



Technical Publications

ProFusion Owner's Manual

For Models:

iN2-2P

iN2-TK2P

iN2-DD2P



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Thank you for purchasing the Crysalli ProFusion beverage system. This device will give you the ability to dispense a nitro beverage and a flat, non-nitro beverage, from one keg source and one gas source. The system is intended for use with food grade nitrogen. However, the system can also be fed with CO₂ to provide a lightly carbonated beverage experience rather than a “nitro drink”.

The system features a patented injector that will infuse nitrogen into a beverage as it is being poured, resulting in a drink with a cascading head and smooth palate. The system includes a high visibility easy access particulate filter screen to prevent coffee or tea grains from passing through the system and plugging faucet’s defuser/restrictor plates or collecting in a drink. It is also equipped with high precision, secondary, regulators, with locking bonnets, to control the keg and injector pressures interdependently. The left side regulator controls dispensing rate of the beverage out of the keg and the right side regulator controls the injection pressure of the gas into the beverage so you can fine tune the nitrogenation of the drink to your exact desire. The regulators are adjustable by simply pulling the front blue knob out, and locking the pressure setting by pushing the knob back in.

The five connections into the unit are all on the right side of the device, and feature quick connect push-in fittings. The system includes optional fittings and adapters to meet all hose type and sizes that may be used. The “TK” tapping kit and “DD” direct draw cooler configurations come with these connections and hoses already provided. The kits are built in two different keg connection options; “P” with ball lock gray gas and black liquid connectors for use with pre-mix kegs. Or “D” with a stainless steel D-style keg coupler for barrel style kegs.

The inlet connections into the system are at the top of the unit. A 1/4” inlet for the gas being fed from a tank out of a primary regulator into the system. A 3/8” inlet for the beverage from the keg “out” side. The two 3/8” connections marked “Still Beverage Out” and “N₂/ CO₂ Beverage Out” are the beverage outlets feeding into the draft tower and faucets. The bottom connection is the 1/4” gas outlet that feeds into the keg inlet connection for the gas that will push the beverage out of the keg.

The system is intended to be used with Crysalli Nitro/Stout style faucets (CR-G26SS) or Column Draft Tower (CLM-V2-N2) with the aerators in the nozzle of the faucets for both nitro and non-nitro beverage dispensing. The iN2-2P device should be mounted inside a back bar cooler or walk-in box as close as possible to the faucets. Temperature of the beverage in the keg and into the iN2-2P device needs to be 40°F or lower (the colder the better) to properly nitrogenate the beverage. A room temperature beverage or keg will not absorb the gas and result in “flat” nitro coffee.

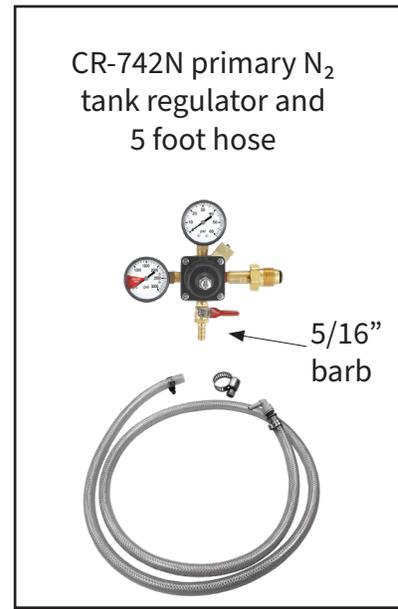
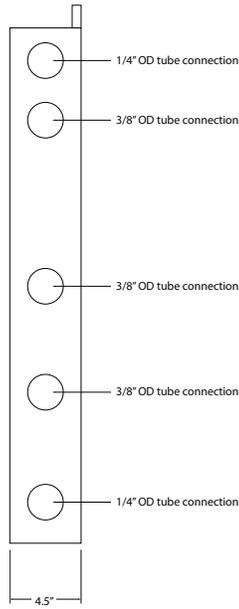
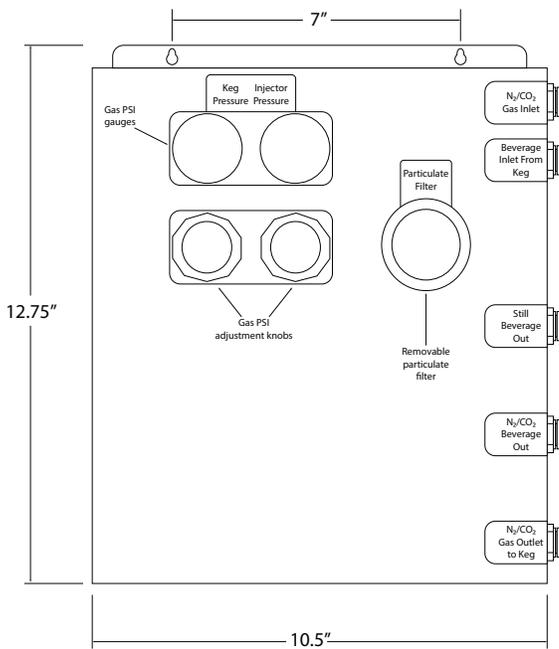
The ProFusion iN2-DD2P direct draw systems come with a 1 year parts & labor warranty on manufacture defects. (The iN2-2P injector and iN2-TK2P tapping kits come with 1 year parts warranty on manufacture defects). Warranty does not apply to installation errors, or cleaning and maintenance related issues.

