



IDC PRO 255

Installation Manual



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The products, technical information, and instructions contained in this manual are subject to change without notice. These instructions are not intended to cover all details or variations of the equipment, nor to provide for every possible contingency in the installation, operation or maintenance of this equipment. This manual assumes that the person(s) working on the equipment have been trained and are skilled in working with electrical, plumbing, pneumatic, and mechanical equipment. It is assumed that appropriate safety precautions are taken and that all local safety and construction requirements are being met, in addition to the information contained in this manual.

This Product is warranted only as provided in Cornelius' Commercial Warranty applicable to this Product and is subject to all of the restrictions and limitations contained in the Commercial Warranty.

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Contact Information:

To inquire about current revisions of this and other documentation or for assistance with any Cornelius product contact:

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This document contains the original instructions for the unit described.

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Correct Disposal of this Product



RECYCLE

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

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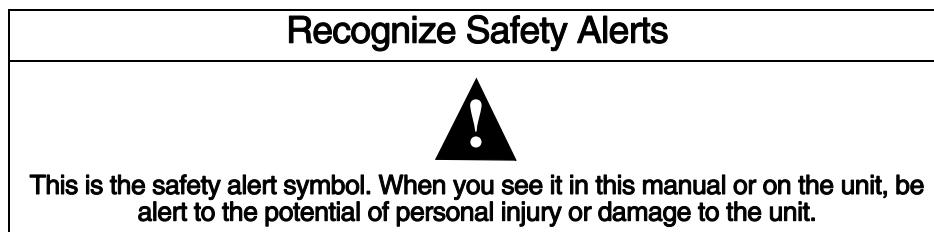
SAFETY INSTRUCTIONS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

Safety Overview

- Read and follow **ALL SAFETY INSTRUCTIONS** in this manual and any warning/caution labels on the unit (decals, labels or laminated cards).
- Read and understand ALL applicable OSHA (Occupational Safety and Health Administration) safety regulations and/or national and local codes before operating this unit.

Recognition



Different Types of Alerts



DANGER:

Indicates an immediate hazardous situation which, if not avoided, **WILL** result in serious injury, death or equipment damage.



WARNING:

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in serious injury, death, or equipment damage.



CAUTION:

Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury or equipment damage.

SAFETY TIPS

- Carefully read and follow all safety messages in this manual and safety signs on the unit.
- Keep safety signs in good condition and replace missing or damaged items.
- Learn how to operate the unit and how to use the controls properly.
- **Do not** let anyone operate the unit without proper training. This appliance is **not** intended for use by very young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
- Keep your unit in proper working condition and do not allow unauthorized modifications to the unit.

NOTE: The dispenser is not designed for a wash-down environment and MUST NOT be placed in an area where a water jet could be used.

QUALIFIED SERVICE PERSONNEL

WARNING:

Only trained and certified electrical, plumbing and refrigeration technicians should service this unit. **ALL WIRING AND PLUMBING MUST CONFORM TO NATIONAL AND LOCAL CODES. FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY, DEATH OR EQUIPMENT DAMAGE.**

IF THE SUPPLY CORD IS DAMAGED, IT MUST BE REPLACED BY THE MANUFACTURER, ITS SERVICE AGENT OR SIMILARLY QUALIFIED PERSONS IN ORDER TO AVOID A HAZARD.

SAFETY PRECAUTIONS

This unit has been specifically designed to provide protection against personal injury. To ensure continued protection, observe the following:

WARNING:

Disconnect power to the unit before servicing following all lock out/tag out procedures established by the user. Verify all of the power is off to the unit before any work is performed.

Failure to disconnect the power could result in serious injury, death or equipment damage.

CAUTION:

Always be sure to keep area around the unit clean and free of clutter. Failure to keep this area clean may result in injury or equipment damage.

SHIPPING AND STORAGE

CAUTION:

Before shipping, storing, or relocating the unit, the unit must be sanitized and all sanitizing solution must be drained from the system. A freezing ambient environment will cause residual sanitizing solution or water remaining inside the unit to freeze resulting in damage to internal components.

CO₂ (CARBON DIOXIDE) WARNING

DANGER:

CO₂ displaces oxygen. Strict attention **MUST** be observed in the prevention of CO₂ gas leaks in the entire CO₂ and soft drink system. If a CO₂ gas leak is suspected, particularly in a small area, **IMMEDIATELY** ventilate the contaminated area before attempting to repair the leak. Personnel exposed to high concentrations of CO₂ gas experience tremors which are followed rapidly by loss of consciousness and **DEATH**.

MOUNTING IN OR ON A COUNTER

WARNING:

When installing the unit in or on a counter top, the counter must be able to support a weight in excess of **1,000 lbs.** (454 kg.) to insure adequate support for the unit.

Failure to comply could result in serious injury, death or damage to the equipment.

NOTE: Many units incorporate the use of additional equipment such as ice makers. When any addition equipment is used you must check with the equipment manufacturer to determine the additional weight the counter will need to support to ensure a safe installation.

NOISE LEVEL

This unit emits acoustical noise with an A-weighted sound pressure level no greater than 75dB, as measured in accordance with ED 60335-2-75.

SYSTEM OVERVIEW

The Refresh IDC PRO 255 unit solves your ice and beverage service needs in a sanitary, space saving, economical way. It is designed to be manually filled with ice from any remote ice making source. The unit distributes cubes (up to 1-1/4 inch in size), Cubelet and compressed (not flaked) ice. Also, the unit includes beverage valves and cold plate.

⚠ CAUTION:

The unit cannot be used with crushed or flaked ice. Use of bagged ice which has frozen into large chunks can void warranty. The unit agitator is not designed to be an ice crusher. Use of large chunks of ice which "jam up" inside the hopper will cause failure of the agitator motor and damage to the hopper. If bagged ice is used, it must be carefully and completely broken into small, cube-sized pieces and left to "temper" or warm up for a minimum of 20 minutes in room temperature before loading into the unit hopper.

FEATURES

- Brand density - 10 brands on each side, 7 chilled, 3 ambient and up to 8 flavor shots (4 per side) for over 320 drink combinations
- Large HD promotional display.
- 255 lb. capacity ice cube hopper.
- Dispenses cubed or chewable soft ice.
- UI Touch screen.

SPECIFICATIONS

Table 1.

Model	IDC Pro 255
Maximum Number of Valves available	32 Total; 20 brands, 8 flavors & 4 water
Built-in Cold Plate	Yes
Voltage	120 V 60 Hz, single phase; 8.5A. of total unit draw
	220 -240V 50 - 60Hz, single phase; 5.5A of total unit draw
Height	39-3/16 in. (.955 m) to top of Adapter lid
Depth	32-3/8 in. (0.823 m)
Width	30 in. (0.762 m)
Screen Dimensions	32 in. Diagonally
CO ₂ Operating Pressure of brand	65 psig (5.17 bar) minimum
CO ₂ Operating Pressure of flavor	30-45 psig (2.07-3.10 bar)
Water Pressure	60 psig (3.45-4.48 bar) minimum
Water Volume	Minimum flow rate, 125 gal/hr. (0.473 cubic meters/hr.)
Shipping Weight	545 lb. (247.2 kg)
Counter Weight	440 lb. (199.6 kg)
Ice Storage Weight	255 lbs. (115.7 kg)
Cup Clearance	9-3/4 in. (24.77 cm)
Ambient Operating Temperature	65 to 95° F (18.3 to 35° C)

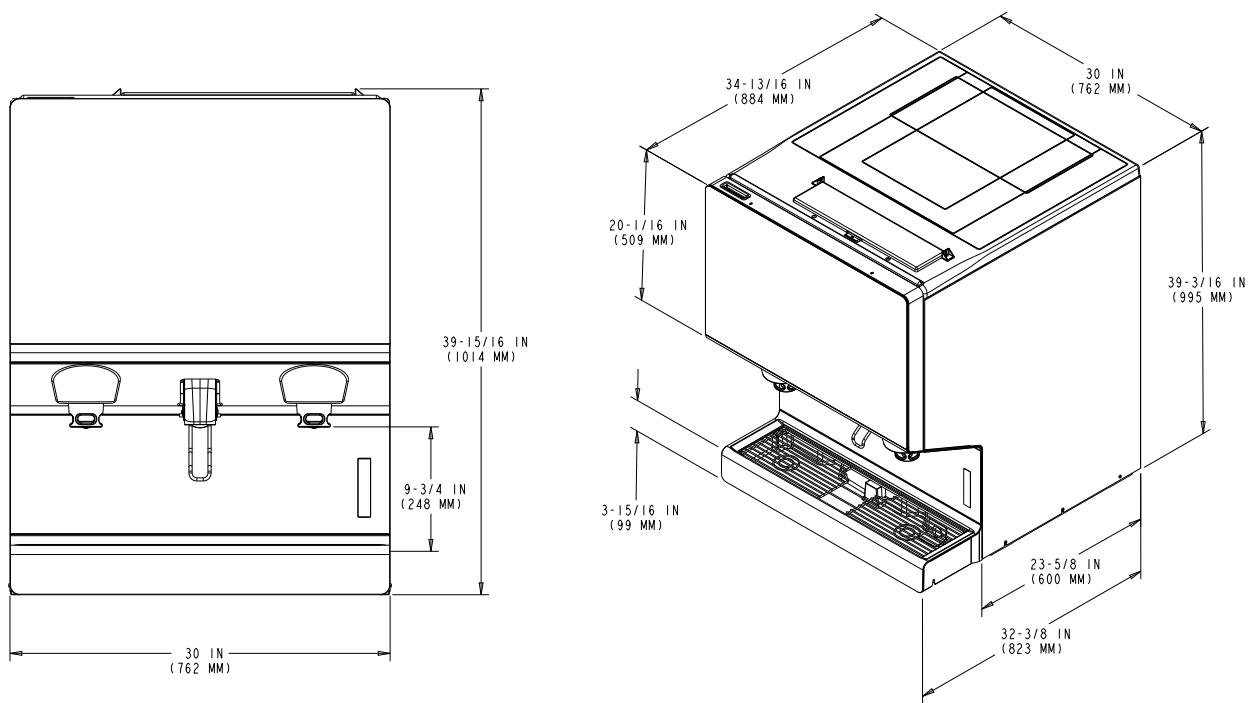


Figure 1.

