

Install Guide

CP-JR-CT1SW CP-JR-CT1SW and CP-JR-CT1SW-PB





Register your product online:



510.732.0100 06022022

www.crysalli.com

Install Kit for CP-JR-CT Still water configurations

QTY		Description		Part Number	Usage
	1		3/8 Tube x 9/26-24 Female Adapter	PSEI6012U9	Optional quick connect fitting adaptor to a 3/8" anglestop
	4	5	JG 90 elbow 3/8" smooth to 3/8"	PP221212W	Water inlet and outlet connections on unit. Swival connections
	1		Filter head 3/8 tube inlet & outlet	QL1	Manifold head for the water filter. Mount to cabinet wall
	1		Water filter cartridge	2FC	Water filter, 1.5gpm, 6,000 gal capacity. Change at least once a year
	1	. <u>İ</u>	9/26-24 to 3/8" Tube and 9/26-24 mpt	PASVPP6	Angle stop TEE in adaptor. For adding an outlet off the anglestop
	10	C	JG 3/8 Locking Clips	PIC1812R	Collet locking clip for 3/8" Hose to JG fittings
	1	3	12' of 3/8"OD hose	PE-12-EI-25	Water Inlet and Product hose. Cut in 4 sections to needed lengths
	1	I	Leak Block Sensor	CR-LBS10-JG	Leak detector to be installed before filter systems, includes fittings

For questions or assistance with install contact Crysalli 510-732-0100 or your local Distributor.

CP-JR Still Water Chiller System Description

Congratulations on the purchase of your Crysalli system. The Crysalli CP-JR-SW still water chiller, with CR-12FC water filter system are a configuration designed to dispense bottle quality ice cold still water at the pull of a handle or press of a button.

The Serenity CP-JR-UC-SW and CP-JR-SW-CT1 units consist of a condensing unit (refrigeration), a manual fill water bath reservoir, water-cooling coil, and an agitator pump. The unit will freeze over 1/3 of the water in the reservoir/bath to create a 3 lbs ice block (bank). This ice bank is responsible for maintaining a 32-degree reservoir water temp. The cooling coils are submerged in the reservoir/bath water to chill and maintain ice cold product temperatures.

For proper function the Crysalli units must have a water supply, dedicated 120 Volt electrical supply and free of obstruction around the condenser coil and vents. The Installation Kit includes water filter, connecting lines and fittings that must be used to ensure proper operation.

WARNING: Do not operate or place a Crysalli unit in a freezing ambient environment. A freezing ambient environment will cause water in unit to freeze and expand, possibly resulting in damage to pump/ motor assembly, tank, water coil, water bath, valve(s), etc.

The detailed stuff: Theory of operation

To chill the water, the incoming filtered water is routed into the chiller then through a water coil that is submerged in the ice-cold water bath. The temperature of the incoming water is at ambient (room) temperature as it enters the water coil. As the incoming water passes through the water coil the heat is removed from the water and chilled to a temperature acceptable for a quality drink (34-40 degrees target).

The chilling happens in the water bath part of the machine. The water bath is the sealed upper area where water is constantly agitated and a certain amount of it will be transformed into ice. This water bath and ice bank acts as a reservoir for refrigeration only (none the water in the bath is used for consumption) so you can have an ice-cold water to drink. Your Crysalli unit will cycle itself on and off as it maintains this ice.

Your Crysalli unit should be left on even when not in use so it can maintain the ice bank and cold temperatures.

The really detailed stuff:

The following will give a general overview of the flow of individual circuits and a clearer understanding of your mini bottling plant:

An Ice Bank Control (IBC, S0513A) senses the level of the ice in the water bath and turns on or off the refrigeration system. The IBC has a sensing bulb, cap tube and controller. The bulb is submerged in the water bath. There is fluid in the bulb that expands when the bulb is covered in ice. This pushes fluid through the cap tube that pushes a diaphragm that activates the switch in an open position to shut the refrigeration off. Once ice is dissipated from the bulb the fluid backs off, deactivating the switch (closing the circuit) and turns the refrigeration back on to rebuild the ice bank. The water that does not freeze in the water bath surrounds the Water Cooling Coils and is constantly recirculating via the submerged Agitator Pump (S0833).

The Ice Bank Control sensor and Agitator in your Crysalli unit are connected to and are energized by the Liquid Level Control Board (LLCB, part# S0068-U). This is the communication center for the system, telling each part when to turn itself on or off.