Sincerely,

Mike Palm

Founder



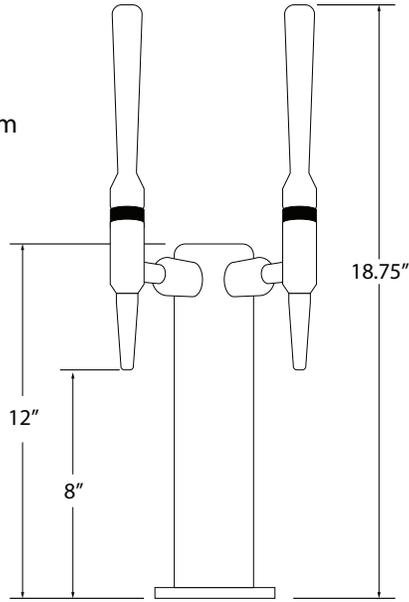


iN2-2P Install fitting kit		
	1/4 barbed to 3/8 tube stem. <u>Liquid</u> connections	3
	3/8 barbed to 3/8 tube stem. <u>Liquid</u> connections	3
	3/8 plug in swivel elbow. <u>Liquid</u> connections	3
	1/4 barbed to 1/4 tube stem. <u>Gas</u> connections	2
	5/16 barbed to 1/4 tube stem. <u>Liquid</u> connections	2
	1/4 plug in swivel elbow. <u>Gas</u> connections	2