INSTALLATION

⚠ WARNING:

Only trained and certified electrical, plumbing and refrigeration technicians should service this unit.

ALL WIRING AND PLUMBING MUST CONFORM TO NATIONAL AND LOCAL CODES. FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY, DEATH OR EQUIPMENT DAMAGE.

⚠ WARNING:

This equipment must be installed to comply with the International Plumbing Code of the International Code Council and the Food Code Manual 01 the Food and Drug Administration (FDA). For models installed outside the U.S.A., you must comply with the applicable Plumbing/Sanitation Code for your area.

Failure to comply could result in serious injury, death or damage to the equipment.

UNIT LOCATION

The unit must be sealed to the counter or placed on the included 4" legs (drip tray style unit only). The template drawing indicates where openings can be cut in the counter. Locate the desired position for the unit, then mark the outline dimensions on the counter using the template drawing, shown in Figure 2. Cut the necessary openings in the counter.

DIRECT COUNTER INSTALLATION

To install the unit on a counter, perform the procedure in Table 2.

Table 2.

Step	Action
1	Locate the unit indoors on a level counter top.
2	When the unit is mounted directly on the counter top, the beverage tubes, drain tube and power cord are routed through the large opening in the bottom of the unit. See the mounting template shown in Figure 2 for locating the required clearance openings in the counter. NOTE: Recommended counter opening size 9" X 16" for utilities and beverage tubing. Opening can be located anywhere within the shaded area.
3	Apply a continuous bead of NSF International (NSF) silastic sealant (Dow 732 or equal) approximately 1/4-inch inside of the unit outline dimensions and around all openings. Then, position the unit on the counter within the outline dimensions. All excess sealant must be wiped away immediately.
4	Install the drain tube on to the drip tray, as shown in Figure 3.
5	Route the drain tube to an open drain with the end of the tube above the "flood" level of the drain. Use the tubing, fittings, clamps, and insulation provided with the unit to assemble the drain. The completed drain line must pitch continuously downward and contain no "traps" or improper drainage results.
6	Connect the beverage system product tubes as indicated in the Plumbing Diagram, Figure 70. NOTE: See the Plumbing Diagram (Figure 70) or in the product, behind the screen for the location of syrup and water connections.
7	Clean the hopper interior (see "Cleaning Interior Surfaces" section on page 25).
8	Connect the unit power cord to a 120 volt, 60 cycle, 3-wire grounded receptacle. For 220-240 Volt units, a 3-wire power cord is provided. An adapter plug for the particular country needs to be provided by the installer.

NOTE: Cornelius Inc. recommends that a water shutoff valve and water filter be installed in the plain water inlet supply line. A Cornelius Water Filter (P/N 313860000) and Quick Disconnect Set (P/N 313867000) are recommended.

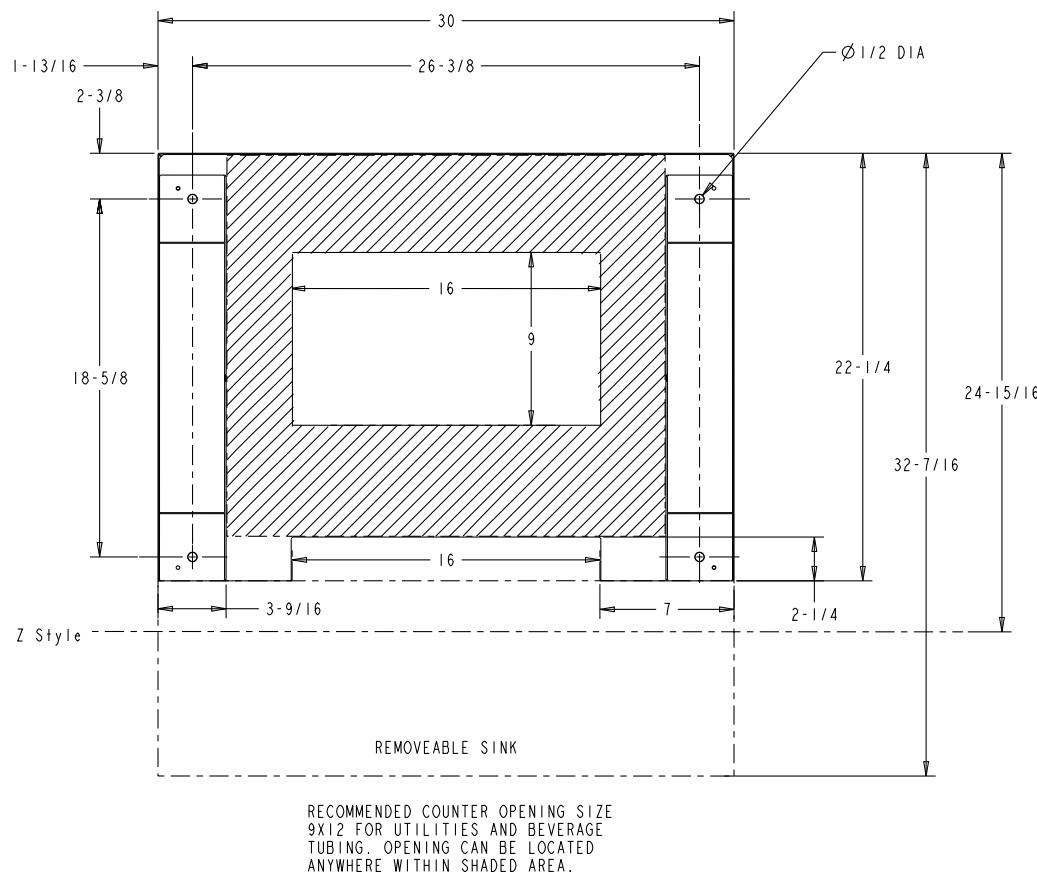


Figure 2.

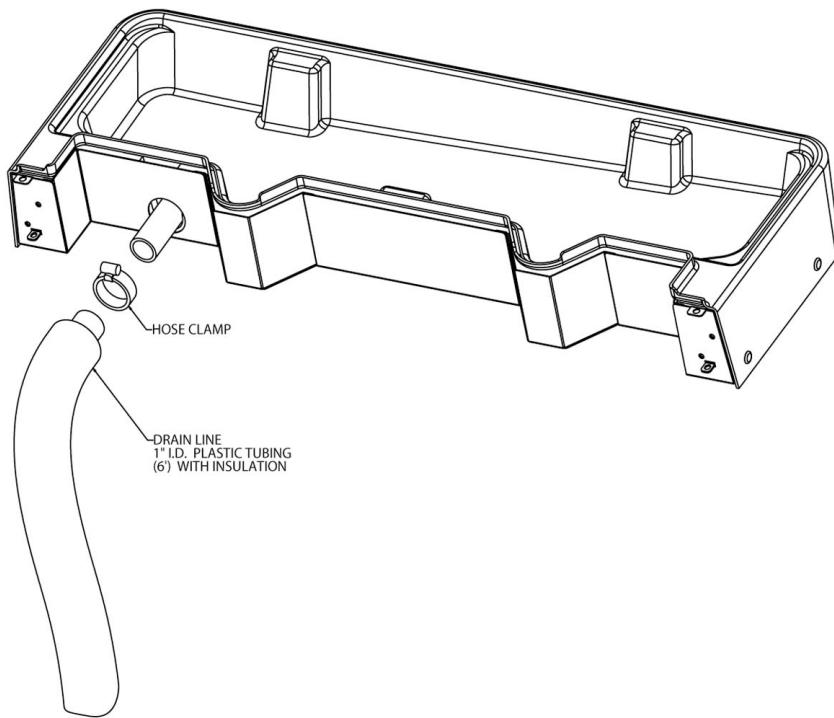


Figure 3.

GATE RESTRICTOR PLATE ADJUSTMENT

The rate at which ice is dispensed is adjusted by adjusting the opening of the gate restrictor plate as illustrated in Figure 4.

To adjust the gate restrictor plate, loosen the four (4) nuts that hold the ice chute assembly to the hopper. The restrictor plate can now be moved up or down. When the restrictor plate is fully up, the ice gate opening is 2-1/2" in height, and the maximum rate of ice dispense is available (approximately 3 oz/sec). Re-tighten the four (4) nuts to set the desired restrictor plate opening. **DO NOT EXCEED 50 IN-LB** of torque.

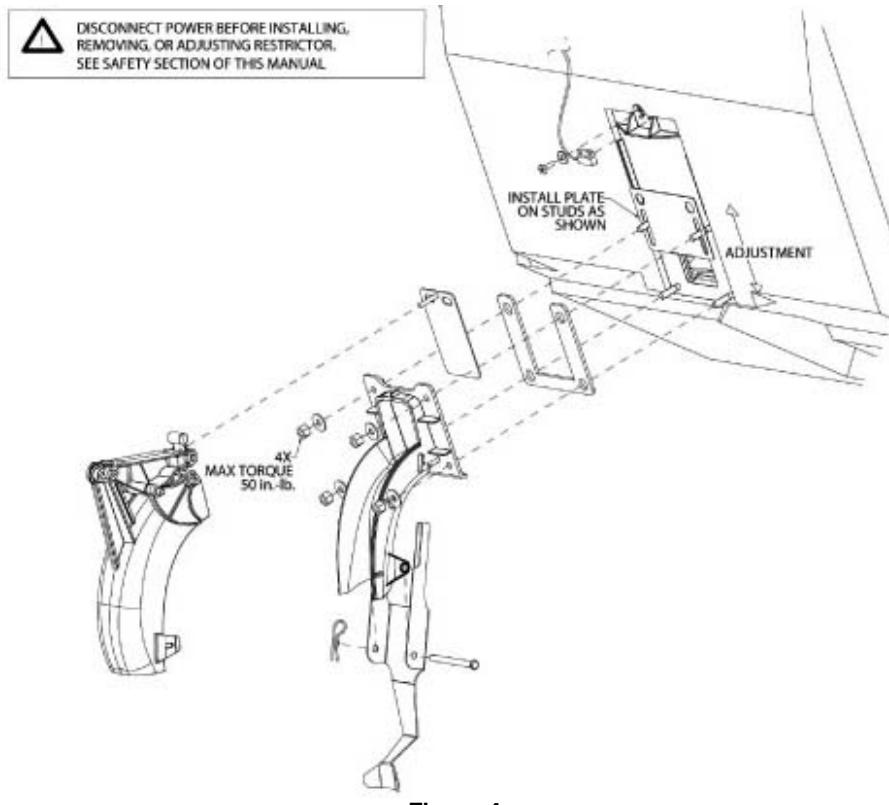


Figure 4.