Since the chilling of the water is via contact time in the pipes submerged in the water bath, your system does not utilize any pumps to boost or push the water pressure. The cold water flowing from the chiller uses the pressure from your plumbing to make it dispense. If water flow is too fast from the faucet, utilize the flow control arm on the side of the faucet to turn it down. The Flow control arm in a horizontal position is wide open. Turning the arm up or down a quarter position restricts the water flow down. A full guarter turn can completely restrict and stop the water from flowing. On Push Button valve models, the flow control is achieved by loosening and tightening the metering pin

located at the top of the valve. Remove the lid to access the valve and use a small flat head screw driver to turn the pin.

As the unit runs it will create heat, 585 BTU per hour (as a reference, 1 burning match creates 1 BTU, so image heat from 585 matches warming a space), so there should be enough space surrounding the chiller to insure adequate air circulating through the refrigeration condenser. Do not block any of the vented panels on chiller.

Water quality will also have an influence on the water pressure. The 2FC water filter will stop particulates such as dirt and rust as small as ½ micron in size as it removes off taste, odors, colors and cholerine from the water. In this filtration process those containments build inside the filter cartridge and eventually plug the water filter, resulting in dwindling water flow. A Plug water filter is an indication it is working, and that it is time to replace it.

Water shut off valve/angle stop and dedicate 120 volt power outlet should be located as near the chiller as possible in order to facilitated install and service. Position the Chiller so the condenser coil vent panel is closest to fresh air or the door of the cabinet.

CP-JR-CT1SW Quick Installation Guide Instructions

- 1. Carefully remove unit from packaging and locate drip pan, water filter, 3/8" hose and angle stop adaptor fitting.
- 2. Place the unit on the counter and attach drip tray.
- 3. Remove the 2FC filter from its packaging and insert into filter head on back of unit. Push up and twist to lift.
- If water and electrical connections are in the cabinet, a 1" hole should be prepared in the countertop.
- 5. They will come with an angle stop adaptor that replaces the compression nut and ring on a standard 3/8 angle stop, it is simply hand tightened on, then an end of 3/8" hose is pushed into it. Pull on hose to confirm it is locked in.
- 6. Run hose to Crysalli unit and push hose end into 3/8" fitting at the water filter.
- 7. Ease water on at angle stop and check for leaks at connection points.
- 8. Plug unit in.

- 9. Remove lid of unit and fill the water bath with 1 gallon of non filtered water or until water level is just below the white overflow stand pipe. If water bath is over filled water will begin to drain out condensate spout into drain pan. Water will flow till level is at or below white overflow stand pipe.
- 10. Turn the unit on. Full ice bank formation for cold temp dispensing will take 1 to 2 hours.
- 11. With a pitcher in hand and under the faucet, pull handle forward, or push and hold LED push button to dispense, flush at least two pitchers worth of water through the system to remove air from the system and flush filter.
- 12. For push button (PB) models, flow rate can be adjusted via the pin on the valve. Remove lid to access. Use a small flat head screw driver adjust. Right turns slows/restricts flow, left turn opens for faster flow.

Countertop Still Water Dispenser Quick Installation Guide



How to make a Standard Connection using JG fittings Inch Polypropylene Fittings



To make a connection, the tube is simply pushed in by hand; the unique patented John Guest collet locking system then holds the tube firmly in place without deforming it or restricting flow.



Secures the collet in its position to prevent an accidental disconnection of the tube.

Locking clips should be connected only after full insertion to prevent scraping of the tube. Locking Clips are not designed for use with John Guest Stem Adapters in Swivel Combinations.

CUT THE TUBE SQUARE



Cut the tube square and remove burrs and sharp edges. Ensure that the outside diameter is free from score marks. For soft or thin-walled plastic tubing we recommend the use of a tube insert.

PUSH UP TO TUBE STOP



Push the tube into the fitting and up to the tube stop.

PULL TO CHECK SECURE



Pull on the tube to check that it is secure. Test the system before use.

TO DISCONNECT Push in collet and remove tube



To disconnect, ensure that the system is depressurized, push the collet square against the fitting. With the collet held in this position the tube can be removed.

Connecting the Angle Stop Adaptor Valve

To tee off an angle stop water valve that is already being used, locate the PASVPP9 angle stop adaptor tee. To connect the angle stop adaptor valve:



- 1. Shut off water supply at brass/chrome supply valve.
- 2. Disconnect riser from brass/chrome supply valve.
- 3. Ensure that the sealing gasket is fully inserted into the angle stop valve female thread.
- 4. Install angle stop adaptor valve on supply valve.
- 5. Connect the riser to the angle stop adaptor valve.
- 6. Fully insert tubing into the Speedfit side of the valve.
- 7. Open valves and check for leaks.