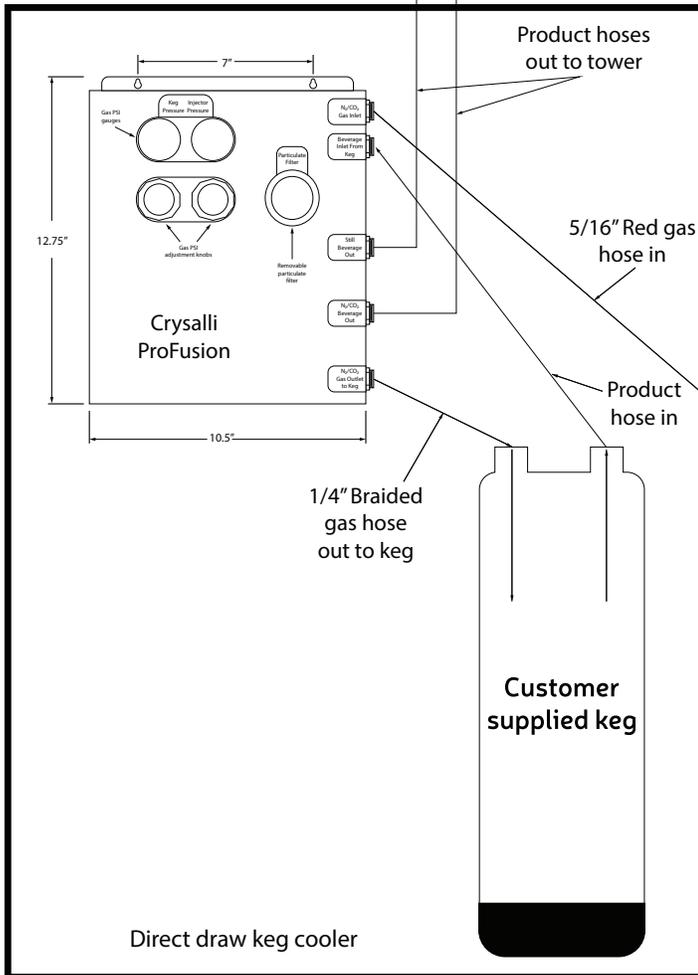


The iN2-DD2P system(s) come with factory configured with product and gas hoses

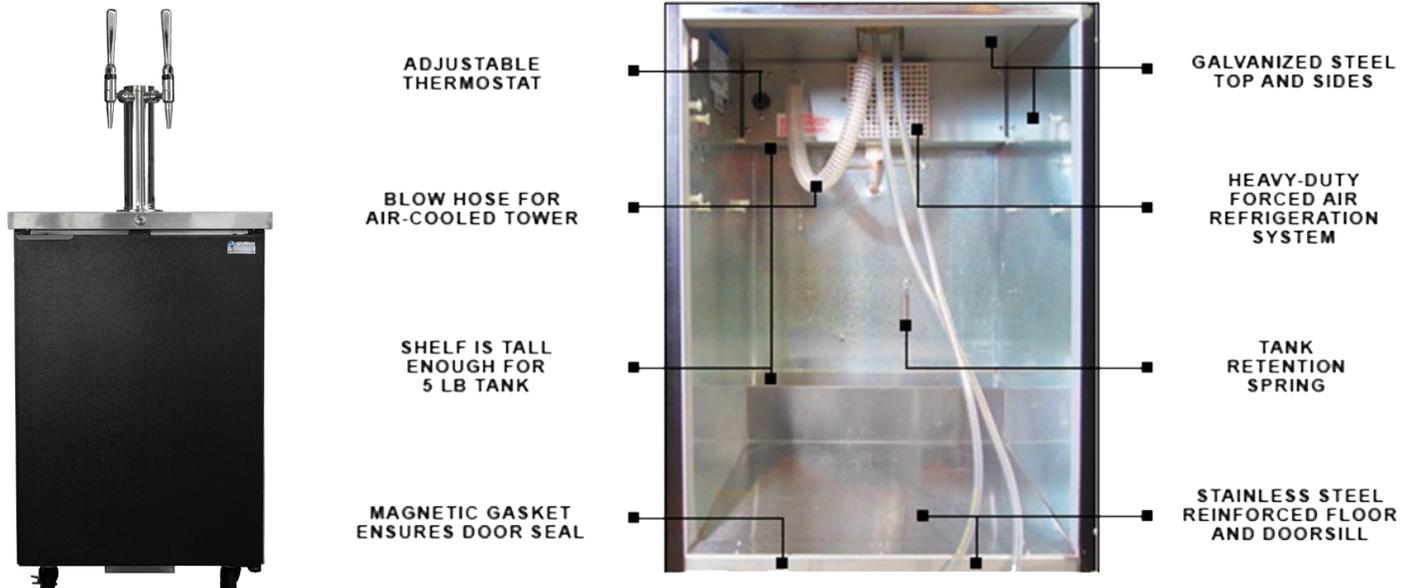
ProFusion system
install layout diagram



CLM-V2-N2 draft
tower with N2 faucets



iN2-DD2P System:



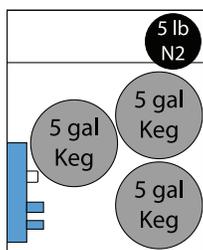
The 24" direct draw cooler is a commercial grade, heavy duty, mobile or stationary, refrigerated cabinet assembled with a two tap tower and iN2-2P Profusion unit mounted inside. The countertop is made from heavy-duty stainless steel including a built-in drip tray for easy cleaning.

Inside construction utilizes galvanized steel for walls and ceiling. The reinforced floors and door threshold are made from heavy-duty stainless steel to provide lasting service. The door is self-closing with a key lock. The magnetic gasket provides positive door sealing. The cabinet is foam insulated with moisture resistant polyurethane (CFC free) which binds the exterior walls with the interior walls to form solid construction and provide supreme insulation.

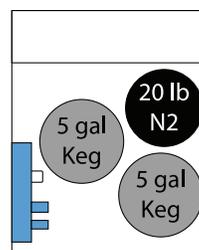
The heavy duty forced-air refrigeration system creates a steady flow of cold air through the cabinet and tower providing fast uniform recovery and cooling. The unit operates with R290 refrigerant, which is CFC-free and compliance to environmental concerns. A 6' cord and grounded plug, 115V NEMA 5-15, are provided for electrical connection. UL and NSF Certified.

