



# Water Distillation System **Instruction Manual** H2oLabs Model 700



Thank you for purchasing the H2oLabs Model 700 Water Distillation System. It will provide your household with freshly made, ultra clean, great tasting water. **Please read this Instruction Manual** for a quick, easy and enjoyable water making experience, and to begin drinking the **PUREST** water possible right away.

## **PACKAGE INCLUDES:**

Main Distillation Unit

Collection/Storage Tank

Dispenser and water meter

Source Water Valve

Drain Valve

Pre-Filter and fittings

Activated Charcoal Cup Post-Filter and media

Power Cord

Instruction Manual

**PLEASE DO NOT DISCARD SHIPPING BOX OR STYROFOAM  
UNTIL ALL PARTS HAVE BEEN LOCATED.**

## **INSTALLATION:**

The Source Water Valve Installs neatly between your cold water line and the riser line to your faucet. Then push supply line to the water distiller into the quick connect fitting. Or it can be installed into a utility faucet or other pipe junction. Just install between the faucet and the cold water line where the faucet was originally attached. Then install the 1/4" water line at the fitting and run it to the distiller and attach.



Should you require a clamp style valve, they are available at any hardware store and are very inexpensive, (less than \$10). They simply clamp on to a copper source water line, (under you sink for example). Turn the valve to pierce the copper line, attach water line and run it to the distiller, (or to the sediment filter and then to the distiller.)

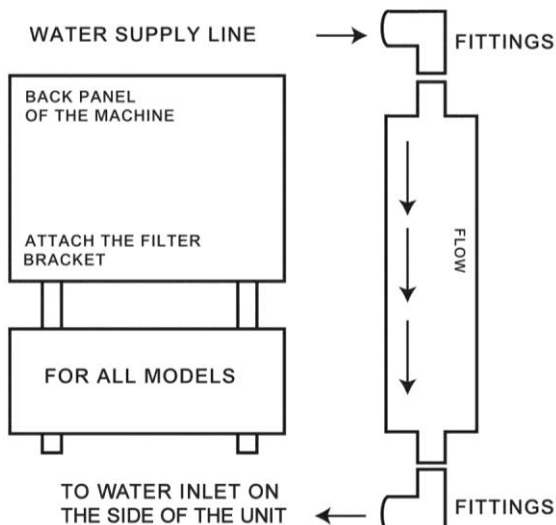


*Installation instructions continued on next page.*

Install the blue handled dispensing valve with the water meter in the bottom storage tank using Teflon tape to prevent leakage. Be careful not to scratch the front of the unit when turning the dispensing assembly into the outlet.

Attach the pre-filter to the distiller using the supplied bracket and the screw located at the lower right hand corner of the back of the main distiller unit. The water flow arrow on the pre-filter should be pointed downward.

Attach the incoming water supply line to the incoming end of the pre-filter, (on top), and the outgoing water line to outgoing end of the pre-filter, (on bottom). The direction of water flow is marked with an arrow on the pre-filter. Use Teflon sealing tape on all threaded connections wrapping clockwise approximately 3 or 4 times and tighten fittings.



Attach the plastic line coming from the pre-filter directly to the inlet on the left side of the unit. Use Teflon sealing tape on threaded fittings. Push plastic line firmly onto the inlet and tighten.

After preliminary cycle, fill Activated Charcoal Post-Filter Cup with the supplied charcoal media. It is important to rinse the charcoal well until all carbon dust has been cleaned from the charcoal. (*The charcoal dust is harmless but you do not want it to end up in the holding tank or in your drinking water.*) Position the cup on top of the lower storage tank at the back left corner where hole is.

**Important Note for laboratory use:** If the distilled water is NOT to be used for drinking purposes, (dental, scientific or other lab use, etc.), DO NOT use the Activated Charcoal media, as it could cause inaccurate water testing results.

Open water valve at source and plug in unit. Switch unit on. (Green power button). During preliminary cycle, allow unit to operate until completely full and it has turned off automatically. Completely drain the distilled water storage tank to flush out one time. (See OPERATION and CLEANING instructions.) Turn unit back on for regular use.