CONNECTING PRODUCT TO THE UNIT

The unit must have a product supply connected to each inlet on the valve. Refer to the "Plumbing Diagram" section on page 35 for details of the hook-up.

NOTE: All inlet connections are clearly marked with a label adjacent to the inlet connections.

Always check for leaks on all connections.

WATER & SYRUP LINE CONNECTIONS

The standard unit supports the following:

- 1-water line from carbonator/chiller
- 1-water line for non-carbonated drinks
- 20-Syrup lines
- 8-Flavor Shots

Product Line Connections

To connect the syrup, water and flavor shot lines from the backroom package to the unit, perform the procedure as shown in Table 3.

NOTE: Make note of the product lineup prior to plumbing.

NOTE: If lines are to be cut, mark the line numbers above the cut with a marker. If syrup lines are mixed up they can be mapped later in the control. Make sure that syrup lines and flavor lines are NOT mixed.

Table 3.

Step	Action
1	Locate the water, syrup and flavor lines under the counter. The lines are marked S1- S14 for chilled syrup A1-A6 for ambient (non chilled) syrup, CW for Carbonated Water, PW for plain water and F1 thru F8 for flavor lines.
2	Connect syrup lines 1 - 14 from the unit to the appropriate lines from the backroom package.
3	Connect the carbonated lines CW from the unit to the carbonator/chiller in the backroom.
4	Connect the plain water lines PW from the unit to the appropriate lines from the backroom package.
5	Adjust the CO ₂ regulator for syrup BIB pumps as indicated in Table 4.

Table 4.

Regulator	Pressure Settings
Basic Pressure Syrup Valves	65 PSIG (5.17 bar) minimum
Basic Pressure Flavor Shot Valves	30-45 PSIG (2.07-3.10 bar)

NOTE: If using less than 14 brands, 6 non-chilled, or 8 flavor shots, use of a splitter is recommended. Lines can be split to share product to both sides.

Ex: S1-S8, S2-S9, A1-A4, A2-A5, F1-F5, F2-F6.

PREPARING FOR OPERATION

SERVICE MODE

The Service mode is used to perform all of the maintenance and troubleshooting for the unit. There are three menu levels available depending on the classification of the operator. Figure 7 shows the service mode screen for operators, Figure 8 shows the service mode screen for technician and Figure 9 shows the service mode screen for service supervisors. To enter the service mode, perform the procedure in Table 5.

Table 5.

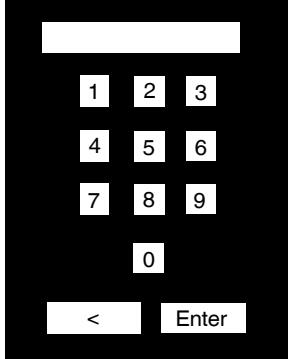
Step	Action	
1	<p>Display the keypad screen by tapping each corner of the video screen starting in the upper right corner (1) and continuing to tap each corner in a counterclockwise direction, in a sequence of 1,2,3 and 4 as shown in Figure 5.</p> <p>NOTE: As each corner is touched, a small confirmation rectangle may momentarily appear to confirm the touch.</p>	
2	<p>Input the proper password for your access level (Operator, Store Manager or Technician) and press Enter. The Service UI screen is displayed, as shown in Figure 6 depending on your access level.</p>	

Figure 5.

Figure 6.

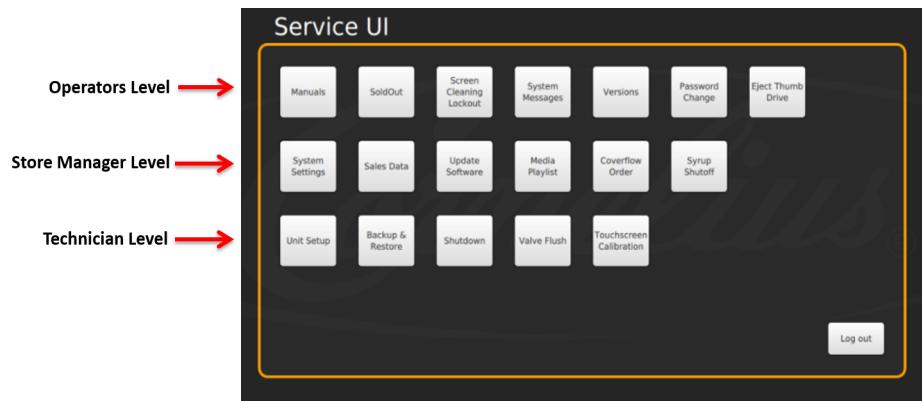


Figure 7

The service screen has a few layout changes, however the access levels remain the same. You have the ability to change your default pass-codes.

Row 1 of the service screen shows what will be displayed when the operators level pass-code is entered.

Row 2 is displayed when the manager level pass-code is entered. This level has visibility to levels 1 and 2.

Row 3 is displayed when the technician level pass-code is entered. This level has visibility to all 3 levels.

NOTE: The Shutdown button is available on all levels.

INITIAL SETUP

Before operating the unit, perform the initial setup described in the following sections.

Adding Syrup

First, load the images on to the machine:

NOTE: Only load the image after mapping if needed.

Table 6.

Step	Action
1	Open the door remove the black USB cable from the rear of the door as shown in Figure 8.

Figure 8.

Table 6.

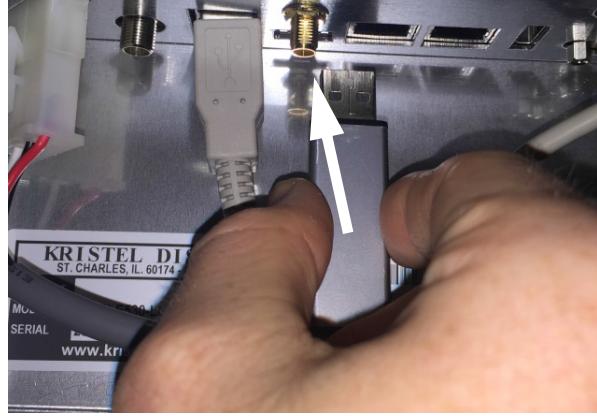
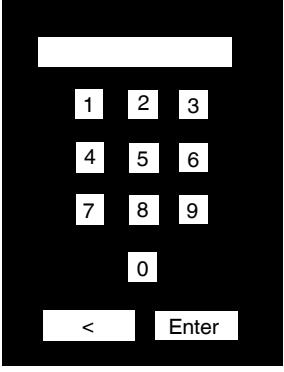
Step	Action	
2	Install a USB drive which has the appropriate Brand or flavor images as shown in Figure 9.	
3	The “Load from USB” icon should be selected when you are loading a configuration via your USB flash drive from your configuration kit at installation	
4	Enter Service mode using the Technician Pin. If not changed by customer settings.	

Table 6.

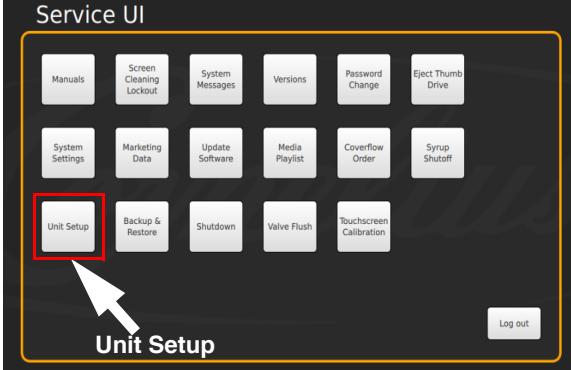
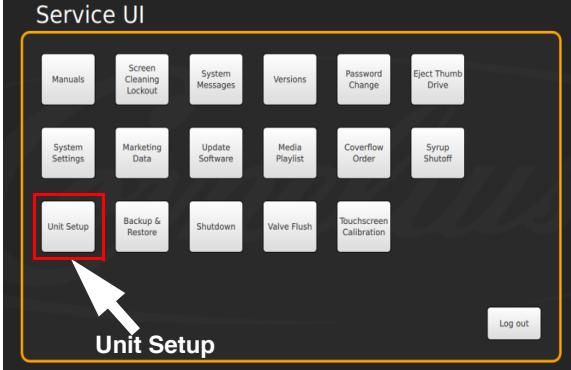
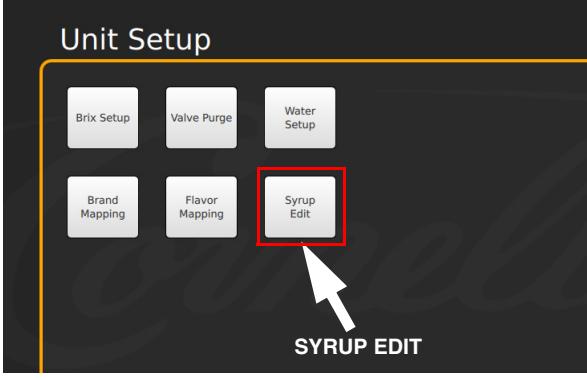
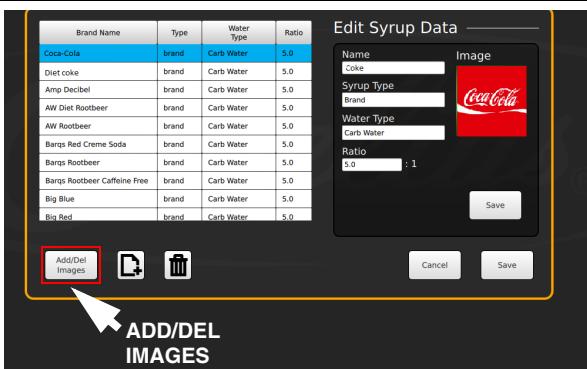
Step	Action	
5	Select "Unit Setup" as shown in Figure 12.	
6	Select "Syrup Edit" as shown in Figure 13.	
7	Select "Add/Del Images" at the lower left as shown in Figure 14.	

Table 6.

Step	Action
8	Navigate the USB drive on the LH side to find the images needed as shown in Figure 15.
	
9	Select the file names needed and press the right-facing arrow in the center of the screen as shown in Figure 16.
	
10	Press the “Back” button to return to the main “Syrup Edit” screen.
11	Remove the USB drive and replace the USB cable from the back of the screen.