*Conversion adaptor can be threaded to either side of the valve to make configurations of 1/2"x1/2" NPS or 3/8"x3/8" compression.





For a dedicated angle stop water valve, use the PSEI6012U9 adaptor fitting.



To use the PSEI6012U9 angle stop adaptor, identify the angle stop water valve in your cabinet that will be the water source for the system, remove the compression nut and ferule ring from it and thread the PSEI6012U9 fitting onto the valve where the nut and ferule ring were, hand tighten the fitting down.



1/4 Turn valves. These valves have been designed to allow temporary servicing of downstream equipment and must only be used in the fully open or fully closed position.

DO NOT USE THESE VALVES:

- In a partially open position to control flow.
- To provide a permanent termination.
- Without tubing assembled or plugged (or threaded connections sealed).
- As a tap or "faucet."

CR-LBS10JG Kit



Leak block control unit sensor Solenoid latch valve 9V battery John Guest fittings

Operating Instructions Installation:

- Install the 3/8" fittings to the solenoid valve inlet and outlet ends. The thread of solenoid valve is 1/2" BSP male. Then connect a 3/8" OD tube from the angle stop to the inlet fitting on the solenoid valve (indicated by position of the arrow). Then connect a 3/8" OD tube from the outlet end of the solenoid to the water treatment system that is feeding your Crysalli CP2000 unit.
- 2. Put the 9V battery in the control unit and activate it by holding the check/reset button for 4 seconds (see operation instructions for more details).
- 3. Place the control unit next to your Crysalli unit, ideally between the filter system and chiller.
- 4. Turn on water and check for leaks at your connection points.

Operation:

- Reset to work

 a) Keep pressing button for
 4 seconds, the control unit
 activates solenoid valve to
 open the inlet tube of water
 treatment system, and
 generates a long beep sound.
- 2. Auto shut-off when water leak is detected.

a) The control unit shuts activate solenoid valve to shut off the inlet tube of the water treatment system to block water flow, and generates an acoustic signal, "beep-beep," and blinks the blue light continuously to notify the water leak is detected. After the leakage problem is solved, keep pressing button for 4 seconds, the control unit activates solenoid valve to open the inlet tube of water treatment system again with a long beep sound.

Low power shut-off

 a) When the battery power
 is low, the control unit shuts
 off the inlet tube of the water
 treatment system, blinks red
 light and generates an acoustic
 signal "beep" to notify that the
 battery needs to be replaced
 to keep water leak protection
 functional.



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510.732.0100

CR-12FC Filter System

Flow Rate: 1.5 gpm

Capacity: 6,000 gallons

Effectively filters dirt and particles as small as 1/2-micron in size by mechanical means.

Reduces chlorine taste & odor and other offensive contaminants that can adversely affect the taste and quality of sparkling and still water.

NSF/ANSI standard 42 class I and 53 certified to reduce cysts such as Cryptosporidium and Giardia by mechanical means.

Replace cartridge when flow rate becomes inconveniently slow from faucet or at least once per year.



CP-JR-CT1SWF-PB Push Button Faucet



A leaking push button valve is usually caused by debris in the valve body. Follow these easy steps to clean out. Always unplug unit before working on it.

1. Unscrew the 2 Philip head screws.



2. Lightly bend bracket to clear the adjustment nut and remove valve assembly.

- 3. Turn valve over, being careful not to pull the wires from the solenoid.
- 4. Remove retaining nut.



5. Lift solenoid off, once again, be careful not to pull on the wires too much.

 Remove the solenoid washer and unscrew the armature stem from the valve body.



7. Watch for the piston and spring in the armature stem when removing it. Check that the spring has tension still and look

the bottom of the piston over for debris and wipe clean.

8. Look for and remove any debris or foreign material in the valve body area that could interfere with the piston seal and flow. Check that small o-ring is in place. Wipe internal valve area down with sanitizing wipe if necessary.

 Reassemble the valve in the reverse steps you took it apart in. The armature needs to be snug, but do not over-tighten. Over-tightening it can result in pining the piston down to the point water will not flow.



10. Before putting the solenoid back on the stem, position the washer so the grove is up, in the solenoid. Check that wires in

the solenoid are closest to the wiring harness to minimize tension on them.

11. Plug unit back in, turn water on, turn CO2 on and run water through valve and make any flow adjustments. Confirm there is no more leak.





