually to indicate the Dispenser is actively heating.
- Once the desired temperature is reached, the dial's red/blue rings will become static.
- When the Instant Hot Water Dispenser is empty and is powered ON, the unit will automatically sense the situation. The heating element will not engage and the "lack of water" will be indicated on the display panel by flashing a 208° temperature reading.
- When "lack of water" indicator is displayed, the dry-burn protection sensor has automatically activated.
- When "lack of water" indicator is flashing 208°, press the ON/OFF center button and hold for 3 seconds to power down the unit. Then, fill the Dispenser and follow the starting procedures. When water is drawn from the Dispenser through the Hot & Cold or Hot Only Filtration Faucet, OR the temperature inside the Dispenser falls by 6° F, the Dispenser will automatically reheat the water to the desired setting.

TEMPERATURE ADJUSTMENT (for temperatures above 203° F)

The BTI Aqua-Solutions Digital Instant Hot Water Dispenser has been set for optimum performance in most common and known situations. However, there are factors which may influence the performance of the Dispenser, such as incoming water temperature, atmospheric pressure, and altitude.

Should you experience any discharge of water from the Filtration Faucet spout during heat-up, you can reduce the temperature setting to compensate by adjusting the unit in 3 degree increments until the water discharge is eliminated.

Consult the "High Altitude Cooking" information included.

HIGH ALTITUDE COOKING

Common knowledge tells us that water boils at 212°F, but that number only represents how water boils at sea level. With each 500 feet of increased elevation, the boiling point of water is lowered by about one degree. That means if you're cooking at the highest point in South Dakota, you're going to be boiling at just 198°, and food will take longer to cook because of decreased atmospheric pressure.

Most cookbooks consider anything more than 3,000 feet in elevation to be "high altitude," putting most of the western United States in the category. For food safety as well as taste, cooks in a high altitude region must cook food for longer, add moisture to most baked goods, and consider marinating or braising meat.

BTI Aqua-Solutions' Instant Hot Water Dispenser can be adjusted for your specific region. If you do not know your city's specific elevation, find the highest point in your state in the chart below. For each 500 feet of elevation more than sea level, reduce 212° by one degree to determine your local boiling point.

State	Highest Point	State	Highest Point	State	Highest Point	State	Highest Point
Alabama	2,413'	Idaho	12,668'	Montana	12,807'	Rhode Island	811'
Alaska	20,310'	Illinois	1,235'	Nebraska	5,427'	South Carolina	3,560'
Arizona	12,637'	Indiana	1,257'	Nevada	13,147'	South Dakota	7,244'
Arkansas	2,753'	Iowa	1,671'	New Hampshire	6,288'	Tennessee	6,643'
California	14,505'	Kansas	4,041'	New Jersey	18,013'	Texas	8,751'
Colorado	14,440'	Kentucky	4,145'	New Mexico	13,167'	Utah	13,534'
Connecticut	2,379'	Louisiana	535'	New York	5,343'	Vermont	4,395'
Delaware	447'	Maine	5,270'	North Carolina	6,684'	Virginia	5,729'
DC	409'	Maryland	3,360'	North Dakota	3,508'	Washington	14,417'
Florida	345'	Massachusetts	3,489'	Ohio	1,549'	West Virginia	4,863'
Georgia	4,784'	Michigan	1,979'	Oklahoma	4,975'	Wisconsin	1,951'
Hawaii	13,803'	Mississippi	2,302'	Oregon	11,249'	Wyoming	13,809'
		Missouri	807'	Pennsylvania	3,213'		

OPTIMAL PRE-SET TEMPERATURES

The BTI Aqua-Solutions Instant Hot Water Dispenser comes with seven pre-set commonly used temperatures:

167°F

176°F

185°F

194°F

203°F

206°F

208°F



COFFEE
195° - 205°F



SOUP
190° - 200°F



TEA
167° - 194°F
White/Green Tea 167°F
Black/Oolong 185°F
Chamomile 194°F



COOKING
206°F

BTI AQUA-SOLUTIONS INSTANT HOT WATER DISPENSER TROUBLESHOOTING GUIDE

THE UNIT DOES NOT HEAT WATER

The BTI Aqua-Solutions Instant Hot Water Dispenser will take between 8 and 10 minutes (from initial activation) to heat water to the setting specified. If the unit is not heating water, make sure the unit is plugged into a 110V outlet that you have confirmed to be operational. Test the outlet by plugging in another 110V item, such as a light. If the outlet is working and the unit is not heating water, please contact BTI Client Support at 720.322.0800 for assistance.

THE FAUCET DRIPS OR SPITS FROM THE SPOUT

Although this is an “uncommon” occurrence with the BTI Instant Hot Water Dispenser unit, certain altitude conditions may make the faucet drip/spit when the Instant Hot Water Dispenser is reheating water to replenish the unit’s water supply. Once the water level in the dispenser is filled and heated, the dripping/spitting will cease.

THE WATER HAS AN ODOR OR TASTES FUNNY

The BTI Instant Hot Water Dispenser contains NSF-approved, food-grade materials for the cold-water inlet and a 304 Stainless Steel tank for the hot water reservoir. Using these materials and the quality control inspections at time of manufacturing eliminates any leaching of chemicals into the unit. The common cause of odor or bad taste is the presence of unfiltered water being heated by the unit. Upon heating the unfiltered water, the odors and taste are accentuated. The best solution to this problem is to install a point-of-use filtration unit such as the BTI Aqua-Solutions FL1000 in conjunction with the Instant Hot Water Dispenser. Make sure the filtration unit selected is certified to both NSF 42 and 53 standards to assure maximum protection. Once the water is filtered, the bad odor and taste will not be present in heated water.

WARNING - IMPORTANT

THE BTI AQUA-SOLUTIONS INSTANT HOT WATER DISPENSER MUST ONLY BE USED WITH A 3-LINE VENTED FAUCET.

If connected to a non-vented faucet, the 5-year warranty will be void.
 Additionally, the use of any in-line water chiller with any BTI Aqua-Solutions Filtration Faucet will void the 5-year warranty of any BTI Aqua-Solutions Filtration Faucet and Instant Hot Water Dispenser.