



UCM Install Guide

Sparkling & Still Remote Dispenser System
CR-UCM1 & CR-UCM2 Remote Chiller with
CBR, LIT, or CM Series Towers.



CR-UCM Series Start-up and Install Check List



Start-up Sequence:

- Turn Water on to unit (confirm flow from faucets)
- Plug unit in and toggle On/Off switch to the On position.
- Turn CO2 on at tank. (carb tank may need to be bled)

Notes:

Water Filters, CR-24FC and CR-24FCP

- Water On. Filters flushed via the flush valve and flowing water.
- Water pressure at/through water filter system above 50 psi and not dropping off.
- All connections leak free.
- 50 PSI water reducer valve installed after water filter, pointing in the correct direction.



CO2

- CO2 hose from unit: flare nut connection on end of CO2 Hose tight to CR-3741 CO2 Regulator (Be sure to use nylon washer supplied with Reg in fitting).
- CO2 Reg connected to CO2 tank (card board/plastic washer used) tight and leak free.
- CO2 Tank Full, Opened all the way and Set to 75 PSI.



CBR tower:

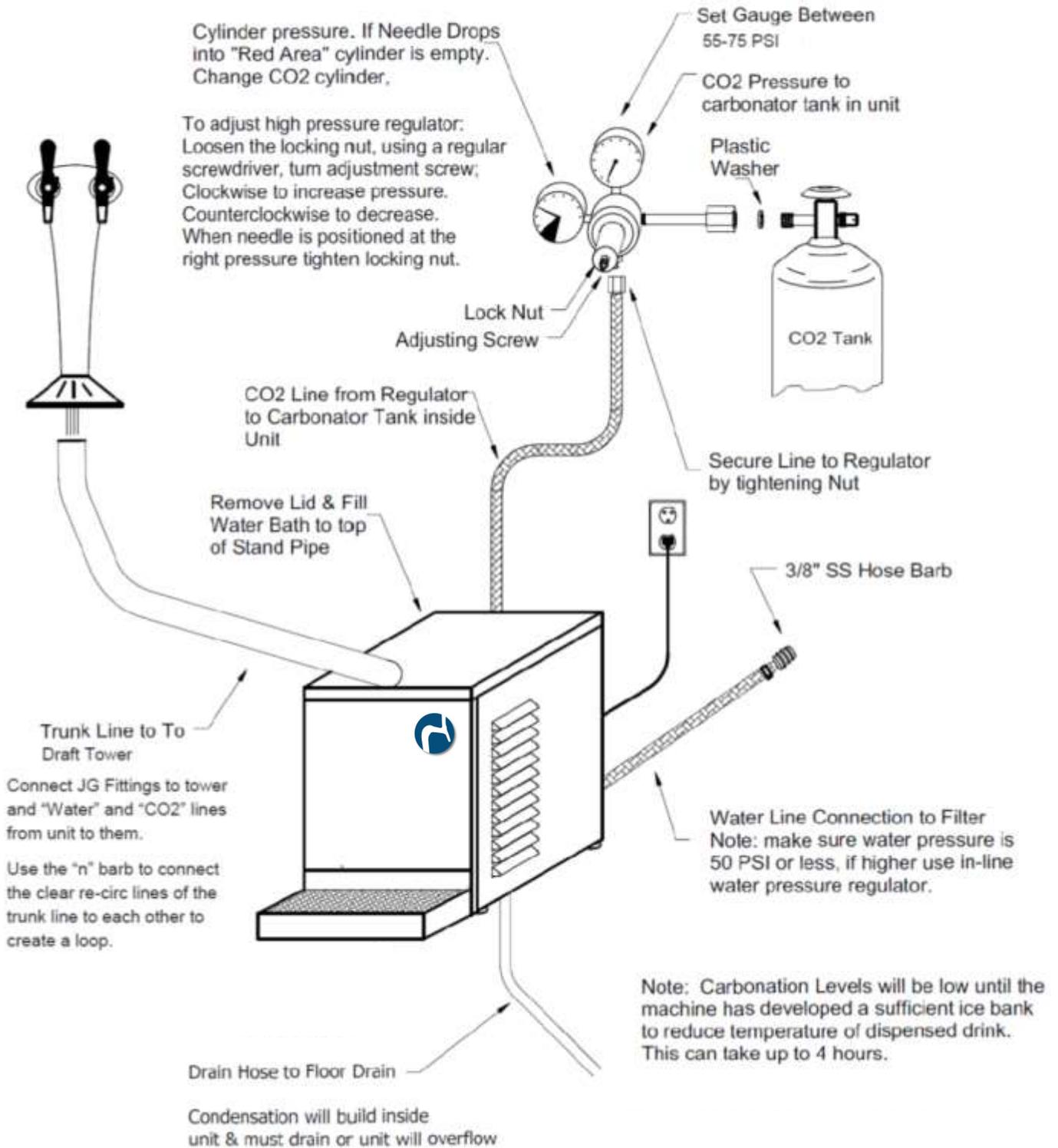
- Faucets tight to shank and positioned vertically. Free of leaks. Customer has faucet wrench.
- Handles tight, front facing and labels are appropriate for water type.
- Sparkling water; cold, carbonated and tastes clean and pure. (Run a few liters of water; is carb pump cycling on and flow consistent without gassing out).
- Still Water: cold and consistent flow. Tastes clean and pure.
- Flow adjustment on faucets set and knob tightened down so flow rate cant change
- Connections to tower made using supplied Super Seal JG fittings from kit and leak free.
- All exposed Hoses and Fittings all wrapped in insulated foam tape.