Next, setup the Brand Or Flavor as per the procedure in Table 7:

Table 7.

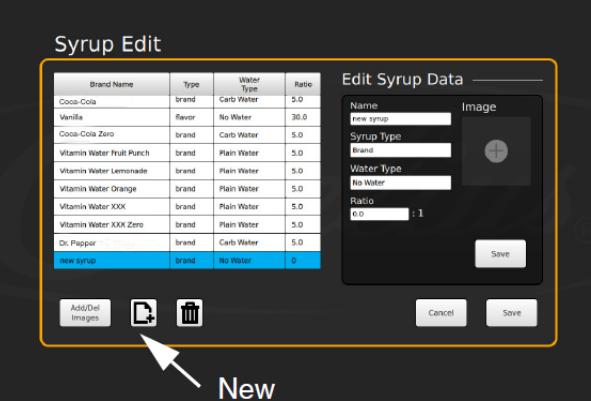
Step	Action
1	In the “Syrup Edit” screen, select the “New” button, the page icon at the bottom with “+” sign as shown in Figure 17.
	

Figure 17.

Table 7.

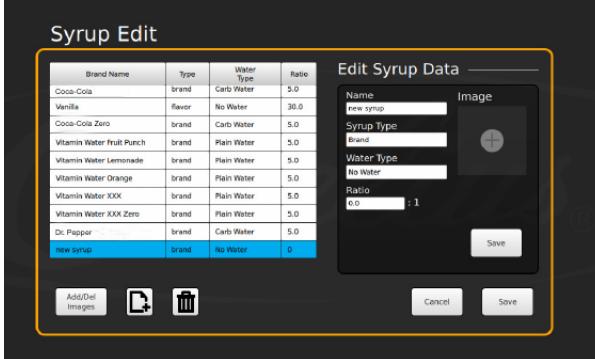
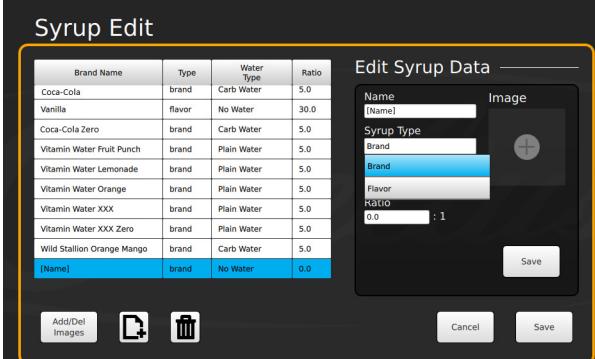
Step	Action	
2	Now, the details for this syrup are editable on the right side of the screen.	
3	Select Name and enter the appropriate name of the syrup.	
4	Select Syrup type to select Brand or Flavor.	

Figure 18.

Figure 19.

Figure 20.

Table 7.

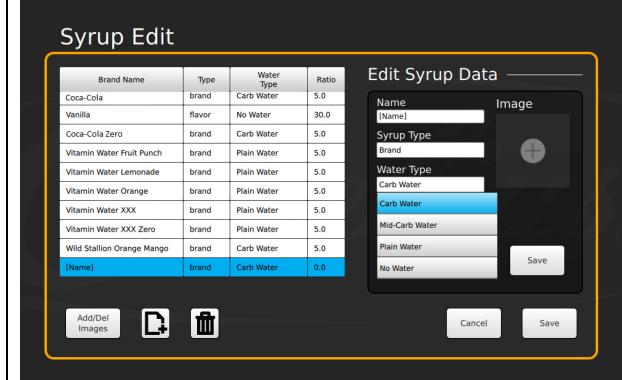
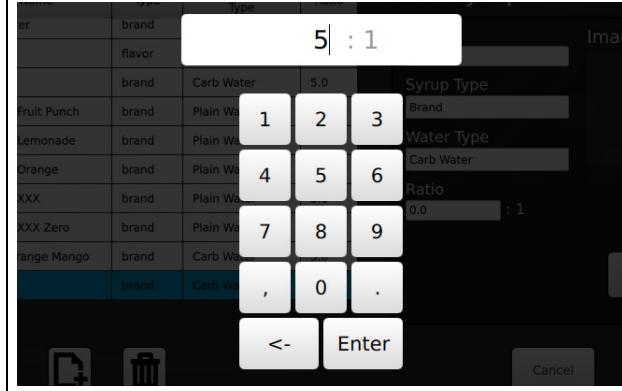
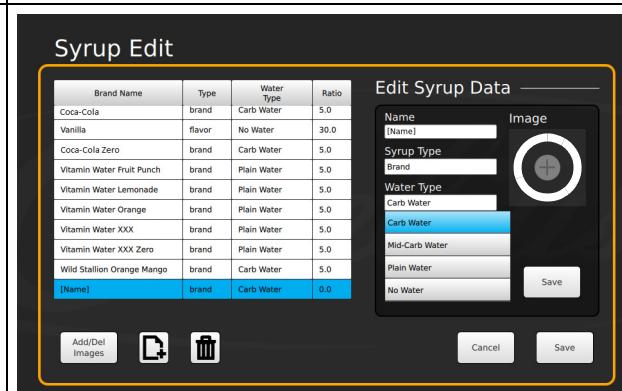
Step	Action	
5	Select Water type to select Carbonated, Plain Water, or Mid-Carbonation (Flavors default to No Water).	
6	Select Ratio and enter the mix ratio for the specific syrup.	
7	Lastly, press below image on the “+” sign and all of the loaded images will appear, find the new image that was loaded for this brand and select it.	

Figure 21.

Figure 22.

Figure 23.

Table 7.

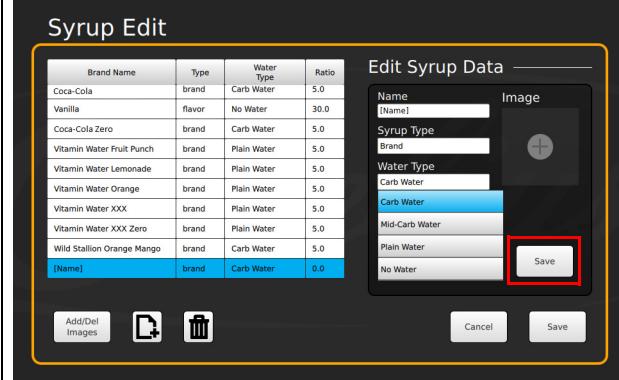
Step	Action	
8	Press “Save” on the Syrup Edit screen.	
9	Repeat for any additional flavors or brands needed.	
10	Exit the service UI.	

Figure 24.

Mapping Brands

To map the valves to the available brands, perform the procedure in Table 8.

Table 8.

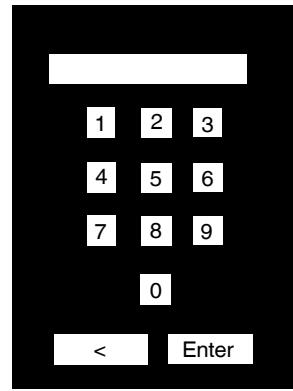
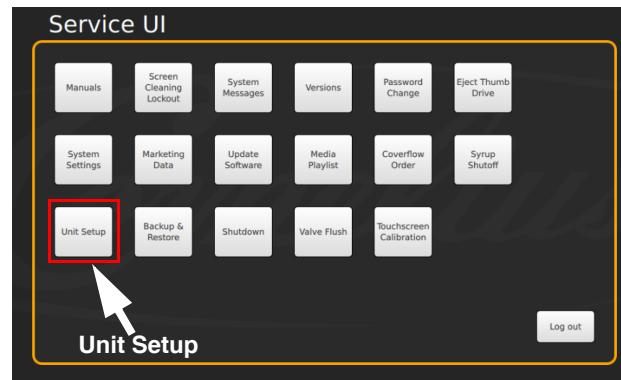
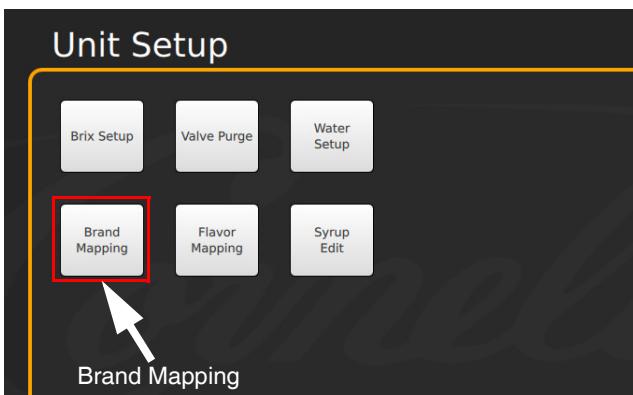
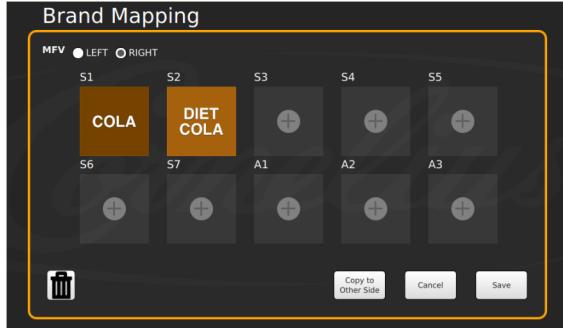
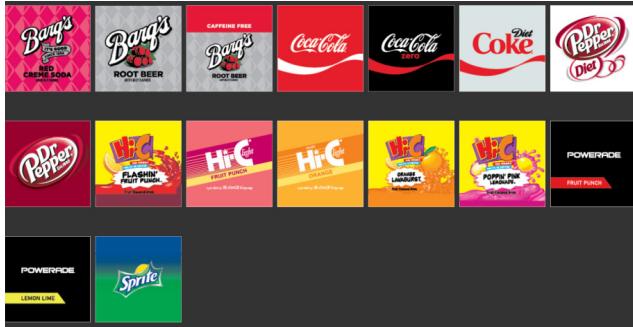
Step	Action	
1	<p>Display the keypad screen by tapping each corner of the video screen starting in the upper right corner (1) and continuing to tap each corner in a counterclockwise direction, in a sequence of 1,2,3 and 4 as shown in Figure 25.</p> <p>NOTE: As each corner is touched, a small confirmation rectangle may momentarily appear to confirm the touch.</p>	 <p>Figure 25.</p>
2	<p>Input the proper password for your access level (technician) and press Enter.</p>	 <p>Figure 26.</p>
3	<p>The Service UI screen is displayed. Press the Unit Setup button to display the Unit Setup screen as shown in Figure 27.</p>	 <p>Figure 27.</p>

Table 8.