Allow for one to two hours for full pull down of temperature once turned on.

Keg storage capacities of the iN2-DD2P:



20 lb N₂ With a 5 pound N₂ gas cylinder on the back shelf in the cooler or an externally placed 20 pound cylinder:
- Three (3) five gallon pre-mix kegs or 1/6 barrel kegs



With a 20 pound N₂ gas cylinder in cooler:
- Two (2) five gallon pre-mix kegs or 1/6 barrel kegs

Installing a ProFusion iN2-TK2P Tapping Kit

1) iN2 device: Locate a mounting location for the iN2-2P device inside the back bar cooler or walk-in as close to the taps as possible. Be careful to avoid any refrigeration lines inside the walls of the cooler when screwing the unit in. There are mounting key holes on the top and bottom of the iN2-2P to secure it to the refrigerated cooler wall.

2) Draft tower: Mount the CLM-V2-N2 tower and route the product lines to the iN2 device. Cut the lines to length if needed. Attach the PP221212W 3/8" white swivel elbow fittings to the product lines and add the red locking clips.

3) Connecting the draft tower to iN2-2P: Connect the right side faucet by pushing the white swivel fitting end into the "Still Beverage Out" connection. Then connect the white swivel fitting from the left faucet into the "N₂/CO₂ Beverage Out" connection for nitro brew.

4) Gas in: Find a suitable location for the tank of gas within 5 feet of the iN2 device. Locate the 5/16" hose with the 1/4" stem fitting on one end and route it from the iN2 device to the tank location. Connect this pre-made end into the iN2 device at the "N₂/CO₂ Gas Inlet". Locate the CR-742N primary regulator and the #15.7 oetiker clamp. At the tank side, slide an oetiker clamp over the hose and push the hose onto the barb on the regulator and crimp the oetiker.

5) Connecting the keg lines to the iN2-2P: Based on the type of keg you are using you will have different keg connector hose kits. The "P" kit is for use with a pre-mix keg, includes two five foot hose assemblies; a 3/8" OD clear product hose with the black ball lock for the beverage and a 1/4" braided gas hose with a gray ball lock for the gas. The "D" kit is for a traditional style keg, locate the 3 foot double hose assembly with the D style keg coupler attached to it. For either kit, the clear product hose with 3/8" OD white swivel end fitting connects to the "Beverage Inlet from Keg" connection on the device. The gas line with the 1/4" grey swivel fitting connects to the "N₂/CO₂ Gas Outlet to Keg" connection on the device.

6) Connecting a pre-mix keg: Push the black ball lock over the male outlet fitting on the keg and the gray fitting over to the male inlet fitting. To disconnect, lift the sleeve at bottom of the connector as you pull up.

7) Connecting a D-style keg: With the handle of the coupler in the up position, place the coupler into the bung of the keg and twist the coupler to the right until it stops. Pull the handle slightly back and push down to engage coupler into the keg. To disconnect, pull handle back a little and lift up, twist coupler to the left until it stops and releases up and out.



Pre-mix



D-style

Pre-mix



D-style



Starting-up a ProFusion system

- 1) Plug in and turn on cooler
- 2) Once the cooler has gotten cold place kegs in it. Let kegs pull down to temperature in the cooler (room temperature product will not nitrogenate).
- 3) Make your keg connections. For pre-mix kegs, make the inlet gas connection first, then the liquid out connection. Any pre-mix kegs with house made coffee should be filled with N2 gas while in storage in the cooler to help preserve it.
- 4) Turn on the gas at the tank by twisting the valve open. Set the regulator pressure above 20 psi, don't to exceed 45 psi.
- 5) On the ProFusion unit locate the blue secondary regulators. Start with the "Keg Pressure" gauge, pull the blue knob out until it clicks to be able to adjust pressure. Adjust the keg pressure to 12-15 psi and check that the "flat" beverage is pouring (may take a couple drinks to purge the air from the system), then push the blue knob back in to lock the setting. Next set the "Injector Pressure" by pulling the blue knob associated with its gauge and set it to 4 psi. With a clear cup pour off a couple drinks from the N2 side faucet and gradually increase the pressure and test pour till you reach the desired presentation of the drink. Do not exceed the gas pressure setting of the "Keg Pressure". Push the blue knob in to set you injector pressure.
- 6) Inspect faucets to make sure they are tight and leak free. Check that the diffuser/restrictor plate is in the nozzle of both faucets.
- 7) Pouring drinks: Pull the handle all the way open. Holding the handle partially open will restrict the flow and injection of the gas into the beverage.
- 8) A properly pouring nitro coffee or other beverage should have cascading effect through the drink as it is poured and eventually settle with a thick head.