Remote Chiller: Unit on.

- Unit On and Plugged into a dedicated 120V outlet.
- Cabinet properly ventilated to handle BTU load of unit heat. Can fresh air draw in and hot air vent out. Unit free of obstructions around it and can vent. If using a Fan box, check that it is plugged in and running.
- Unit positioned so Air Filter is accessible. If using a CR-ABUCM air baffle, it is in place and sealing to vents.
- Rear outlet connections for trunkline (hoses and fittings) to tower wrapped in insulated tape and leak free.
- Water Inlet connection to unit leak free and not pinched off anywhere
- Water Bath filled with water up to the white stand pipe.
- Ice Bank formed on refrigeration coils in water bath. Unit cycling on and off properly to maintain ice bank. Unit will take 2 hours to form full ice bank after initial start-up.
- Carb pump cycling on for 7-14 seconds after 1.5 liters of Sparking water is poured, and not screeching.
- Agitator pump agitating bath water and pumping re-circ water through the trunkline.

Under Counter Chilled Water Dispenser Quick Installation Guide



* Always reference local plumbing codes to determine if a Back Flow Preventer is required and to check the type/style of back flow preventer that is accepted as well as the plumbing location it needs to be placed in. Crysalli does not include Back Flow Preventors in the install kits because of variability in requirements. Back Flow Devices should be sourced from local plumbing stores.



Using JG fittings

John Guest®

Inch Polypropylene Fittings



How to make a Standard Connection

MAKING A GOOD CONNECTION:

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.

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.

O-ring provides a leakproof seal

Grips before it seals

The Collet (gripper) has stainless steel teeth which hold the tube firmly in position while the O-ring provides a permanent leakproof seal.



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

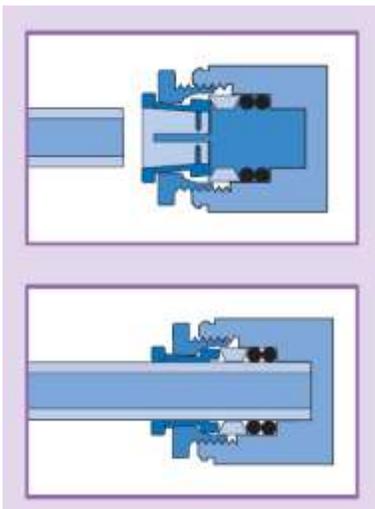


To disconnect, ensure that the system is depressurized, push the collet square against the fitting. With the collet held in this position the tube can be removed.

Inch Superseal Fittings

For use with Stainless Steel Tubing

CBR and LIT Towers



Correctly set and tightened

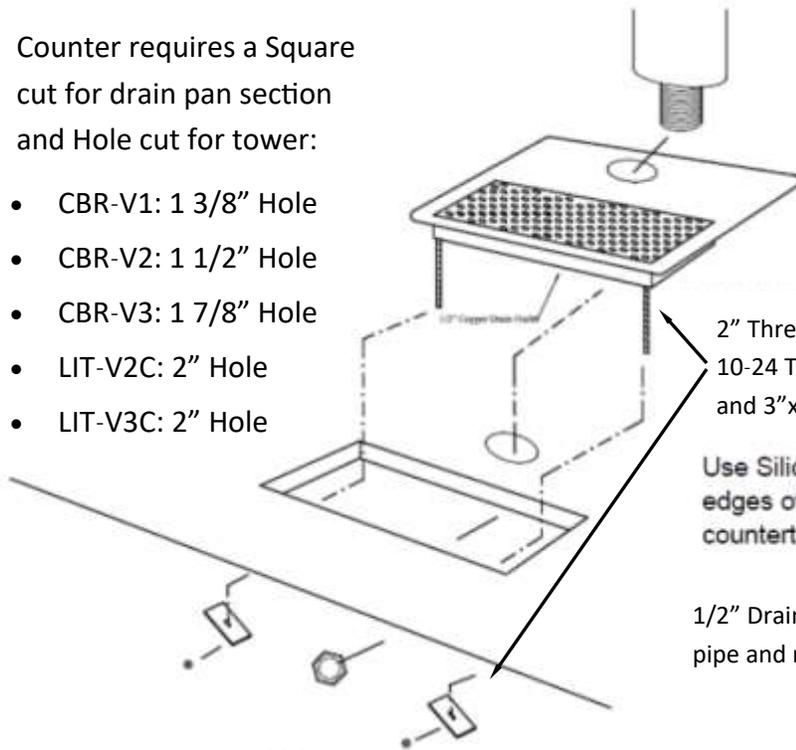
Fitting not tightened down

Mounting the RDP-1SSQ or RDP-3SS Recessed Drain Pan



Counter requires a Square cut for drain pan section and Hole cut for tower:

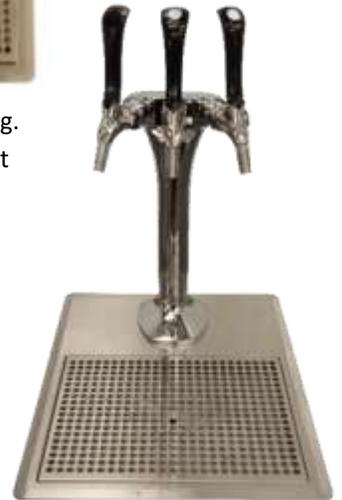
- CBR-V1: 1 3/8" Hole
- CBR-V2: 1 1/2" Hole
- CBR-V3: 1 7/8" Hole
- LIT-V2C: 2" Hole
- LIT-V3C: 2" Hole



2" Threaded stud for mounting.
10-24 Thread with Locking Nut
and 3"x1" SS Mounting Strip

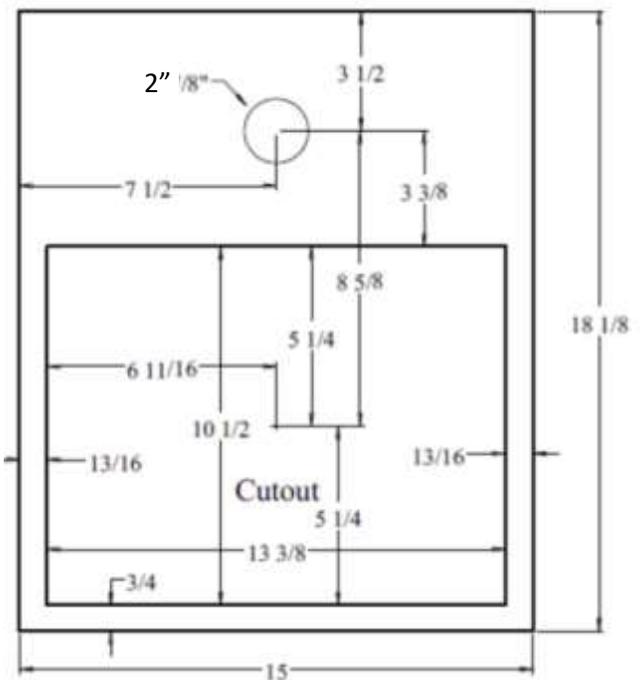
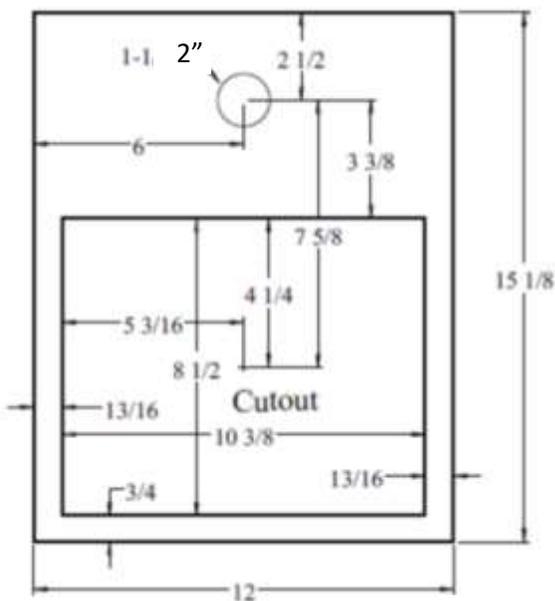
Use Silicone on bottom and
edges of pan to seal to
countertop.

1/2" Drain Stub, connect hose/
pipe and run to floor sink.



RDP-1SSQ

RDP-3SSQ

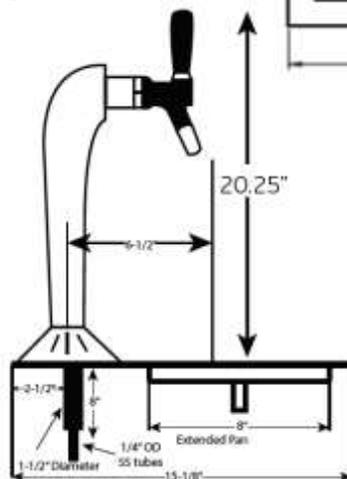


RDP-1SSQ for use with:

- CBR-V1C/W Tower
- CBR-V2C/W Tower
- LIT-V2C Tower.
- CM-2-PB-SB Push Button

Specs:

- 12" x 15 1/8" Overall
- 2" Tower Hole on pan
- 10 3/8" x 8 1/2" Drain Pan
- 1/2" Dia Copper Drain Stub



RDP-3SSQ for use with:

- CBR-V3C/W Tower
- LIT-V3C Tower.