### **SAFETY INSTRUCTIONS - Read Before Operating**

#### **SCALDING DANGER!**

▲ Locate the unit in a safe place that is not accessible to children. Particular attention should be made to the accessibility of the drain valve. If it is opened during or soon after operation, scalding hot water will be discharged. **Always be sure that the unit has been off for an hour or so before using the drain valve.**

#### **ELECTRICAL PRECAUTIONS:**

▲ Do not use extension cords unless absolutely necessary and in those cases, use a heavy duty cord.

▲ Do not share the same outlet with other appliances to prevent overloading. A surge protecting power strip is recommended.

▲ Push plugs all the way in to the sockets to avoid a poor connection which could result in arcing.

▲ Unplug the power cord when cleaning the unit.

#### **OPERATION:**

Turn on water valve and Green “Power” switch. Water will flow to the boiler tank until full and the unit will start the process automatically.

When the distilled water storage tank is full, the unit will turn off automatically. Do not turn off the power switch while unit is operating or the automatic water refilling process will not begin when necessary. (System may have to be reset.)

## **CLEANING and MAINTENANCE:**

The distilled **water storage tank** does not normally require cleaning, but it can be flushed using distilled water if necessary.

However, please be sure to drain the **boiler** often. It only takes a couple minutes and will save cleaning time and reduce maintenance.

**IMPORTANT: The boiling tank should be drained weekly**, (or more often if source water conditions are very hard), in order to reduce the frequency of thorough cleanings necessary. Simply drain the water from the upper boiling tank by opening the valve on the right side of the unit.

**WARNING! Do not attempt to drain the tank until at least one hour after the unit has turned off, or scalding could occur.** It is suggested to obtain a clear plastic or rubber hose of sufficient length to reach from the unit to your sink for ease of draining. But the tank can be drained into a bucket if desired. The unit can be switched on for a couple minutes to flush more contaminants from the tank. Be sure to close the drain valve only hand tight so no leakage will occur but the internal valve will not be damaged.

The more frequently the above process is conducted, the fewer major cleanings will have to be performed as the scale and contaminants will be flushed away instead of allowed to harden on the heating element and interior of the boiling tank.

**Follow the steps below to clean the inside of the boiling tank approximately every month or more often if necessary, depending on water conditions and amount of distilled water produced.**

1-Be sure the power switch is off and the unit has been allowed to cool, and unplug the unit from the wall outlet.

2-Drain the boiler tank from the Drain Valve on the side of the unit, using a hose or bucket. Close the Drain Valve after draining.

3-Unfasten the 4 screws on the top cover and unscrew the 2 wing nuts on top of the boiler. Remove the steel plate and cover.

4-Clean out as much crystallized and other scale in the boiler as reasonably possible. Pour in about a quart of plain white distilled vinegar, (or the recommended amount of food grade citric acid scale cleaning crystals), and enough warm water to cover the heating element, and let it soak for a couple hours or so, or even over night.

5-After the scale on the heating element has been allowed to soften, clean it off and drain and sponge out the boiling tank. Pour more water into the boiling tank and drain repeatedly until most scale and residue has been eliminated. If the vinegar solution does not work well enough, use water scale remover crystals available at most hardware stores or from H2o Labs.

6-Inspect and clean the boiling tank water level sensors.

Important note: There are two sensors, (paddles), extending into the boiling tank that control the shut-off valve solenoid and turn on the heating element. As the boiling tank fills, the water first reaches the longer paddle and when it reaches the shorter paddle it makes the connection and completes the circuit. If the paddles are dirty and the connection is not good, it can cause water not to shut off and continue to fill the boiling tank and possibly overflow into the holding tank.

7-Inspect the cooling fan and condensing coil. If dirty, use a tooth brush or vacuum cleaner to remove the dust.

8-When cleaning is completed, replace the steel plate and fasten the wing nuts tight enough to ensure no steam will escape from the boiler during operation.