Note that not all beverages will nitrogenate the same. Some "light" teas like a black or green tea with concentrates of 11:1 or greater may not nitrogenate. The "thicker" the beverage, the better it will absorb nitrogen and cascade.

*** The system is designed to pour one beverage at a time. Pouring a nitro and still beverage simultaneously will result in a poor quality nitro beverage.

Gauges. Left side is keg pressure, right side is injector pressure



Pull handles out to engage regulator to adjust pressure. Press back in to lock in pressure



Nitro coffee cascade



Nitrogen Regulator & Tank Assembly

DANGER

Tank under high pressure. Do not drop or allow tank to fall over. Tank must be chained and secured to prevent movement as per Occupational Safety and Health Administration (OSHA) requirements. Do not attempt to connect a tank unless properly trained.

Nitrogen cylinders contain high-pressure gas which can be hazardous if not handled properly. Make sure to read and understand the following procedures for nitrogen cylinders before installation

IMPORTANT *Only use food grade nitrogen

1. **ALWAYS** connect the nitrogen cylinder to a primary regulator and **NEVER** directly to the product cylinder. Failure to do so can result in an explosion, injury or even death when the cylinder valve is opened.
2. **ALWAYS** follow correct procedures when cylinders are changed
3. **ALWAYS** secure the cylinder in a upright position with a chain
4. **NEVER** drop or throw a nitrogen cylinder
5. **ALWAYS** keep a nitrogen cylinder away from heat. Store extra cylinder(s) in a cool place securely fasten with a chain in an upright position.
6. **ALWAYS** check the Department of Transportation (DOT) test date on the cylinder neck before installation. Ask your gas supplier for (DOT) test requirements.
7. **NEVER** connect a product container unless there is a secondary ON/OFF valve in the system or on the nitrogen regulator.

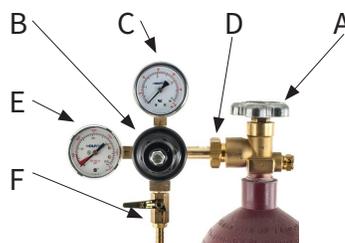
Nitrogen Installation/Replacement

NOTE: During initial installation of the unit a bracket for the nitrogen cylinder must be installed to a solid wall nearby and a chain used to secure the cylinder to the bracket.

WARNING - Verify gauge orientation before setting pressures

1. Make sure cylinder “A” is closed by rotating the knob clockwise completely.
2. Rotate the ball valve “F” 90° so the handle is in a horizontal position. The gas is now in the off position.
3. Remove the regulator from the empty cylinder by rotating the nut “D” using a wrench.
4. Remove the dust cap from the new nitrogen cylinder at “D” open and close valve “A” of quickly to blow out any dust from the outlet.
5. With valve “A” in the closed position, re-attach the regulator to the new cylinder and securely tighten the nut “D” using the supplied wrench.
6. Open valve “A” all the way by rotating the knob counter clockwise completely. It is important that it is fully open because the cylinder valve seals in two places.
7. Set inlet pressure to above 25 PSI by rotating the regulator pressure adjustment screw “B” clockwise to increase and counter clockwise to decrease.
8. Rotated the ball valve handle “F” 90° to the vertical position. Nitrogen is now feeding the system.

NOTE: Drinks will not pour if valve “A” or valve “F” are in the closed position.





Follow this code to get a detailed list of cleaning instructions for the ProFusion!



Replacement Parts for Inline Particulate Filter



CR-19768: Replacement gasket, ILS gasket LP black EPDM, NSF 61

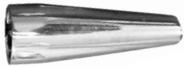


CR-SE-S-50CSS: Replacement filter screen, 50 micron



CR-SB-S-CN: Replacement bowl, clear, low profile.

Replacement Parts for Nitro Faucet CR-G26SS



CR-G26-18:-NZ SS nozzle



CR-G26-15-OR: Nozzle o-ring



CR-G26-16-DS: Stainless steel disc



CR-G26-17-DV: Diverter cone



CR-01712: Faucet cleaning brush





Product Registration

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