Specs:

- 15" x 18 1/8" Overall
- 2" Tower Hole on pan
- 13 3/8" x 10 1/2" Drain Pan
- 1/2" Dia Copper Drain Stub

Mount and connecting the CBR or LIT towers

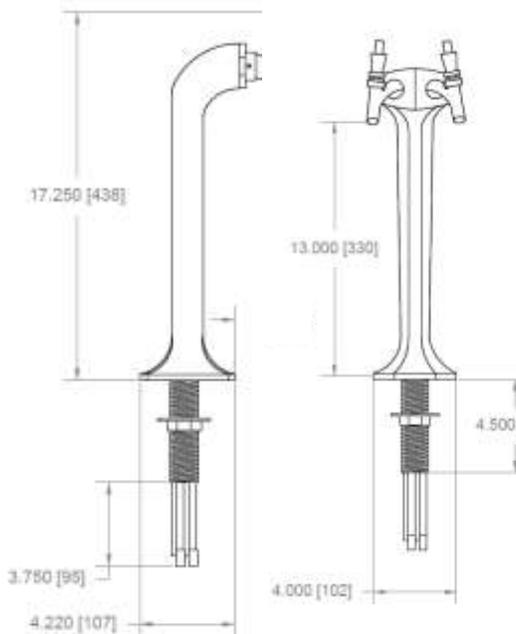
Step #1

Locate the Box containing the Tower for the system. A Draft tower such as the CBR-V2C, CBR-V3C or LIT-V2C are packaged with the Faucet bodies and handles shipped loose, a Faucet wrench, a set of SI030812S Super Seal fittings for the 1/4" Stainless Steel tubes on the tower, PP221212W Plug In Elbow fittings and Instructions.



Step #2

Insert tower into the hole in the countertop for it, thread on and tightened the set nut to secure tower. Locate grey SI030812S Super Seal Union Elbow Fittings supplied with the tower (one per tube). Loosen the Collet Nut on the fitting to the last thread then push the fitting onto the 1/4" stainless steel tube as shown on John Guest instruction page. Tighten the Collet Nut all the way down to lock fitting onto SS tube (failure to tighten the collet nut can result in a leak or the fitting slipping off). You will use the White Plug-In Elbow fittings to connect the Product line from the trunkline to the tower. It is easiest to attach these fittings to the product tubes of the trunkline first (using the red locking clips), then connect them to the Super Seal fittings on the tower tubes (see "CR-4L38 Trunkline Tower End Connections" page).



SI030812S Super Seal Elbow, loosen collet nut, push into SS tube and tighten collet nut.





CR-4L38 Trunkline Tower End Connections

Step #1

Locate the CR-4L38 Trunkline. 5' will be included with the UCM install kit, unless a longer length was ordered. If a longer length is being used pull the line from the Chiller to the tower, being careful not rip the pvc wrap and not to make any bends that kink the tubes. Leave enough length at both ends so connections can be made and the chiller can move for service. If installing 3 Valve tower, the 3rd water line, ambient water, should be tee'd off the water filter outlet and fed over to the tower.

Trunkline: 3/4" Foam insulation, with a PVC exterior wrap.

Four 3/8" plastic barrier tubes, wrapped together

Two Product tubes: Blue Striped & Natural Color

Two ReCirc tubes: Red Striped

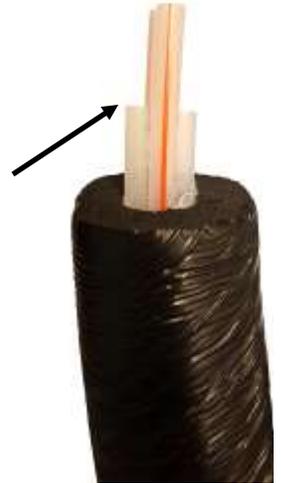


Step # 2, Tower End

Cut back the insulation (or tubes) so 2.5"-3" of Tubing is exposed.

Cut the two Product tubes (Blue Striped and Natural Color ones) back 1.5", so the Red Striped tubes extend past them at least 1.5".

Cut the Tubes square and remove burrs and sharp edges. Make sure the Red Striped tubes are cut to the same height.



Step #3

Find the two White PP221212W Plug In Elbow Fittings that come with the CBR Tower and connect them to the Product Tubes.

Find the Grey PIUB12S U-Bend fitting in the UCM install kit and connect it to the two re-circ tubes.

Use the Red locking clips.



Step #4

Once assembled, connected the stem end of the Plug In Elbow fittings to the Super Seal fittings on the tower. Connect the Blue striped tube to left faucet tube for sparkling water. Natural to Still Chilled water. If using a 3 Valve tower, run a separate hose from the filter to the 3rd tube for ambient water. After testing the system for leaks wrap all exposed hoses and fittings with the Insulated tap found in the UCM install kit.



Mounting Faucets & Handles to Tower



Locate the Faucet Bodies, Handles and Faucet Wrench.

The faucet bodies attach to the shanks, that are pre-attached to the tower and leak tested.