### **Replacing the Activated Charcoal Media:**

The activated charcoal in the post filter cup should be changed approximately monthly. Simply empty the cup and wash, rinse and dry it well. Then fill the cup with new activated charcoal. It is important to rinse the charcoal very well with distilled water before re-inserting the cup in the top of the holding tank. *The use of the activated charcoal is optional and it is normally not required unless the customer has very odorous water or is concerned about VOCs in their local water.*

## **TROUBLE SHOOTING:**

### **Unit does not come on:**

- A-Check to see if the power switch is on and unit is plugged in.
- B-Check household breakers.
- C-Make sure source water valve is open.
- D-Check if fuse is blown. If necessary, replace with 120V AC 10 Amp.
- E-Check to see if fan is clogged with dust preventing fan from rotating.
- F-Check the 2 sensor inductors, (one long and one short), hanging from the cover of the boiler to see if they are clogged with scale.

### **Water Leaking:**

- A-Check all water line fittings and tighten if necessary.
- B-Make sure Activated Charcoal Post-Filter Cup is positioned properly.
- C-Check to see if the pipe bringing water into the cup is positioned correctly or if it is cracked or leaking.
- D-If water is leaking from the dispenser, tighten the fitting above the blue handle, or tighten the faucet assembly to the storage tank.
- E-If the boiling tank drain valve is leaking, and sufficiently tight, it is most likely due to a worn out rubber ring on the rotating shaft. Simply replace the rubber ring with a new one.

### **Water continues to fill boiling tank when full:**

- A-The source water is too pure, (distilled or reverse osmosis, etc.) Use only tap water to fill the boiling chamber or the conductivity of the water will not allow the electronic sensors to operate properly.
- B-Verify sensor wires are connected securely or replace solenoid.

### **Unit makes a continuous clicking sound:**

Boiler sensors are not synchronized. Verify that the red wire is connected to the SHORT sensor paddle and the blue wire is connected to the LONG sensor paddle. Open the boiler lid and while holding it, turn the unit on and touch each sensor to the stainless steel tank. Do this repeatedly until the long sensor does not have any effect. (Only the short sensor should shut the water off and trigger the fan to start.) Operation of the unit should now be normalized without the continuous clicking sound.

## **Trouble Shooting Continued:**

### **Testing of the distilled water indicates it is not pure:**

A-Undistilled water over-flowing from boiler to reservoir. (See above “Water continues to fill boiling tank when full.”)

B-Activated Charcoal dust has been allowed to enter the holding tank. Empty, and rinse post-filter cup and holding tank well. Allow to dry completely, run a 2<sup>nd</sup> cycle and retest.

C-Sensor paddles in boiling tank are dirty. Fill boiling tank with white distilled vinegar or cleaning solution and allow to soak for a few hours depending on how much scale is present. Drain Boiling Tank and clean residue from the paddles. Empty the holding tank and allow to dry completely. Run one complete cycle and empty again. Run the 2<sup>nd</sup> cycle and retest the water.

D-If the distilled water continues to indicate lack of purity, the solenoid may be sticking due to particles lodging inside it. Replace solenoid if above suggestions do not resolve the purity issue.

If the above suggestions do not solve the problem, DO NOT ATTEMPT to conduct other repairs yourself. Call H2o Labs or contact a serviceman to check and repair.

### **SPECIFICATIONS:**

Output: 5 Gallons per Day (20 Liters)

Storage Capacity: 4 Gallons (15 Liters)

Stainless Grade: 18-8 Stainless Steel

Size: 13 ¾” Wide, (front), 10 5/8” Deep, (front to back), 18” High  
(Allow 3” additional width for drain valve and water inlet connection.)

Weight: 33 lbs. (15 KG) N.W; Shipping Weight 35 lbs. (16 KG)

Packaging: 17” X 20” X 22” tall

Power Source: Standard 120V, 60Hz,

Power Consumption: 725 Watts

Fuse: 120 Volt AC 10 Amp.

**Visit [www.H2oLabs.com](http://www.H2oLabs.com) or Call 1-800-990-3560**

*(Monday through Friday 8:00 AM to 5:00 PM Central time.)*  
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