Step	Action	
4	Press the Brand Mapping button to open the Brand Mapping screen as shown in Figure 28.	
5	Press the Brand icon that is to be remapped.	
6	The Brand Selection screen opens and you can select the brand to be mapped to the valve location.	
7	Repeat Steps 5 & 6 for each location desired.	
8	When all the brands on the right, press the left button and repeat Steps 4 and 5 for the left side Or, if the setup will be identical on the LH and RH side, press the copy to other side button and confirm when prompted.	
9	When all the brands are mapped as desired, press the Save button to save the settings.	
10	Repeat steps 4 through 9 for flavor mapping.	

Purging The Syrup Lines

The purge process is performed as part of the “Syrup Line Cleaning & Sanitizing” section on page 21. If a BIB container is replaced, the syrup lines need to be purged and sanitized. To purge the lines, perform the procedure in Table 9.

Table 9.

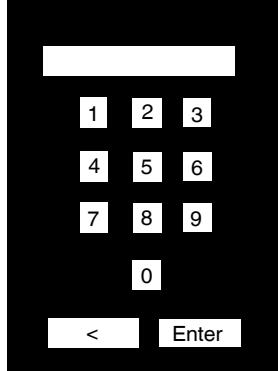
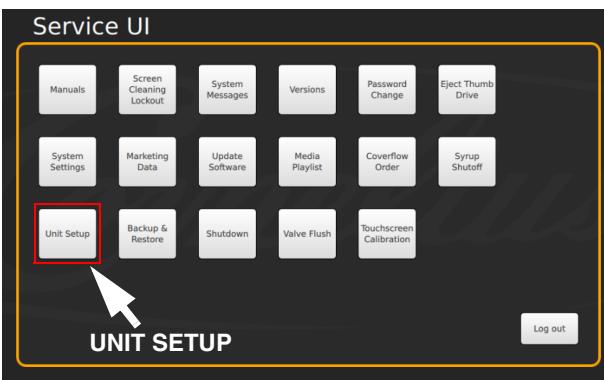
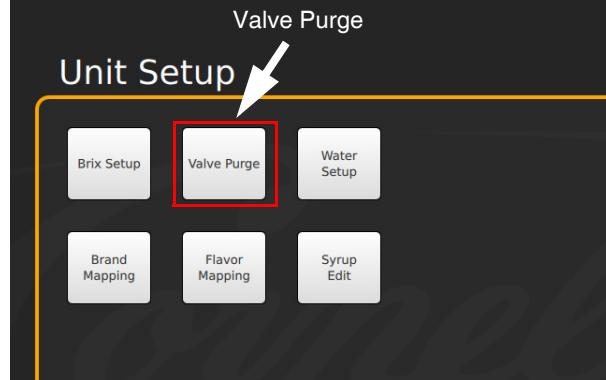
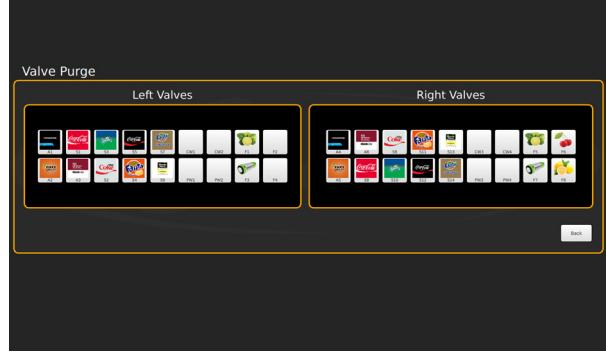
Step	Action	
1	Ensure that the water and CO ₂ are turned on. (initial setup only)	
2	<p>Display the keypad screen by tapping each corner of the video screen starting in the upper right corner (1) and continuing to tap each corner in a counterclockwise direction, in a sequence of 1,2,3 and 4 as shown in Figure 31.</p> <p>NOTE: As each corner is touched, a small confirmation rectangle may momentarily appear to confirm the touch.</p>	
3	Input the proper password for your access level (technician) and press Enter.	
4	The Service UI screen is displayed.	
5	Press the Unit Setup button.	

Table 9.

Step	Action	
6	The Unit Setup screen is displayed.	
	Press the Valve Purge button as shown in Figure 34.	
7	The Valve Purge screen is displayed.	
	Select up to 4 syrup and 2 water at a time, per side, to purge.	
8	NOTE: 12 minute default runtime unless turned off.	
9	When the syrup flows and lines are purged, press the same again to turn off.	
10	Repeat Step 7 until all lines are purged (up to 4 at once).	
	When all lines are purged, press the Back button to display the Service User Interface screen and select the Log Out button or another selection.	

Syrup Line Cleaning & Sanitizing



CAUTION:

Only trained and qualified persons should perform these cleaning and sanitizing procedures.

To sanitize the tubing and BIB connectors, perform the procedure in Table 10.

NOTE: No more than 7 chilled carbonated brands can be mapped per side. Specify the names of chilled vs ambient lines.

Table 10.

Step	Action	
1	Remove all the quick disconnects from all the BIB containers.	
2	Fill a suitable bucket with a soap solution.	
3	Submerge all disconnects (gas and liquid) in the soap solution and then clean them using a nylon bristle brush. (Do not use a wire brush.) Rinse with clean, potable water.	
4	Using a plastic pail, prepare approximately 5 gallons (18.93 l) of sanitizing solution.	
5	Sanitizing fittings must be attached to each BIB disconnect. If the fittings are not available, the fittings from empty BIB bags can be cut from the bags and used. These fittings open the disconnects so the sanitizing solution can be drawn through the disconnect.	
6	Place all the BIB disconnects with the sanitizing fittings in place into the pail of sanitizing solution. Use the "Purging The Syrup Lines" section on page 20 to purge the lines. Allow the sanitizer to remain in the lines for 15 minutes.	
7	While the lines are soaking, remove the nozzles and syrup diffusers and clean them in a mild soap solution, rinse them with clean water.	

Table 10.

Step	Action
8	Use a mechanical sprayer filled with sanitizing solution to spray the nozzles and diffusers and allow them to air dry.
9	Reassemble the nozzles and syrup diffusers and replace them on the valves.
10	Remove the sanitizing fittings from the BIB disconnects and connect the disconnects to the appropriate BIB container.
11	Use the "Purging The Syrup Lines" section on page 20 to purge the lines. Continue until all the sanitizer has been flushed from the system and only syrup is flowing.

Adjusting the Water to Syrup Ratio (BRIX)

NOTE: During the BRIXing process, agitate the ice in the bin occasionally to ensure that the cold plate is at the proper operating temperature.

Water and syrup MUST be cold before checking BRIX.

The unit must be BRIXed initially before the unit is put into operation. To BRIX the unit, perform the procedure in Table 11.

Table 11.

Step	Action
1	<p>Display the keypad screen by tapping each corner of the video screen starting in the upper right corner (1) and continuing to tap each corner in a counterclockwise direction, in a sequence of 1,2,3 and 4 as shown in Figure 39.</p> <p>NOTE: As each corner is touched, a small confirmation rectangle may momentarily appear to confirm the touch.</p>
2	<p>Input the proper password for your access level (technician) and press Enter.</p>



Figure 39.

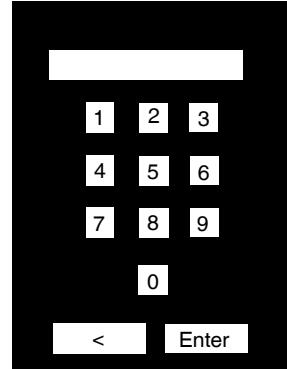


Figure 40.

Table 11.

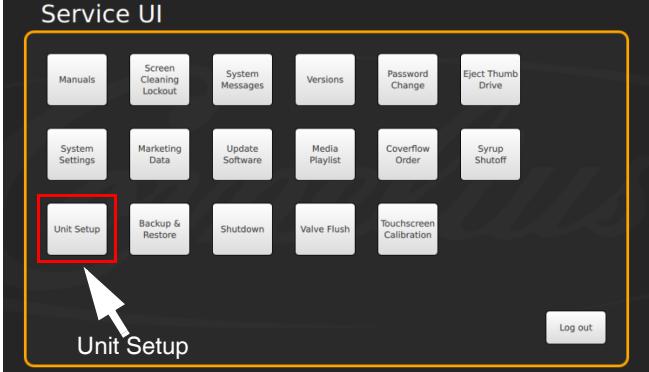
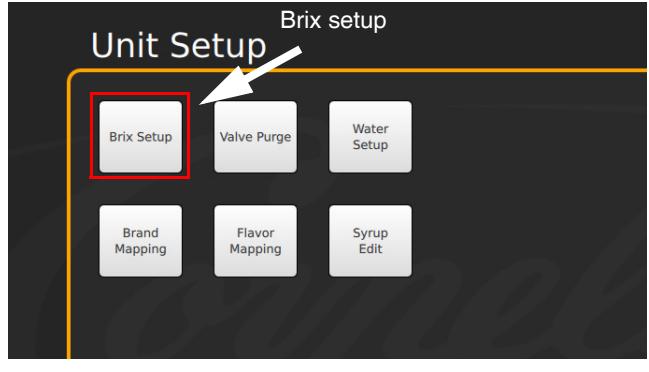
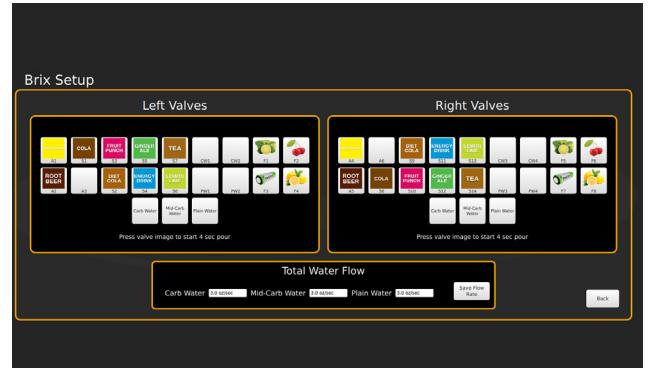
Step		Action
3	Press the Unit Setup button.	
4	Select the Brix setup screen as shown in Figure 42.	
5	<p>All instructions and volumes below are based on the pour rate of 3 oz/sec.</p> <p>NOTE: All pour at 4 sec.</p>	
6	Place a graduated cylinder or brix cup under the valve.	
7	Select the CW1 button and press Pour to dispense 10 oz (295.7 ml).	
8	If the flow rate is not correct, adjust the proper valve to the desired flow. Refer to Figure 44 for valve locations.	
9	Turn the flow adjustment valve a 1/4 of a turn at a time and recheck the flow. To increase the flow, turn the knob clockwise.	
10	Test the valve and adjust until a consistent ratio is delivered two consecutive times.	
11	Select PW1 and press Pour to dispense 10 oz (295.7 ml.).	
12	Perform Steps 8 through 10 for the PW1 valve.	
13	Select CW3 and Pour to dispense 10 oz (295.7 ml.).	