When attaching the faucet body to the shank, be sure the faucet is properly aligned before tightening it down. Adjusting the faucet angle when attached to the shank can result in loosening the shank to tower connection which can cause a leak.

Using the Faucet Wrench on the Shank Nut:

- Counter-clockwise tightens the shank nut to the faucet body.
- Clockwise loosens it for removal.

Push Faucet onto the Shank



Angle the faucet body vertically straight



Set the faucet position, push back to lock in



Pull shank nut to faucet and hand tighten



Tighten shank nut with Faucet Wrench




Once the Faucet Bodies are attached to the Tower, thread the Handles on to the them. Thread down till the position the handle with curve is facing you, if loose, tighten the black set nut up to the handle base to lock the handle in position. Apply the round Sparkling and Still Water image stickers to the appropriate handles at the top of them.

Installing the Water filter system, Water Regulator and Angle Stop Adaptor.



Locate the 2 PSEI012026 1/2" to 3/4" NPT fittings and PP062012W 5/8 Stem to 3/8 tube adaptor fittings from the UCM Install Kit. These are your inlet and outlet fittings for the Twin Water filter system. Wrap some Teflon tape around the threads of the 3/4" NPT fitting, attach them to the two ends of the filter manifold. Push the smaller adaptor fittings in to the larger fittings and twist lock the larger fittings collet.



Mount the Filter manifold on the wall with at least 3" of clearance at the bottom of the filters.

Locate the 183-150-NF 50 PSI Water Reducer and two PI451214FS fittings from the UCM install kit. Attach the Fittings to inlet and outlet of the Reg. Install Reg with Arrows pointing to the UCM unit