<u>CP-JR-CT1SW Cleaning and Maintenance</u> <u>Recommendations</u>

Daily:

- Wipe down the unit or draft tower, cleaning and drying all surfaces. (Use window cleaner on mirrored and chrome finishes).
- Clean and dry drain pan and drain grate. Check that water is draining, pour warm water down drain if necessary.
- Check over faucets for action and hand tighten any loosened handles or nuts on them. A wobling faucet indicates the faucet body is loosening from the shank which can result in a leak, faucet coming off or stripping the teeth. Use a shank wrench to tighten the shank nut to the faucet.
- □ Check flow from faucet, loosen, readjust, and tighten flow control knob as needed.
- Check that flow and temperature of water poured from the unit are consistent to average use.

Weekly:

□ Clean the faucets by wiping them down. If there is any scale or slime submerge them in cleaners/ sanitizer and use a brush on them.

Monthly:

- □ Visually check condenser coil for dust and blow out with compressed air.
- Check for good water pressure at the water filter system by running water from flush valve on filter.
- □ Visually check pre-filter in clear bowl on water filter system (if applicable) to determine if it needs replacing. Use only EPC5-10 replacement pre-filter cartridge.

Quarterly:

□ Check the water bath level, either top off or drain, clean and refill.

Semianually:

- □ Change the water filters. Use only 2FC replacement filter cartridges.
- Drain water bath, clean and refill with new water (pull white stand pipe inside water bath to drain water. Be sure have a container under the ss drain spout at the front of the unit to catch the draining bath water).
- □ Remove and disassemble faucets for cleaning and inspection.

Annually:

- □ Inspect internal water bath components such as agitator pump and all hose connections.
- □ Flush and rinse system with food safe sanitizer (this work should be performed by a certified service tech).

Model Number:

Install Date:

Serial Number:

Installer/Servicer:



Limited Express Warranty

Crysalli Beverage Systems (herinafter referred to as Crysalli) warrants for a period of 12 months from installation date (except as limited below) that new Crysalli water systems, towers and faucets (herinafter referred to as Product) manufactured by ICI for Crysalli shall be free of defects in material or workmanship under normal and proper use and maintenance as specified by Crysalli and upon proper installation and start-up in accordance with the Quick Install Guide and Owners Manuals. Any accompanying water filtration system is warranted by the Manufacture of that product only, not by Crysalli, ICI or WPD.

The obligation of Crysalli under this limited express warranty is limited to the repair or replacement of parts, components, or assemblies that in the opinion of Crysalli are defective. This warranty is further limited to the cost of parts, components or assemblies and standard straight time labor charges at the servicing location. Replacement parts are warranted for 90 days or the balance of the original warranty period, whichever is longer. The foregoing constitutes Crysalli's sole obligation and the consumer's exclusive remedy for any breach of this warranty. Crysalli's liability under this warranty shall in no event be greater than the actual purchase price paid by the consumer for the Product. Additional expenses including, without limitation, service travel time, overtime or premium labor charges, accessing or removing the Product, or shipping are the responsibility of the consumer.

The foregoing limited express warranty shall not apply to costs for: (1) periodic or routine maintenance including water filter change outs, (2) repair or replacement of the Product or parts due to normal wear and tear, (3) defects or damage to the Product or parts resulting from clogged water filters, misuse, abuse, neglect or accidents, (4) defects or damage to the Product or parts resulting from improper or unathorized alterations, modifications, or changes; (5) defects or damage to any Product that has not been installed and/or maintained in accordance with the Owners Manual, Quick Install Guide or technical instruction provided by Crysalli, ICI or WPD; and (6) any work being performed by non-authorized service agents.

THIS LIMITED EXPRESS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OR GUARANTEES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL CRYSALLI, WPD, OR ICI BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Upon the expiration of the warranty period, Crysalli's liability under this limited express warranty shall be terminated. The foregoing limited express warranty shall constitute the sole liability of Crysalli, WPD and ICI and the exclusive remedy of the customer or user.

To secure prompt and continuing warranty service, the warranty registration card or online form must be completed and sent to Crysalli within thirty (30) days from install date. Complete the following registration card and send to Crysalli/WPD to below address. Retain a copy for your record.

Name of Customer/Business & Address:

Phone:

Distributor/Dealer: Model Number: Install Date: Crysalli Beverage Systems 1739 Sabre Street, Hayward, CA 94545 Phone: 510-732-0100 Fax: 510-732-0155 Website: www.crysalli.com