Table 11.

Step	Action
14	Perform Steps 8 through 10 for the CW3 valve.
15	Select PW3 and press Pour to dispense 10 oz (295.7 ml.).
16	Perform Steps 8 through 10 for the PW3 valve.
17	Place a graduated cylinder or brix cup under the valve.
18	Select S1 and press Pour to dispense 2.0 oz (60 ml.).
19	If the rate is not correct, perform Steps 8 through 10 for the S1 valve.
20	Repeat Steps 18 and 19 for S2 through S7 and A1 through A3.
21	Repeat Steps 18 through 19 for S8 through S14 and A4 through A6.
22	When the flow rate process is complete, select the Back button to return to the flavor shot screen.
23	Press the Back button on the flavor shot screen to return to the Service UI screen.
24	Press the Log Out button to return to normal operation.

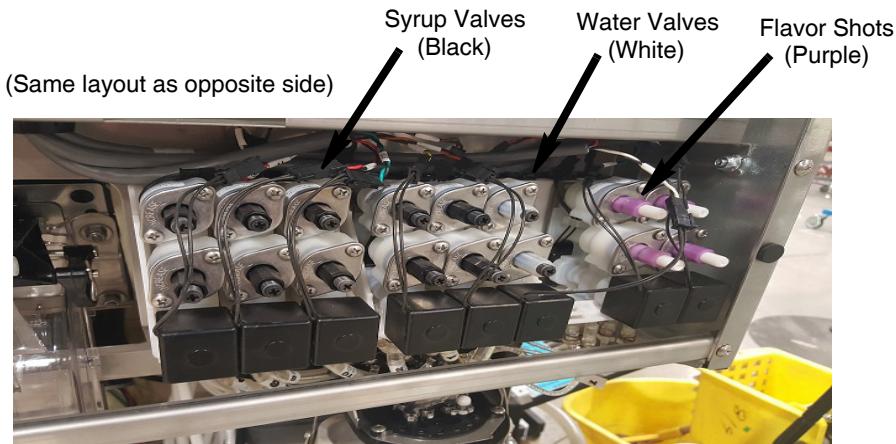


Figure 44.

Cleaning Interior Surfaces

As part of the initial cleaning procedures, clean and sanitize the ice hopper by performing the procedure in Table 12.

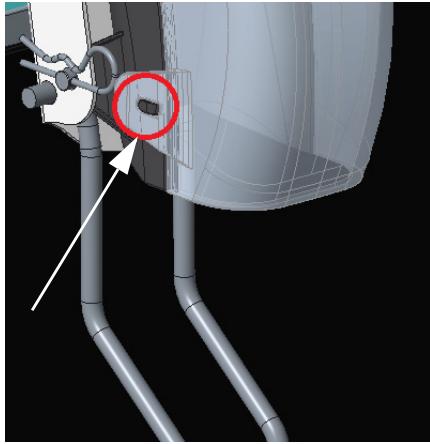
CAUTION:

When pouring liquid into the hopper, do not exceed the rate of 1/2 gallon per minute. Pouring liquid into the hopper faster than the recommended rate could result in an overflow situation which may result in personal injury or damage to the equipment.

Table 12.

Step	Action	
1	Remove the agitator assembly by unscrewing the thumbscrew and lifting the agitator assembly out of the hopper as shown in Figure 45.	
2	Using a nylon bristle brush or sponge, clean the interior of the hopper, top cover and agitator assembly with soap solution. Thoroughly rinse the hopper, cover and agitator surfaces with clean potable water.	
3	Reassemble agitator assembly. Take special care to ensure that the thumbscrew is tight.	
4	Using a mechanical spray bottle filled with sanitizing solution, spray the entire interior and the agitator assembly. Allow them to air dry.	

Table 12.

Step	Action	
5	Open the display panel and remove the ice chute cover from the unit.	
6	With a nylon bristle brush or sponge, clean the inside of the ice chute, gasket, and cover with soap solution and rinse thoroughly to remove all traces of detergent.	
7	Reassemble the ice chute assembly.	
8	Using a mechanical spray bottle filled with sanitizing solution, spray the inside of the ice chute. Allow it to air dry.	
9	Close the display panel.	

UNIT OPERATION

WARNING:

This unit must be grounded to avoid possible electrical shock to the operator. The unit power cord is equipped with a three pronged plug. If a three pronged (grounded) outlet is not available use an appropriate method to ground the unit.

Failure to comply could result in serious injury, death or damage to the equipment.

To initially start up the unit for operation, perform the procedure in Table 13.

Table 13.

Step	Action
1	Connect electrical power to the unit.
2	Check for water leaks, and tighten any loose connections.
3	Dispense several drinks for checking.

UNIT SHUTDOWN/RESTART

The unit can be shutdown by entering the service UI at any level and selecting the “shutdown” icon. To shut down or restart the unit, perform the procedure in Table 14.

Table 14.

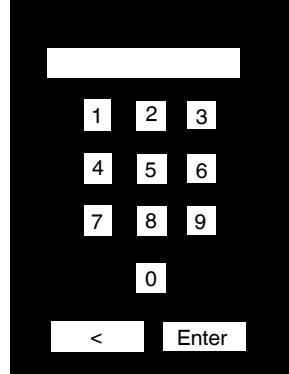
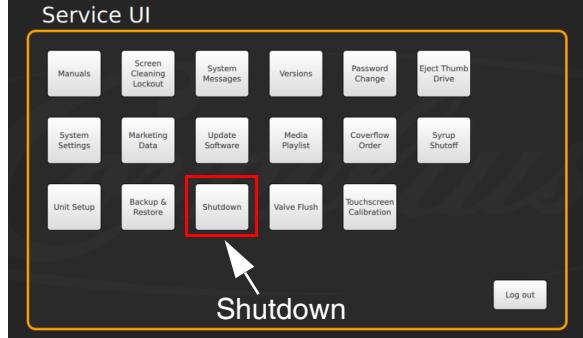
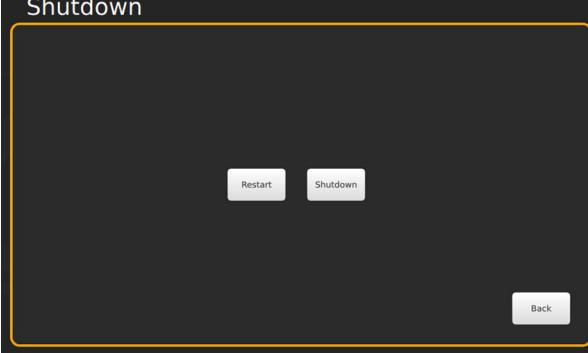
Step	Action	
1	<p>Display the service screen by tapping each corner of the video screen starting in the upper right corner(1) and continuing to each corner in a counterclockwise direction, in a sequence of 1,2,3 and 4 as shown in Figure 52.</p> <p>NOTE: As each corner is touched, a small confirmation rectangle may momentarily appear to confirm the touch.</p>	
2	<p>Input the proper password for your access level (technician) and press Enter.</p>	

Table 14.

Step	Action	
3	<p>Select the Shutdown button to display the Shutdown/Restart Screen, as shown Figure 54.</p>	
4	<p>Press the Shutdown button to start the shutdown process or press the Restart button to restart the unit.</p>	
5	<p>Red/Black button on back of screen shown in Figure 8. To prompt screen, push button and select Restart or Shutdown. To hard shutdown hold for 5-7 sec until screen get blank. Wait for 10 sec and press once to restart.</p>	

EDITING THE MEDIA PLAYLIST

The unit is capable of changing the display video on a preprogrammed schedule. This allows the user to set a specific time and duration for playing a specific media for breakfast, lunch, dinner or any special media required.

To set the media playlist schedule, perform the procedure in Table 15.

Table 15.

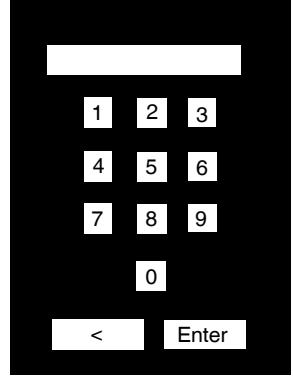
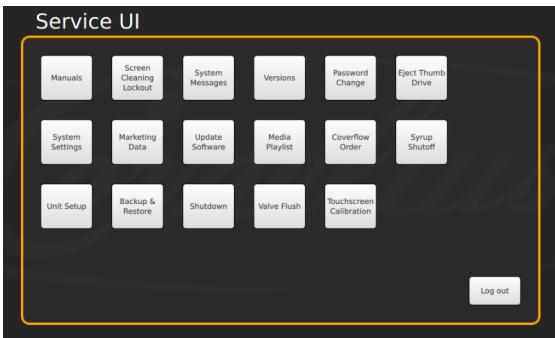
Step	Action	
1	First, enter the Service Screen at either manager or technician level permissions.	
2	<p>Tap each corner of the video screen starting in the upper right corner(1) and continuing to each corner in a counterclockwise direction, in a sequence of 1,2,3 and 4 as shown in Figure 56.</p> <p>NOTE: As each corner is touched, a small confirmation rectangle may momentarily appear to confirm the touch.</p>	 <p>Figure 56.</p>
3	Input the proper password for your access level and press Enter.	 <p>Figure 57.</p>
4	This will take you to the Service UI screen.	 <p>Figure 58.</p>

Table 15.

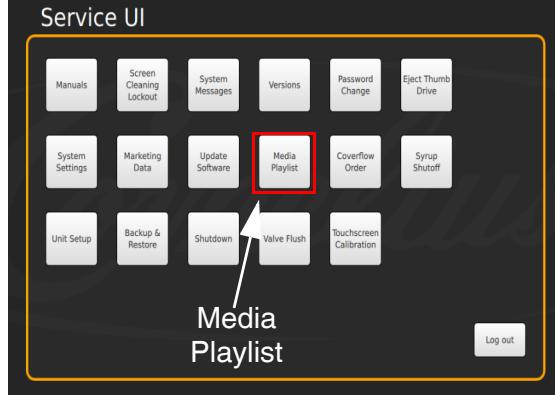
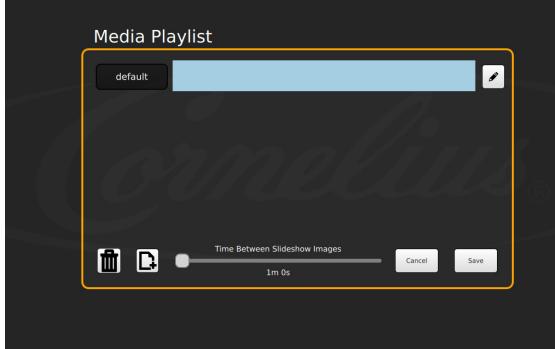
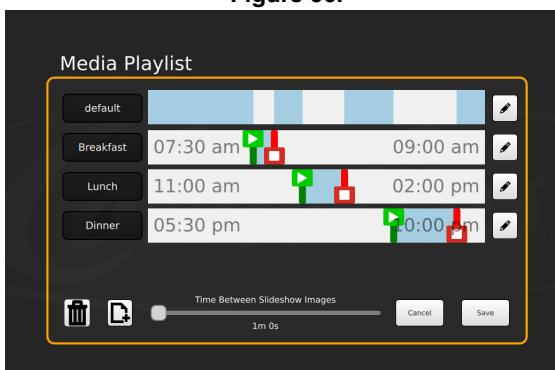
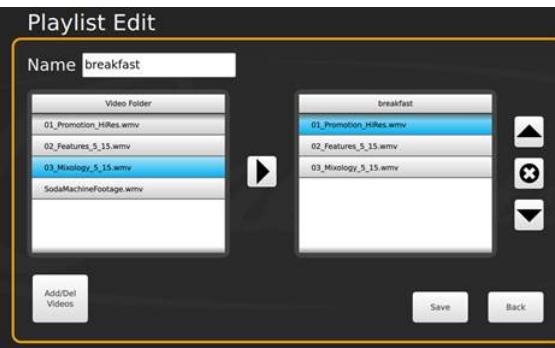
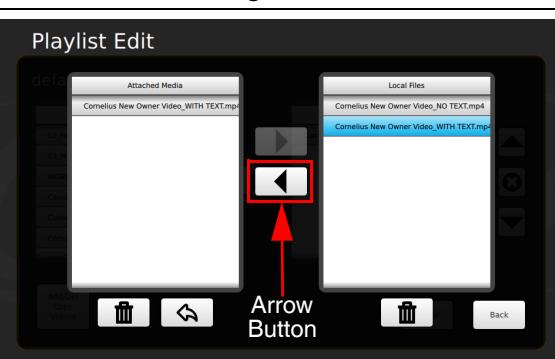
Step	Action	
5	<p>This is where you can access the videos (Media Playlist) and sales information (Marketing Data).</p> <p>To start with changing the playlist, select the “Media Playlist” button. This brings you to this screen (only the default playlist appears initially).</p>	
6	<p>First, to manipulate the playlist and their schedule. A new playlist can be added by selecting the second button on the bottom left (with the + symbol). This will add a new playlist in addition to the default playlist. The times when it starts playing and finishes can be adjusted by dragging the play and stop handles left and right. The corresponding times appear in the bar shown. So, the “breakfast” playlist in Figure 61 plays from 7:30 to 9:00am. The default playlist will fill in the gaps and plays unless any other playlist is set at that time.</p> <p>Now, to modify what's actually in these playlist (or their names), select the pencil on the RH side of the playlist. The next screen will appear:</p>	 

Table 15.

Step	Action	
7	<p>At the top is the name, click on the white box and a keyboard will appear to allow you to change the name.</p> <p>Below this are two lists of videos. On the RH side is the playlist that you are editing. The videos will play, starting at the top, and repeat, throughout its specified time. To remove a video from the playlist, select it from the list and press the 'X' on the right side. To add a video that is on the machine to the playlist, select it from the list on the left and press the arrow in the center. The position of this video can be changed by using the 'up' and 'down' arrows on the right.</p> <p>Static image option: you can add .jpeg and .png file to the playlist and adjust their duration with the slider on the media playlist menu.</p> <p>To add a video from a USB drive, select the "Add/Del Videos" button in the bottom left. Next screen will pop up.</p>	 <p>Figure 62.</p>
8	<p>All the videos or images currently on the machine are shown on the right. A USB stick that is connected to any of the (3) available ports will be displayed on the left. Click on the name of the drive and, subsequently, through any folders to find the videos to be added.</p>	 <p>Figure 63.</p>
9	<p>These videos can be transferred to the machine by selecting them and pressing the arrow button in the center. Any videos that were added are now available to the playlist by pressing the 'Back' button. File can also be copied from the machine to USB drive by selecting the files on the RH side and pressing the left facing arrow.</p> <p>NOTE: If attached files are deleted they will be deleted from the USB drive.</p>	 <p>Figure 64.</p>
10	Important Note: Please press save on the Playlist Edit screen and again on the Media Playlist screen when making any changes.	
11	To export sales information, return to the main service UI. Insert a USB drive in an available USB slot on the back of the door. Select "Marketing Data" and again select "Export Data". The data will be exported directly to the USB.	

UPDATING SOFTWARE REVISIONS

The unit can be updated as new versions of software become available, they may be installed on the unit by performing the procedure in Table 16.

Table 16.

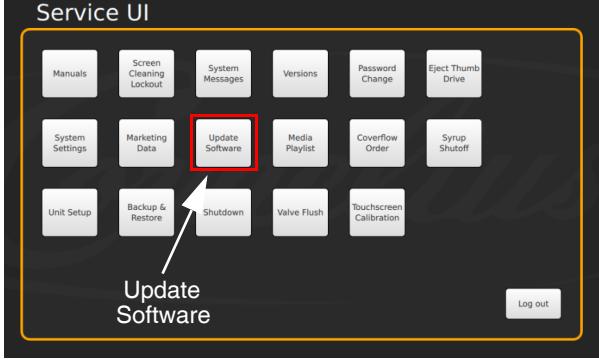
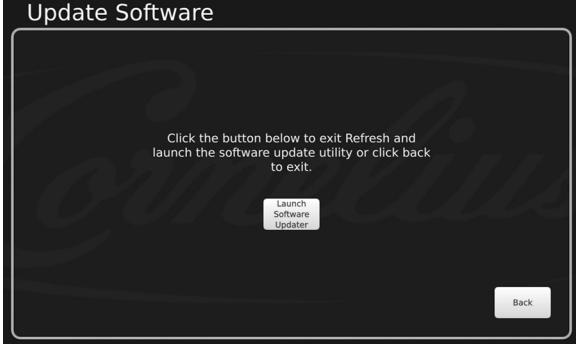
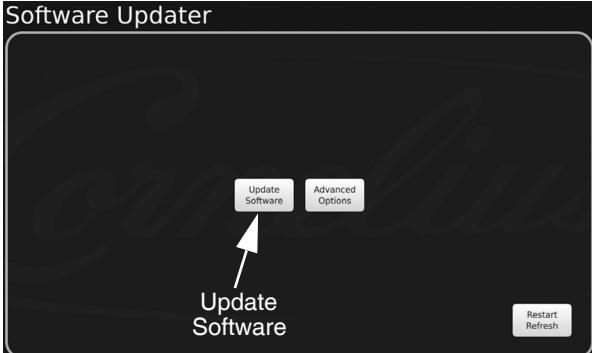
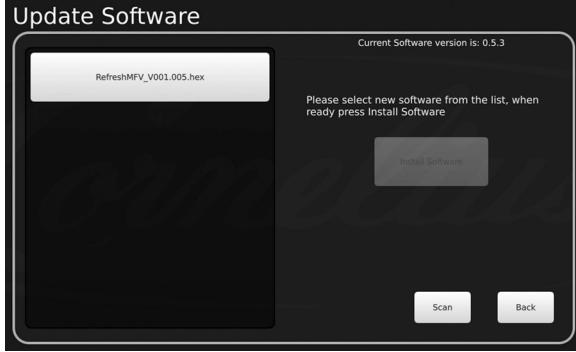
Step	Action	
1	Enter Service mode, as described in “Service Mode” section on page 10.	
2	Open the display panel.	
3	On the back of the display, unplug the USB connection to the ADA panel and plug in the USB stick with the software update loaded on it.	
4	Press the Update Software button.	
5	The Update Software screen is displayed. Press the Launch Software Updater button.	

Table 16.

Step	Action	
6	The Software Updater screen is displayed. Press the Update Software button.	
7	The second Update Software screen is displayed.	
8	Select the software version to be installed by selecting from the list on the left side of the screen. If the list on the left side of the screen is empty, press the Scan button. This reads the software updates contained on the USB stick. When the proper version is highlighted, press the Install Software button on the right side of the screen.	
9	When the update is complete, press the Back button to revert to the previous screen, then press the Restart/Refresh button to restart the unit.	
10	Unplug the USB stick from the connector and reinstall the ADA cable.	
11	Close the display panel.	

PLUMBING DIAGRAM

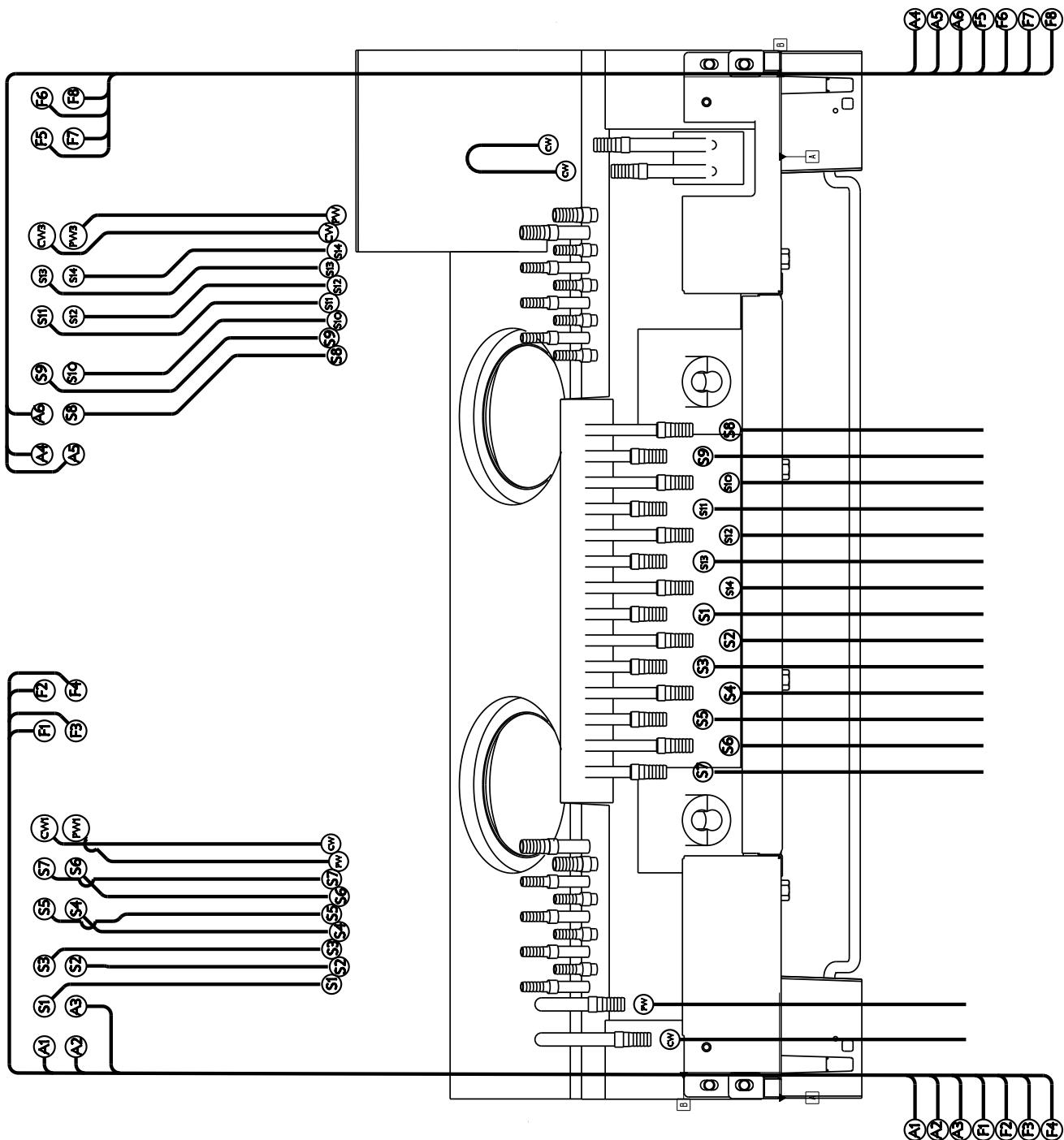


Figure 70.

S - Syrup Line.

F - Flavor Line.

A - Ambient Line.

WIRING DIAGRAM

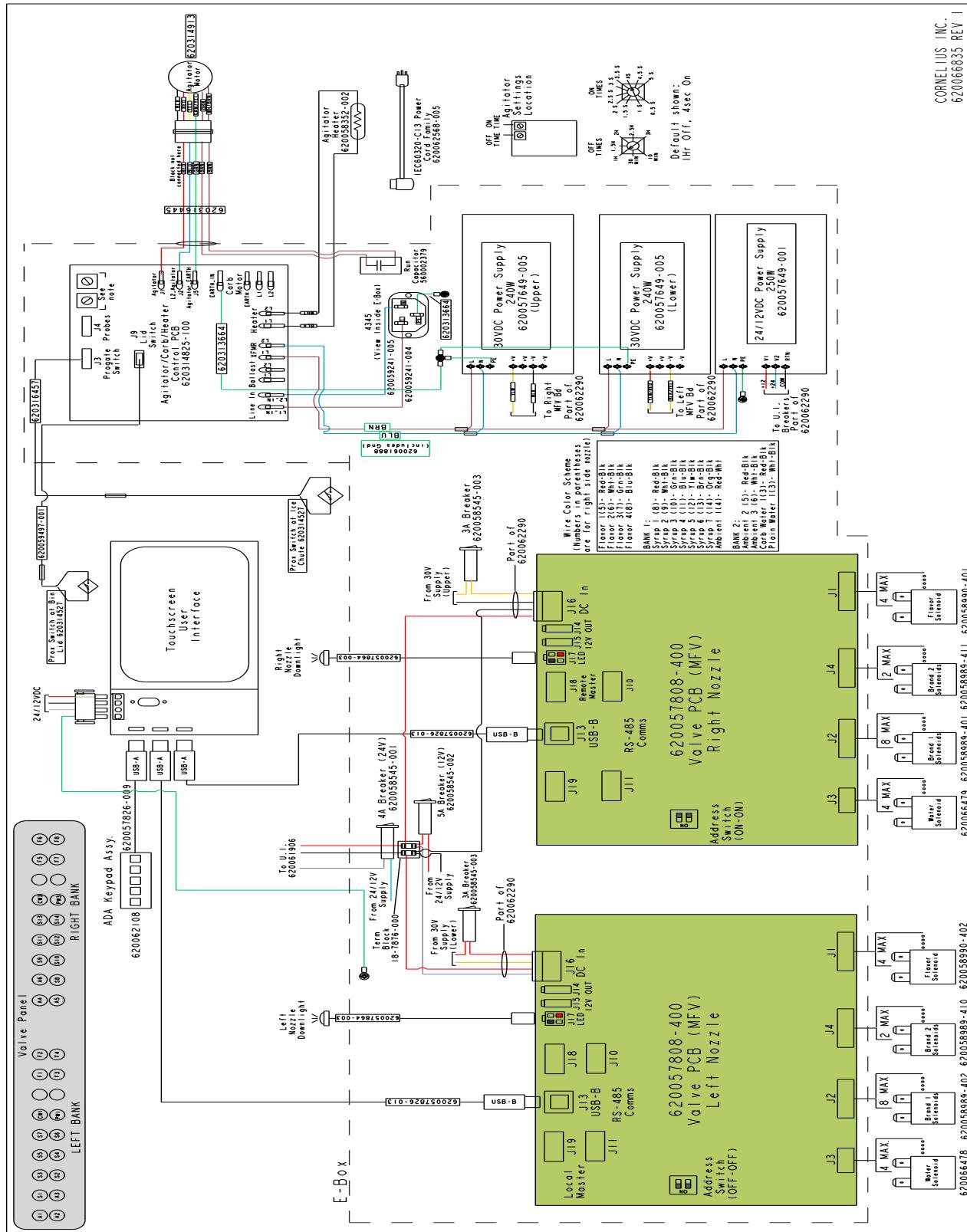


Figure 71

TROUBLESHOOTING

**WARNING:**

Only trained and certified electrical, plumbing and refrigeration technicians should service this unit.

ALL WIRING AND PLUMBING MUST CONFORM TO NATIONAL AND LOCAL CODES. FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY, DEATH OR EQUIPMENT DAMAGE.

**WARNING:**

If repairs are to be made to a product system, remove quick disconnects from the applicable product tank, then relieve the system pressure before proceeding. If repairs are to be made to the CO₂ system, stop dispensing, shut off the CO₂ supply, then relieve the system pressure before proceeding. If repairs are to be made to the refrigeration system, make sure electrical power is disconnected from the unit.

Should your unit fail to operate properly, check that there is power to the unit and that the hopper contains ice. If the unit does not dispense, check the following chart under the appropriate symptoms to aid in locating the defect.

UNIT TROUBLESHOOTING

Table 17.

Symptom	Cause	Remedy
Blown fuse or circuit breaker	A. Short circuit in electrical wiring. B. Inoperable agitator motor (shorted motor).	A. Repair wiring. B. Replace gear motor.
Agitator does not turn	A. No power. B. Improperly installed upper ice chute assembly (Reed switch is not being activated). C. Inoperable reed switch. D. Electrical board driver circuit is defective. E. Gear motor has open circuit. F. Reed switch is not activated, improper assembly of upper ice chute to lower chute. G. Broken wire in the 2-wire harness leading to the reed switch. H. Bad connection at main control board. I. Door not closed or not making switch connections to lid.	A. Restore power or plug in unit. B. Check the upper ice chute assembly for proper assembly and operation. C. Replace reed switch. D. Replace main control board. E. Replace gear motor. F. Check to make sure tongue of upper chute engages into the back of the lower chute, ensure upper chute engages outside the lower chute, and snap front of chute into place. G. Repair or replace 2-wire harness. H. Repair connection or replace 2-wire harness. I. Check distance from screen to lid.
Ice dispenses continuously	A. Ice gate mechanism is stuck in open position. B. Stuck or bent ice lever (does not allow gate to close and open reed switch).	A. Inspect gasket for proper position. Examine gate plate to see if it slides freely behind the lower ice chute. B. Examine ice dispense lever to see if it is bent.
Slushy ice or water in hopper	A. Blocked drains in cold plate. B. Poor ice quality due to water quality or ice maker problems.	A. Remove access covers in cold plate cover & inspect/clean drains. B. Correct water quality or repair ice maker.
Beverage does not dispense	A. No 30 VDC to valves. B. No touch response.	A. Restore 30 VDC to valves. B. Restart unit.
Beverage is too sweet	A. Valve BRIX requires adjustment.	A. Adjust valve BRIX.
Low water pressure	A. Could be caused by excessively long runs (over 40 ft.) of 3/8" water supply line. B. Low water pressure. C. Plugged water filter. D. Water booster bladder has burst.	A. Increase line size to 1/2". B. Add water pressure booster pump. C. Change water filter. D. Replace water booster tank/bladder.

NOTE: Contact your local syrup or beverage equipment distributor for additional information and troubleshooting of beverage system.

Cornelius Inc.
www.cornelius-usa.com