PI451214FS



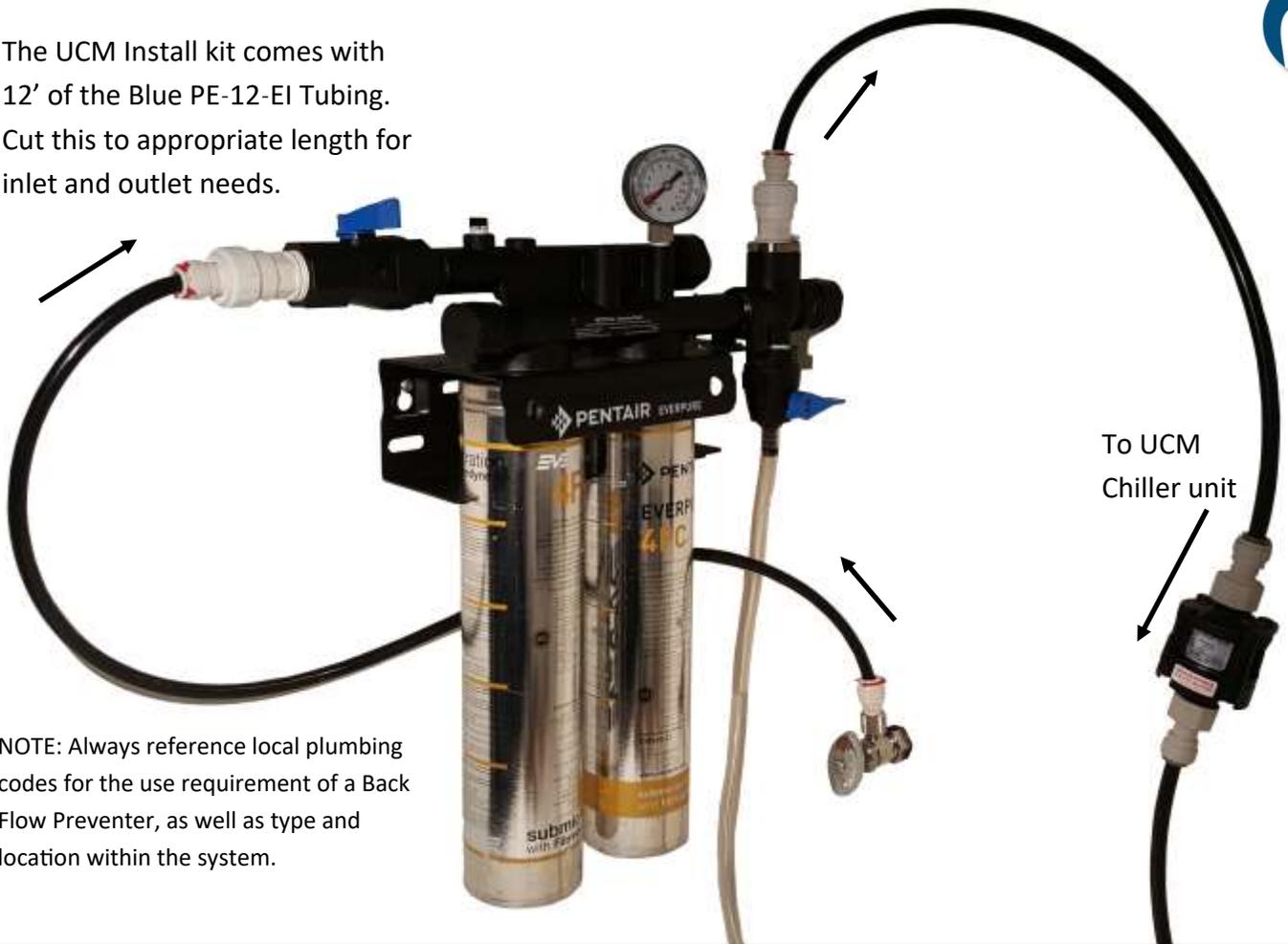
183-150-NF



Locate the PSEI6012U9 Angle stop adaptor in the UCM Install Kit. Locate the angles stop water source feeding the system, remove the compression nut and ferule ring from it and replace with the PSEI6012U9 fitting.



The UCM Install kit comes with 12' of the Blue PE-12-EI Tubing. Cut this to appropriate length for inlet and outlet needs.



NOTE: Always reference local plumbing codes for the use requirement of a Back Flow Preventer, as well as type and location within the system.



Placing the UCM Remote Chiller



CR-TFB1



CR-WMB2

The CR-UCM Chillers generate a lot of heat when running, take all necessary measure to place it in an environment/space that allows for it to vent hot air out & away and pull in fresh cool air. Failure to do so will void warranty and cause operational issues.

Place the CR-UCM Chiller so the front air filter is facing out or has the clearest path to breath air in, while being accessible for removal and cleaning. If using the CR-ABUCM Air Baffle assembly slide it over the air filter and position the unit so the baffle presses up to vent holes/louvers of the cabinet.

The unit will vent hot air out the sides (and back on the UCM2), leave at least one side free of obstructions and positioned so this hot air can vent out of the space.

The top of the unit will need about 8" of clearance so the lid can be removed and the water bath filled with water and inspected. If going in a cabinet, avoid placing the unit directly under the CRR draft tower since you may not get enough clearance with the tower stem and lines protruding down.

If wall mounting the unit, appropriately anchor the Wall Mount Bracket (CR-WMB1 or WMB2) to the wall/studs so it can support a minimum of 300 lbs. Remove the feet/legs from the chiller and place it on the Bracket, use the supplied 5/16-18 1" bolts to screw the unit to the bracket via the leg holes.

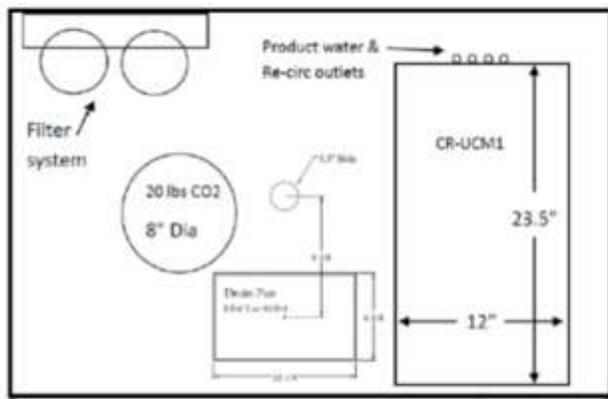
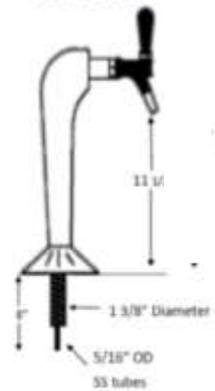
Top down and Front view.
Sample Install Layout in a
48"W x 28"D x 32"H Cabinet



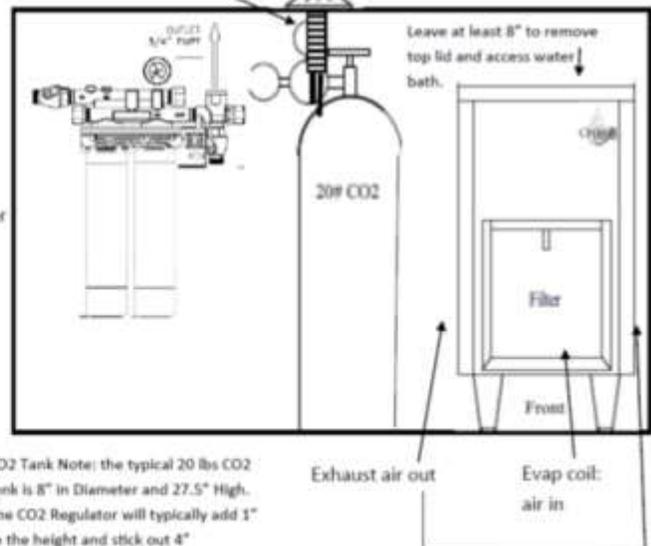
CR-UCM1 & CBR-V2 Sample Layout (not to scale)

CR-UCM1: 12" W x 23.5" D x 24.5" H (with legs)

CBR-V2 Detail



Threaded shaft and tubing must either clear top of unit or sit off set of unit location for clearance. Minimum 10"



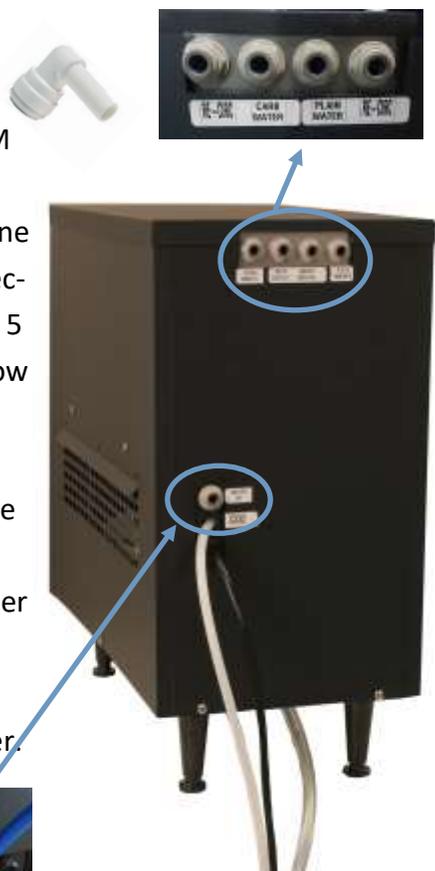
Notes: Provide ventilated cabinet doors and sides to allow for fresh air into the Evap Coil side and Exhaust air out of the other sides. Without proper ventilation the unit will not perform properly and you will short life the compressor.

CO2 Tank Note: the typical 20 lbs CO2 tank is 8" in Diameter and 27.5" High. The CO2 Regulator will typically add 1" to the height and stick out 4"

Connecting the UCM Chiller.

Step #1

Position the UCM unit so you can make the trunkline and water connections. Locate the 5 PP221212W Elbow fittings from the UCM install kit. You will use these on the trunkline hoses to the upper outlets and the water in on the back of the chiller.



1/4" Braided Hose: CO2 w/ Flare nut
Clear Hose: Overflow bath drain

Step #2

Connect 1 of the PP221212W Fittings and red locking clips to the Water Inlet hose from the water filter system. Then connect to the UCM Chiller Water In.



Step #3

Cut back 6"-8" of the insulation from the CR-4L38 trunkline to expose the 4 hoses.

Cut the two product hoses a little less than 1/4" shorter than the Re-circ hoses.

Connect 4 of the PP221212W fittings to the hoses, use the red locking clips on the hose to fitting connection



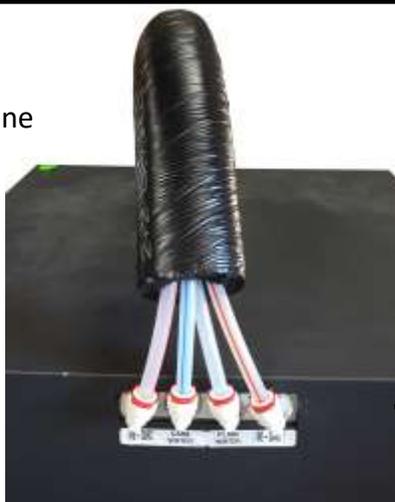
Step #4

Connect the Hoses to the outlets:

1. Blue Striped Hose the to the "CARB WATER"
2. Natural Hose to the "PLAIN WATER"
3. The Two Red Striped hoses to the "RE-CIRC"



CR-4L38 Trunkline
Connected to a
UCM Chiller



If you are comfortable your connections are leak free, wrap the exposed hoses and fittings with the insulated tape and push the unit in place.





Connecting CO2 and Filling Water Bath



The Hose for the CO2 connection is 6' long, 1/4" Braided Hose with a 1/4" flare nut on the end extending out from the chiller near the water inlet.

Route this hose to the location of the CO2 tank. If additional hose is required, the UCM install kit comes with an additional 8' of 1/4" Braided hose*, a 1/4" Barb Union and 10.5 Oetiker Clamps to extend it.

*Warning: do not use this extra 1/4" Braided hose with John Guest fittings for the water inlet or water filter connection, it is not the correct OD or tube type work with these fittings and seal.

If using dedicate CO2 tank, Locate the CR-3741 Primary High Pressure CO2 Regulator. Unbox it and be careful to locate the 1/4" Nylon Washer taped to the packaging. Insert this washer into the flare nut on the end of the hose and thread it on to the 1/4" mpt flare on the CO2 reg. Locate paper washer with CO2 Tank and thread CO2 Reg to Tank, making sure its tight.

For Bulk CO2 tank use or shared CO2 systems, use the CR-T5251SN Secondary High Pressure CO2 Regulator to regulate .



Flare Nut with Nylon Washer in it



CR-3741



CR-T5251SN

Route the Clear Over Flow Water Bath Drain hose from the back of the unit to a floor sink.

The Water Bath must be filled for the system to work and build an Ice Bank. This water is not used for consumption, it is only used to form an Ice Bank around the refrigeration coils and chill the water flowing through the water cooling coils. Water will drain from the over flow hose upon initial start up as the ice bank forms. After that only periodic condensation may drip from the over flow hose.

Remove the Lid of the Chiller to expose the Water Bath area. Fill this area with water (preferably non-filtered) up to the White Stand Pipe, covering the carb tank, water coils and refrigeration coils.

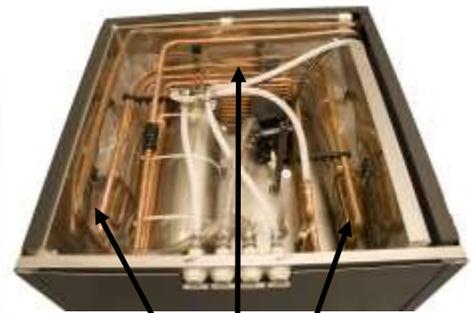
CR-UCM1

Fill with 4 Gallons of water
Or up to the White Stand Pipe



CR-UCM2

Fill with 6 Gallons of water
Or up to the White Stand Pipe



UCM2 Ice Formation
around Ref Coils



CO2 information

CO2 Tanks can be sourced and refilled from local Beverage CO2 Companies (both Bulk and or Tank) and even Welding Supply companies.



On Average 1 Pound of CO2 will be used for every 5 gallons of sparkling water. So a 20 lb Tank should carbonate 100 Gallons (or 12,800 oz's, or 378 Liters of sparkling water)

WARNING: CO2 Can be Dangerous. CO2 Cylinders contain high pressure gas which can be hazardous if not handled properly. Follow all CO2 regulator instructions (found with CO2 regulator). And other handling instructions from the CO2 tank supplier.

CR-3741 High Pressure CO2 Regulator 0-160 PSI:

Attaches to 5-100 lb CO2 tanks. Set at 75 PSI as a starting point.

(Note: Low Pressure Beer Regulators 0-50 psi, will not work properly with Crysalli)

Fill Level Gauge: Volume of CO2 in Tank. Tank is empty when needle is in the red zone or zero

Output Pressure Gauge: Shows CO2 output pressure setting. Set to 75 psi.

1/4" Male Flare connection to Crysalli Chiller. Use Nylon washer supplied with regulator in fitting.

Threaded Connection to CO2 Tank

Pressure Adjustment screw and locking nut.





Sparkling Water Flow Adjustment Lock Out.

Upon start up of the system, the CR-SSQ1231 Faucets used on the CBR-V1, CBR-V2, CBR-V3, LIT-V2C and LIT-V3C dispensing towers will need the flow rate adjusted and set.



These faucets are designed with a flow control adjustment knob (decrease or increase the flow of the water) on the right side of the faucet body. It will be desirable to lock in a lower flow of the sparkling water rather than allowing it to be adjustable. This can prevent splashing in self service applications and will maximize carbonation profile of the water (the slower the pour the better the bubble profile). The faucets can also “wander” or increase to full flow on its own with use. To lock in a set flow rate, these faucets are supplied with a Stainless Steel lock washer on the adjustment knob, once tightened down it will prevent the knob from being turned or moving on its own.



To set the flow rate & lock the flow adjustment knob (make sure system is on and cold, and CO2 open):

- Locate the black plastic three pronged adjustment knob on the right side of the faucet, and check that you can freely turn it (you may need to loosen the Phillips head set screw a little so the knob can turn).
- With a cup under the faucet pull open the handle so sparkling water is flowing. While water is flowing turn the knob to adjust the flow rate (clockwise or away from you to decrease the flow).
- Once a favorable flow rate is determined, tighten the set screw (while not turning the knob) so teeth of washer bite in to the plastic, this will lock the knob so it can no longer be turned or move out of adjustment on its own.
- Check the flow rate again by filling a cup and confirm if the knob is properly tightened down so it can't be turned by hand.



Model Number: _____ Serial Number: _____

Install Date: _____ Installer/Service: _____



CR-UCM & CBR Tower Cleaning and Maintenance Recommendations.

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.

The set nut holding the handle down will loosen with use.

Check flow from faucet, loosen, readjust and tighten flow control knob as needed.

Check that flow, temperature and carbonation 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.

Check CO2 level at CO2 tank.

Monthly:

Clean the air filter. Remove it to brush down and wash off dust and dirt, then reattach.

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.

Semiannually:

Change the water filters. Use only 4FC replacement filter cartridges.

Drain water bath, clean and refill with new water.

Remove and disassemble faucets for cleaning and inspection.

Annually:

Inspect internal water bath components such as Agitator/re-circ pump and blade, check valves for CO2 and Water, and all hose connections.

Flush and rinse system with food safe sanitizer (this work should be performed by a certified service tech).



Limited Express Warranty

Crysalli Artisan Water Systems (hereinafter 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 (hereinafter referred to a 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 unauthorized 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 CRYSTALLI, 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: _____ Serial Number: _____

Install Date: _____ Install Company: _____

Crysalli Artisan Water
1739 Sabre St, Hayward, CA 94545
Phone: 510-732-0100 • Fax: 510-732-0155
Web site: www.crysalli.com

Or register online:

