



Flavor Magic Module Integrated & Aftermarket

Installation, Use & Care Manual

This manual is updated as new information and models are released.
Visit our website for the latest manual. www.multiplexbeverage.com

Safety Notices

As you work on Multiplex equipment, be sure to pay close attention to the safety notices in this manual. Disregarding the notices may lead to serious injury and/or damage to the equipment.

Throughout this manual, you will see the following types of safety notices:

Warning

Text in a Warning box alerts you to a potential personal injury situation. Be sure to read the Warning statement before proceeding, and work carefully.

Caution

Text in a Caution box alerts you to a situation in which you could damage the equipment. Be sure to read the Caution statement before proceeding, and work carefully.

Procedural Notices

As you work on Multiplex equipment, be sure to read the procedural notices in this manual. These notices supply helpful information which may assist you as you work.

Throughout this manual, you will see the following types of procedural notices:

Important

Text in an Important box provides you with information that may help you perform a procedure more efficiently. Disregarding this information will not cause damage or injury, but it may slow you down as you work.

NOTE: Text set off as a Note provides you with simple, but useful, extra information about the procedure you are performing.

Read These Before Proceeding:

Caution

Proper installation, care and maintenance are essential for maximum performance and trouble-free operation of your Multiplex equipment. Read and understand this manual. It contains valuable care and maintenance information. If you encounter problems not covered by this manual, do not proceed, contact Multiplex Beverage. We will be happy to provide assistance.

Important

Routine adjustments and maintenance procedures outlined in this manual are not covered by the warranty.

Warning

PERSONAL INJURY POTENTIAL

Do not operate equipment that has been misused, abused, neglected, damaged, or altered/modified from that of original manufactured specifications.

NOTE: SAVE THESE INSTRUCTIONS.

We reserve the right to make product improvements at any time. Specifications and design are subject to change without notice.

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Section 1 General Information

Read This Manual

Multiplex Beverage developed this manual as a reference guide for the owner/operator and installer of this equipment. Please read this manual before installation or operation of the machine. A qualified service technician must perform installation and start-up of this equipment, consult **Section 5** within this manual for service assistance.

If you cannot correct the service problem, call your Multiplex Service Agent or Distributor. Always have your model and serial number available when you call.

Your Service Agent _____

Service Agent Telephone Number _____

Your Local MBE Distributor _____

Distributor Telephone Number _____


Model Number _____

Serial Number _____

Installation Date _____

Unit Inspection

Thoroughly inspect the unit upon delivery. Immediately report any damage that occurred during transportation to the delivery carrier. Request a written inspection report from a claims inspector to document any necessary claim.

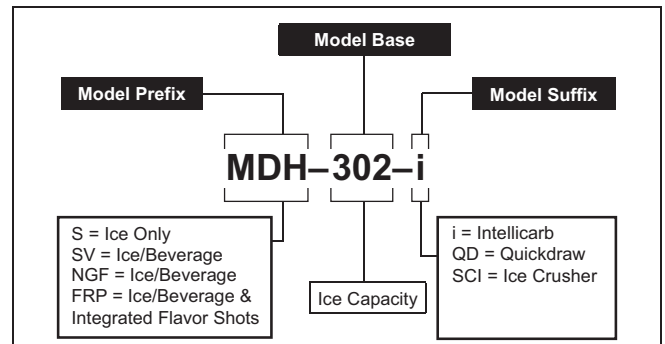
 Warning PERSONAL INJURY POTENTIAL Do not operate equipment that has been misused, abused, neglected, damaged, or altered/modified from that of original manufactured specifications.
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Model Numbers

This manual covers the following models:

Beverage/Ice Dispensers
Flavor Magic, MDH302, MDH402, SV-200, SV-250

HOW TO READ A MODEL NUMBER



Accessories

Portion control through adjustable dispense time, backlit dispense nozzle with field-selectable flash sequence, built-in dispense counter to track individual flavor sales, POP static cling instruction sheet, easy-to-install pre-assembled valve/control board module.

MODULE KIT CONTENTS

Switch cover with nozzle, ice chute bracket, cover mounting bracket, internal nozzle tubing mount, control board and valve solenoid assembly, nozzle LED

BACK ROOM KIT CONTENTS

BIB rack, BIB syrup pumps (1 for each flavor), low pressure CO₂ regulator (0-100 PSI), 50 feet of bundled tubing (1 tube for each flavor)

CONNECTORS

Use the following part numbers when ordering additional kits or replacement parts.



P37SBBKHN (Coca Cola)



QCD-II (General Bottler)



PCS1 (Pepsi)

SANITARY LEVERS

Use the following part numbers when ordering additional kits or replacement parts.



020000409 Narrow Lever is used on the following units:
MD & SV-175, MD & SV-200/250 (10 valve), MDH-402 (20 valve)

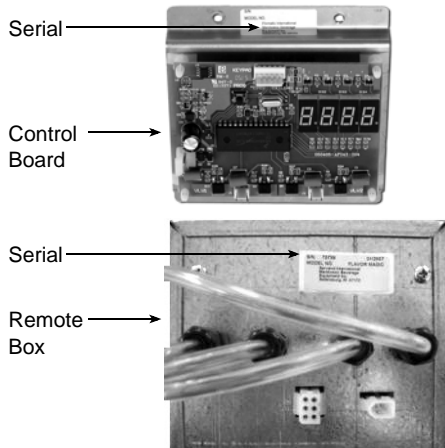


020000410 Wide Lever is generally used on the following units:
MD & SV-150, MD & SV-200/250 (8 valve), MDH-302/402 (16 valve)

Serial Number Location

This number is required when requesting information from your local distributor. The serial number is listed on the SERIAL NUMBER DECAL affixed to the Flavor Magic control board bracket.

FLAVOR MAGIC SERIAL NUMBER LOCATIONS



Warranty Information

Consult your local MBS Distributor for terms and conditions of your warranty. Your warranty specifically excludes all beverage valve brixing, general adjustments, cleaning, accessories and related servicing.

Your warranty card must be returned to MBS to activate the warranty on this equipment. If a warranty card is not returned, the warranty period can begin when the equipment leaves the MBS factory.

No equipment may be returned to MBS without a written Return Materials Authorization (RMA). Equipment returned without an RMA will be refused at MBS's dock and returned to the sender at the sender's expense.

Please contact your local MBS distributor for return procedures.

Section 2

Installation Instructions

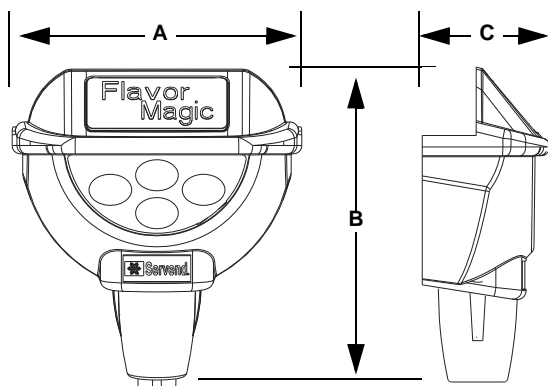
General

These instructions are provided to assist the qualified installer. Contact your Multiplex Beverage Service Agent or call Multiplex Beverage Systems for information regarding start-up services.

Important

Failure to follow these installation guidelines may affect warranty coverage.

DIMENSIONS



Flavor Magic	A	B	C
Module*	4.66" (11.84 cm)	5.08" (12.90 cm)	1.97" (5.00 cm)

ESSENTIAL TOOLS

- Tubing Cutters
- Oetiker pliers
- Phillips and slotted [screwdriver](#)
- Power drill
- Six (6) inch adjustable wrench
- Tape Measure

⚠ Warning

Carbon Dioxide (CO₂) displaces oxygen. Exposure to a high concentration of CO₂ gas causes tremors, which are followed rapidly by loss of consciousness and suffocation. If a CO₂ gas leak is suspected, particularly in a small area, immediately ventilate the area before repairing the leak. CO₂ lines and pumps must not be installed in an enclosed space. An enclosed space can be a cooler or small room or closet. This may include convenience stores with glass door self serve coolers. If you suspect CO₂ may build up in an area, venting of the B-I-B pumps and / or CO₂ monitors must be utilized.

PRE-INSTALLATION CHECKLIST

When installing any system, first make sure the major components are available. Generally the major components necessary for an installation are:

Typical BIB System:

- B-I-B connectors
- B-I-B regulator set
- B-I-B rack
- B-I-B syrup boxes

Post Mix System:

- CO₂ regulator set
- Beverage dispenser
- Beverage tubing
- CO₂ tank
- Carbonator
- Stepless (Oetiker) clamps
- Chain for CO₂ tank

Electrical

GENERAL

⚠ Warning

All wiring must conform to local, state and national codes.

MINIMUM CIRCUIT AMPACITY

The minimum circuit ampacity is used to help select the wire size of the electrical supply. (Minimum circuit ampacity is not the beverage/ice machine’s running amp load.) The wire size (or gauge) is also dependent upon location, materials used, length of run, etc., so it must be determined by a qualified electrician.

VOLTAGE

The standard voltage for the Flavor Magic Module is 24VAC, 0.5 AMP, powered by existing valve transformer on dispenser.

MINIMUM CIRCUIT AMPERAGE CHART

Important

Due to continuous improvements, this information is for reference only. Please refer to the dispenser serial number tag to verify electrical data. Serial tag information overrides information listed on this page.

Dispenser	Voltage/Cycle	Minimum Circuit Amps
MDH-302	115/60	3.5 FLA
MDH-302 w/EM MDH-402 MDH-402 w/24" EM	220/50, 220/60, 240/50, 240/60	4.0 FLA
	220-240/50	4.5 FLA
MDH-402 w/34" EM	220-240/50	5.0 FLA
SV-200, SV-250	115/60	2.8
	220/50, 220/60, 240/50, 240/60	1.5
	220-240/50	5 (with carb deck)

GROUNDING INSTRUCTIONS

⚠ Warning

Risk of electrical shock. Connect to a properly grounded outlet only.

This appliance must be grounded. In the event of malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

⚠ Warning

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment grounding conductor. If repair or replacement of the cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the appliance is properly grounded. Do not modify the plug provided with the appliance — if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

 **Warning**

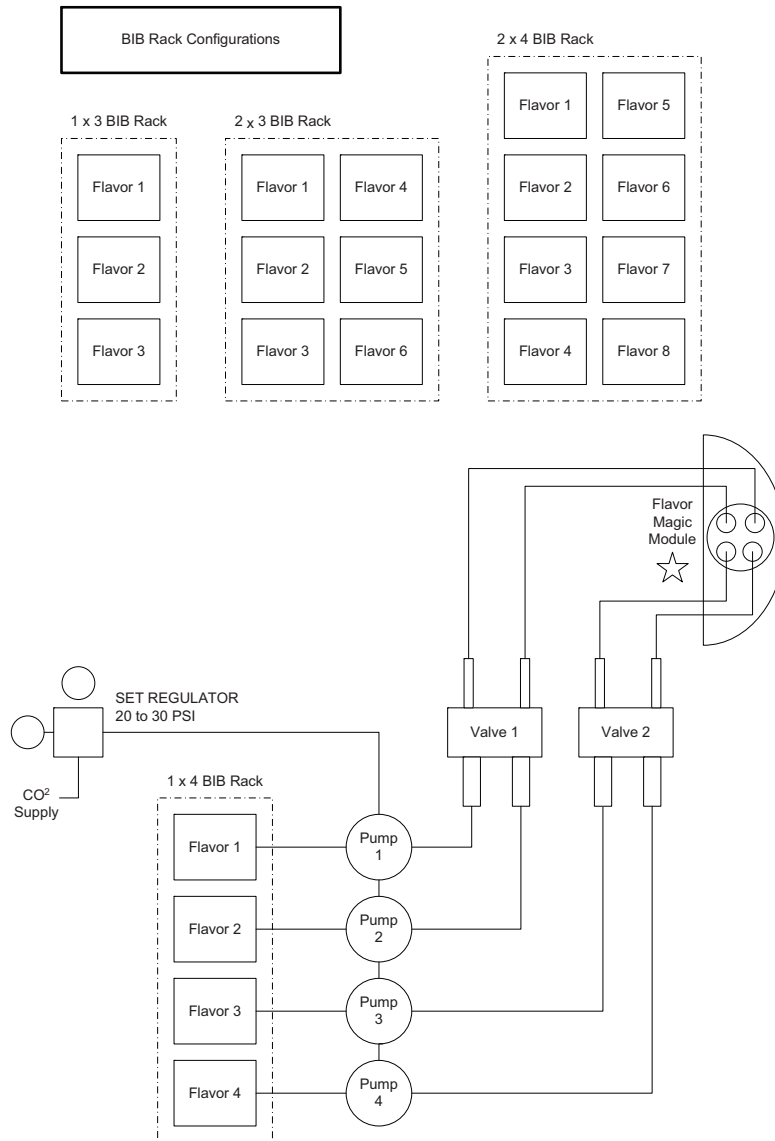
When using electric appliances, basic precautions should always be followed, including the following:

- a. Read all the instructions before using the appliance.
- b. To reduce the risk of injury, close supervision is necessary when an appliance is used near children.
- c. Do not contact moving parts.
- d. Only use attachments recommended or sold by the manufacturer.
- e. Do not use outdoors.
- f. For a cord-connected appliance, the following shall be included:
 - Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
 - Unplug from outlet when not in use and before servicing or cleaning.
 - Do not operate any appliance with a damaged cord or plug, or after the appliance malfunctions or is dropped or damaged in any manner. Contact the nearest authorized service facility for examination, repair, or electrical or mechanical adjustment.
- g. For a permanently connected appliance — Turn the power switch to the off position when the appliance is not in use and before servicing or cleaning.
- h. For an appliance with a replaceable lamp — Always unplug before replacing the lamp. Replace the bulb with the same type.
- i. For a grounded appliance — Connect to a properly grounded outlet only. See Grounding Instructions.

Recommended Plumbing

GENERAL

The Flavor Magic Module is compatible with MDH & SV units. See the appropriate section for instructions on attaching the module assembly to the unit.



CAPACITIES

Module	Valves	Flow Rate	Dispense Time
Flavor Magic	1 per flavor, up to 4 flavors	Variable, 0.5 oz/ sec nominal	0.2 - 10 seconds, adjustable in 0.2 second increments

SPECIFICATIONS CHART

	MIN.	MAX
Dispenser Incoming Plain Water Pressure	40 psi dynamic	70 psi static
Ambient Temperature	40°F (4°C)	105°F (41°C)
B-I-B (Secondary)	75 psi or according to line run	
Flavor Magic Regulator	20 psi MAX or according to line run	

Step by Step Aftermarket & Integrated Installations

PRE-INSTALLATION

Important

MDH Aftermarket installations, measure the merchandiser depth from the valve mount cap to the outside. If the depth is approximately 5 inches, STOP. This version of Flavor Magic is not compatible with the merchandiser frame. Contact the factory to order a compatible merchandiser frame. (See Parts Manual)

1. Disconnect electrical power to ice drink dispenser.
2. Remove translite, lamps and splash panel from dispenser work area.
3. Remove "Push for Ice" lever from rocking chute where the Flavor Magic is to be installed.
4. Remove the caps from the valves on either side of the rocking chute.

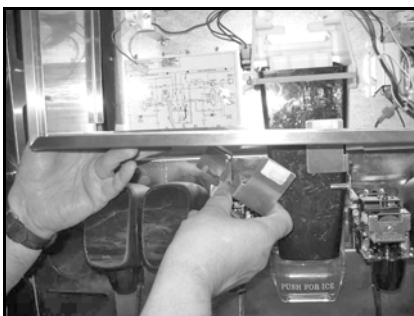
Important

Integrated MDH & SV installations, additional components must be field installed and are found in a box shipped with the dispenser. 0-30 CO₂ regulator, CO₂ and Flavor Magic syrup lines, fittings, and clamps must be field supplied.

MDH-302/402 MODULE

Aftermarket

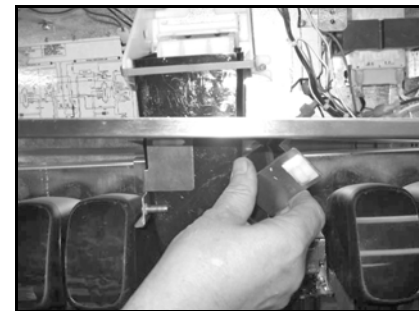
1. Remove the merchandiser or carefully lift up the merchandiser approximately 1 inch on the side where the Flavor Magic is to be installed.
2. Insert the LH mounting bracket, 020000896, under the merchandiser at a 45 deg. angle.



3. Rotate the bracket vertically hooking the back flange over the valve mounting cap and passing the front plate through the opening in the merchandiser in front of the rocking chute.



4. Insert the RH mounting bracket, 020000897, under the merchandiser at a 45 deg. angle.



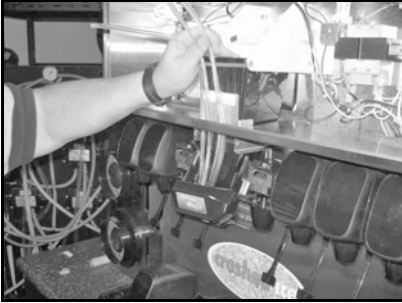
5. Rotate the bracket vertically hooking the back flange over the valve mounting cap and passing the front plate through the opening in the merchandiser in front of the rocking chute.



6. Carefully lower the merchandiser into place.



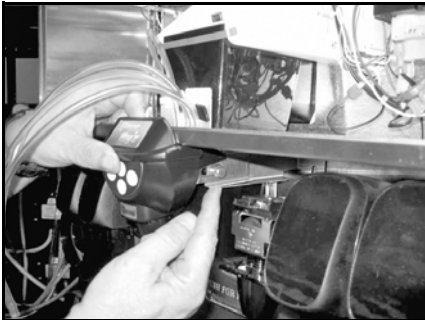
7. Route the tubing and ribbon cables from the module assembly between the opening in the merchandiser and mounting brackets.



8. Align the channels on the center bracket, [020000898](#), inside the channels on the LH and RH mounting brackets.



9. Loosely fasten the thumbscrews on both sides of the bracket assembly
10. Push the plastic module housing against the merchandiser frame. Firmly tighten the thumb screws.



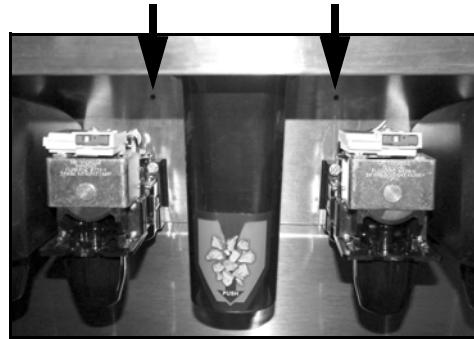
11. Secure the tubing through the plastic clips on the mounting brackets.



⚠ Caution

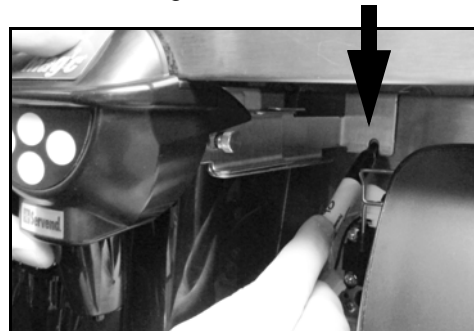
DO NOT PINCH TUBING BETWEEN CHUTE PLATE AND MERCHANDISER

12. Locate the two (2) pre-punched holes for mounting the Flavor Magic module bracket, one on each side of the ice chute.



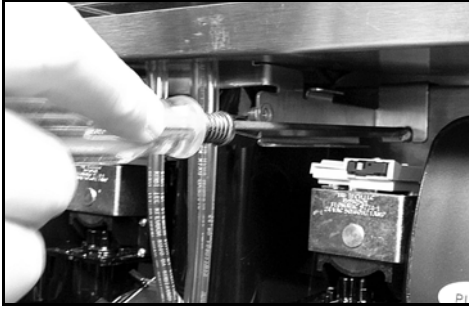
NOTE: If the dispenser does not have predrilled holes they will have to be drilled in order to properly secure the bracket.

- A. Before drilling the holes first remove the valves adjacent to the ice chute and with the module attached put the bracket in place. Check that the mounting brackets are not rubbing the rocking chute. Lift the merchandiser and slide the bracket assembly left or right to allow the brackets to clear the chute.
- B. Using the notches on the bracket mark where the holes will go on the unit.



- C. Drill the holes using the .141 diameter drill bit and tap them with the 8-32 tap included in the kit.

- Secure the Flavor Magic mounting bracket with the two (2) slotted knurled screws provided.

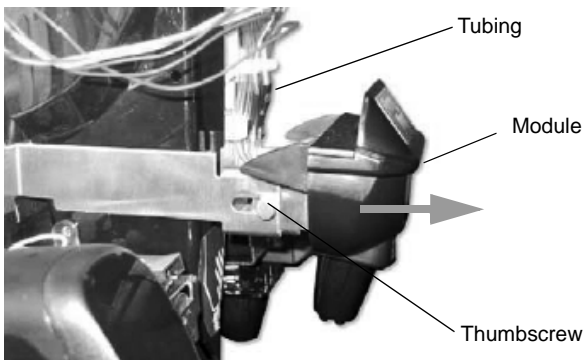


- Replace "Push for Ice" lever in lower position holes on rocking chute or replace with sanitary lever as required by local codes. Check to assure door lock is functioning properly.

SV-150/175/200/250 MODULE

Aftermarket

- Hook the flanges on the module assembly, [020001154](#), over the valve mounting cap on either side of the rocking chute. Center the assembly, so there is clearance between the chute and brackets.
- Loosen, but do not remove, the thumb screws on either side of the module assembly. Pull the plastic module forward.



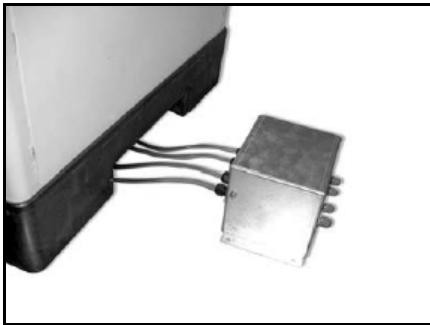
- Make sure the tubing is through the plastic clips and loops toward the bottom plate, allowing the module to slide forward and back w/o straining the tubes.
- Replace "Push for Ice" lever in lower position holes on rocking chute or replace with sanitary lever and check to assure door lock is functioning properly.

SYRUP & CO₂ LINES

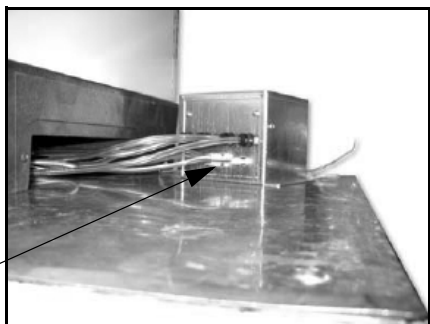
Remote Box

(For SV-150/175 & MDH-302/402 with Crusher)

- Identify the remote box part# [020000508](#). Select a location for the box close to the dispenser, but away from patron access. The box must be within 6-8 feet of the back of the unit. Ideal locations include behind the unit, or in a cabinet below the unit. The box may be mounted in any orientation.



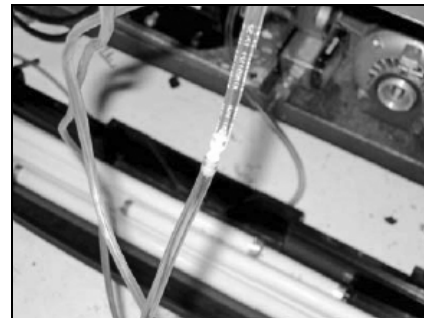
- Disconnect the valve harness from the load side of the transformer inside the unit's electrical box. Connect the 24V power harness, [020000590](#) to the load side of the transformer. Connect the valve harness to the connector on [020000590](#). (see wiring diagram)
- Route the 24V power harness, [020000590](#), behind the splash panel and below the unit to the remote box. Plug the harness into the two pin connector on the box.
- Connect the control harness, [020000585](#), to the connectors on the module for the LED and touch pad.
- Route the control harness, [020000585](#), behind the splash panel and below the unit to the remote box. Plug the harness into the six pin connector on the box.



- Check that the wiring length is sufficient to mount the box in the desired location.
- Remove the cover from the remote box by removing the two 8-32 screws and pulling upward on the cover.

Tubing

- Route the four (4) line bundle tubing from the back room to dispenser behind the valve mounting plate to the mounted valve assembly or remote box depending on your installation, do not attach yet. Remote box installations, place the 1/8" plastic tubing connectors, [020001327](#) firmly into the four (4) line bundle tubing.



Remote Box Tubing & Connectors

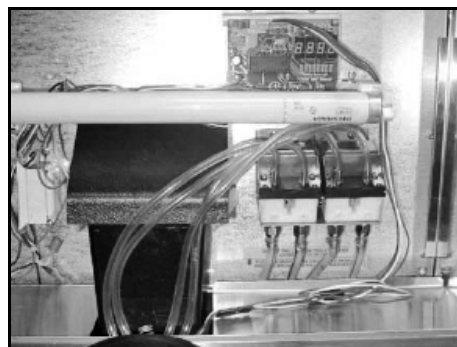
Important

Use caution so wires that power post mix valves are not broken or dislodged.

NOTE: Cut any excess length from the end of the tubing connected to the Flavor Magic module but leave enough slack in tubing to reach the approximate location where valve assembly or remote box will be mounted.

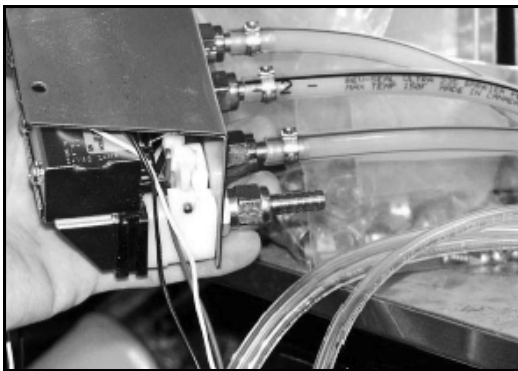
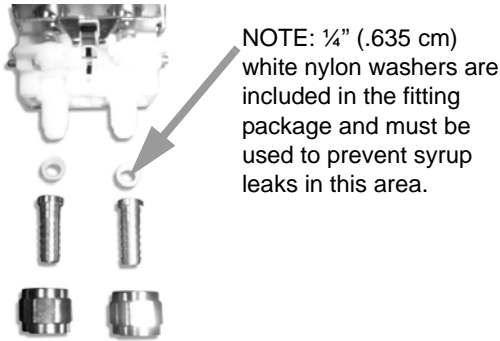
NOTE: MDH installations using Flavor Magic modules on both sides dispensers, add tees and additional tubing for 3 or 4 flavor dual module kits and route to opposite side of dispenser. If same flavors are used on both sides, use 1/4" by 1/4" by 1/4" tees (.635 cm x .635cm x .635 cm) to deliver syrup to both sides.

- Route 1/4" (.635 cm) syrup lines (field supplied) from BIB rack containing in back room to dispenser. The number of lines will be determined by the number of flavors used.

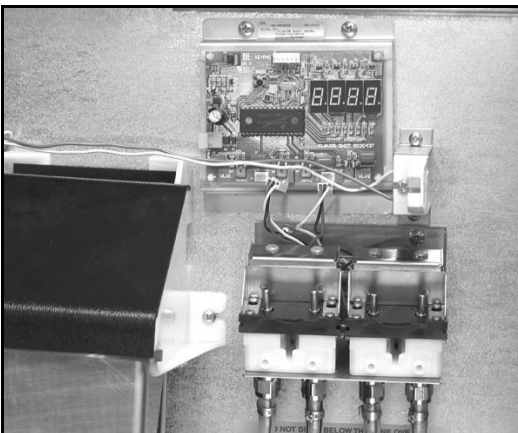


Factory Integrated Valve & Line Locations

- Attach four (4) bundle syrup lines, nuts, washers, and barbed fittings to the Flavor Magic valve inlets. Be sure NOT to over tighten nuts.



- Mount valve assembly plate with the two (2) #10 x 3/4" (.953 cm) sheet metal screws provided in a convenient spot near the rocking chute, or place remote box in final location if doing a remote box installation.

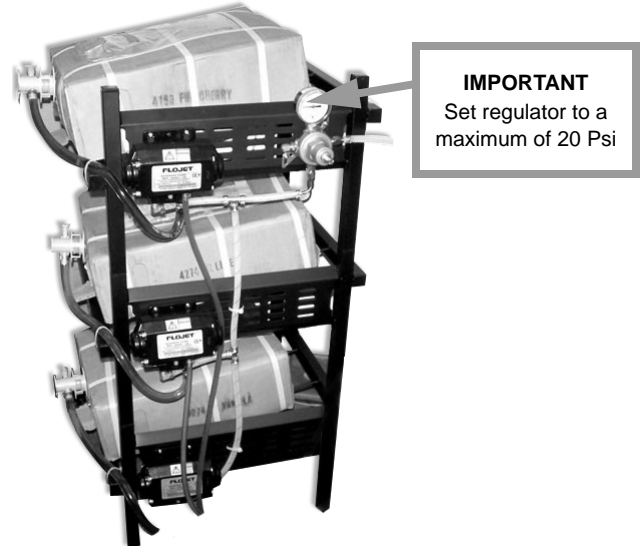


- Route the vinyl lines to the valve assembly or remote box and cut lines to fit neatly over the valve outlets.

Back room Tasks

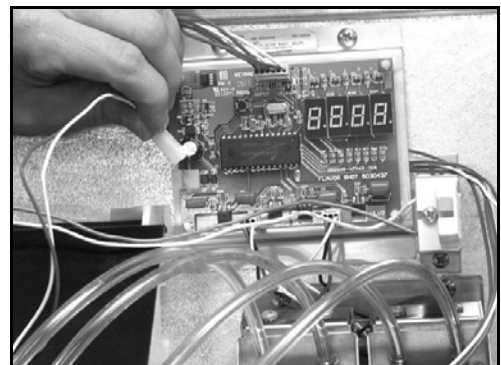
- Turn off CO₂ supply in back room.
- Route 1/4" (673 cm) beverage tubing from CO₂ supply to CO₂ regulator on BIB rack and secure with proper Oetiker clamp.

- Place BIB syrup on BIB rack.
 - Attach BIB connectors to flavor syrup boxes.
- NOTE: BIB connectors vary with syrup manufacturer. Assure that correct connector is used.
- Turn on CO₂ supply and adjust to twenty (20) PSI (1 bar).
 - Check syrup and CO₂ connections for leaks. Return to dispenser unit



Control Board

- Connect the control board harness to the circuit board and to the electrical connectors from the touchpad cover and LED.



- Connect the 24V power harness from the transformer to the circuit board.
- Restore power to unit. (Blue LED light(s) should be lit).
- Assure that control board readout is in dispense mode ("- - - -")

FINALIZING INSTALLATION

- 27. Purge air from syrup lines by utilizing the purge/sanitize mode until syrup is running freely. Adjust dispense time if desired. (See Control Board programming)
- 28. Return control board to dispense mode by pressing the program button.
- 29. Test each flavor for proper dispensing by placing a cup under the nozzle and dispense one at a time by pressing each flavor icon. Dispense rate is preset at one-half (1/2) oz (15 ml) per one (1) second or dispense. Additional setup is normally not required for proper operation. (See the Operation section for programming the dispense time.)
- 30. Neatly arrange and tie up wires. Route the tubing and wiring away from the rocking chute mechanism. Secure the tubing and wiring using the peel and stick plastic clips, [0905403](#), provided.



- 31. Replace splash panel, lamps and merchandiser cover.

SV Installations

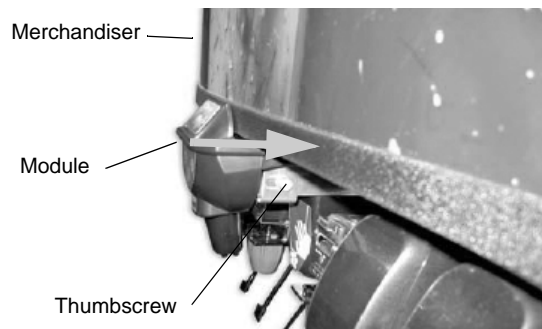


- 32. SV Installations, remove the black plastic bottom piece from the merchandiser assembly by removing the 3, #10 screws.

- 33. Assemble the black, plastic bottom piece with cutout, 02000592, to the merchandiser assembly. Push the plastic piece all the way down onto the translite. Tighten the 3, #10 screws removed from the original merchandiser bottom.



- 34. Attach the merchandiser assembly to the machine.
- 35. Push the flavor magic module inward against the merchandiser. Tighten the thumb screws on with either side of the module assembly.



NOTE: To remove the merchandiser, loosen but do not remove the thumbscrews and slide the module outward away from the merchandiser.

MDH & SV Installations

- 36. Replace the valve [caps](#)
- 37. Place the flavor labels on the cover pad according to the desired flavor line up.
- 38. Carefully position the clear adhesive decal overlay over the flavor labels and secure to pad.
- 39. Review basic Flavor Magic operation, flavor BIB changing, and periodic cleaning and maintenance with customer.

ADA KEY PADS

These instructions are for installations with this option.

1. Remove power from the unit.

Merchandiser Removal

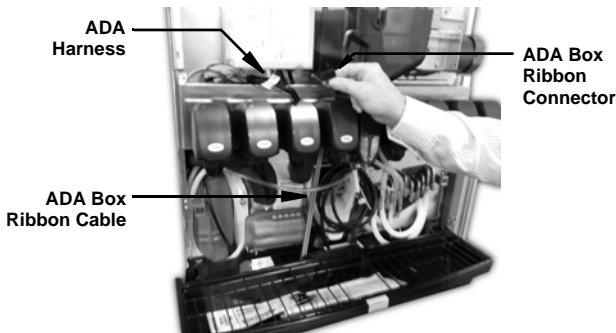
2. Gain access to the merchandiser area of the dispenser by one of the following methods;
 - A. MDH Series units, remove the medallion from merchandiser to gain access to the area above the valve mount cap. Medallions are removed through the top of standard merchandisers and either side of the extended merchandisers.
 - B. SV & SVi Series units, loosen the two knurled fasteners located in the top of the merchandiser that hold the merchandiser in place. Then remove the merchandiser by lifting up and tilting forward.

Splash Panel Removal

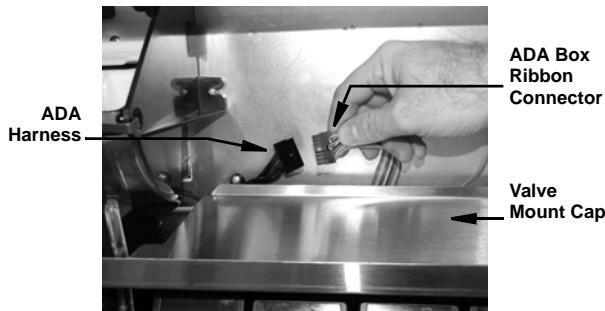
3. Remove the splash panel from the unit by removing the two (2) phillips head screws holding it in place.

ADA Wiring

4. Route the ADA ribbon cable under the drain pan.
5. Continue routing the ADA cable up to the ADA harness;
 - A. SV & SVi units, continue routing the ADA cable behind the valve mount cap on the left hand side of the unit and connect to the ADA harness clipped to the foam front.

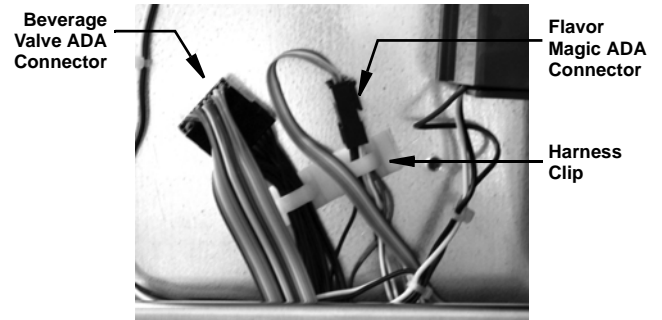


- B. MDH units locate the ADA harness, on units with a crusher it will be on the left of the ice chute, non-crusher units will be on the right. Connect to the ADA harness that is clipped to the foam front.



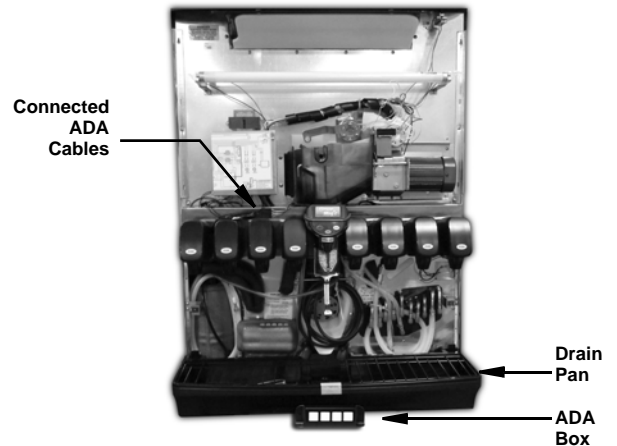
6. Neatly tuck in and take up any slack remaining in the ADA ribbon cable so it will not be in the way of any moving parts or panels when they are placed back on the unit.

NOTE: Units that also have ADA for beverage valves will have 2 harness connections, one for the beverage ADA Key Pad Box and one for the Flavor Magic ADA Box. The Flavor Magic uses the smaller connector.



Drain Pan & ADA Touch Pad Box

7. Attach the drain pan to the unit.
8. Center the ADA Key Pad Box (or Boxes if more than will be used) with the unit in front of the drain pan and secure into place.



Important

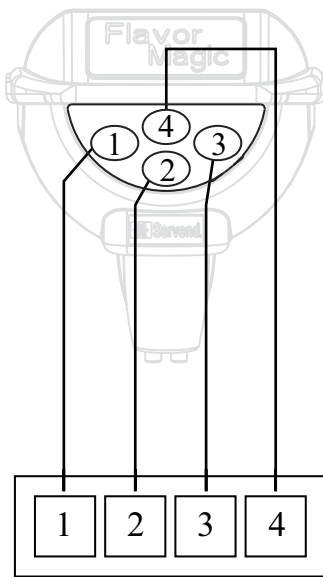
If mounting the ADA Box directly in front of the drain pan on the counter top leave a minimum of 1 inch space between the bottom edge of the drain pan and the ADA Box to allow space for drain pan removal. Units that need more space for drain pan removal, mounting to the front edge of the counter top may be necessary.



9. Apply corresponding drink labels to the ADA key pads using the ADA Key Pad Matrix.

NOTE: Flavor Magic correspond counterclockwise starting from the far left button on the module to left to right on ADA key pads. If buttons are not used they will be blanked out.

ADA Key Pad Matrix



3 & 4 Button Flavor Magic

Finish Installation

- 10. Put the splash panel and merchandiser back onto the unit and reinstall the screws that hold them in place.
- 11. Restore power to the unit.

Starting Your Beverage System & Dispenser



MDH-302



SV-250

Upon completion of the beverage dispenser and / or system installation, all tubing, dispenser, and system components must be cleaned and sanitized prior to use.

NOTE: At installation, equipment, dispensers, and tubing get moved through many environments, dirt, dust, chases, insulation, drywall, etc. It is an important procedure and best practice to address cleaning to deliver the best quality drink to your customer.

Important

Clean and sanitize the water and syrup circuits according to instructions provided in this manual. Clean and sanitize the dispenser components according to instructions provided in this manual. Seal to counter top when no legs are used with the unit. Consult and use local health codes if a discrepancy occurs between this manual and your local health codes.

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Section 3 Operation

General System Overview

COMPONENT IDENTIFICATION



RACKING

A rack (or shelf) system affords systematic placement and complete usage of the beverage paid for. The B-I-B rack allows the boxes to lay properly for syrup dispersal. Please check with your B-I-B syrup supplier. Some boxes must be slightly tilted down, while others may be in virtually any position.

B-I-B

The Bag-In-Box system refers to a plastic disposable bag. The B-I-B normally contains 5 gallons of syrup, however some locations offer 2-1/2 gallon B-I-B units. This plastic bag is then held inside a cardboard or other container. B-I-B systems are for post-mix applications only.

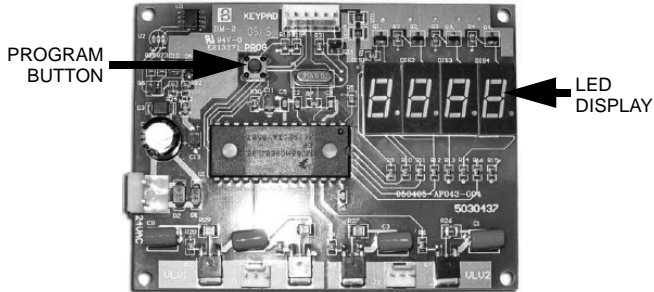
PUMPS

The syrup in a B-I-B system is delivered to the beverage system through gas operated pumps. These pumps extract the syrup out of the bags, forcing the syrup throughout the system.

Programming Modes

To exit the program mode at any time hold the program button for >3 seconds and the controller will switch to the dispense mode. The program mode can only be accessed by pressing the program button during the first five seconds of initial power up.

PROGRAM DISPENSE TIME



1. The program mode is used to adjust the dispense time. To access the Program Mode, disconnect power to the control board, wait ten (10) seconds and reconnect power.
2. Press the program button one time on the control board during the first five (5) seconds after power is applied.
3. The LED display will show "P r o". To check the current dispense time, press the corresponding flavor button on the touchpad and the time will be displayed on the LED (Example "1.0"). a. To increase the time (+) by two-tenths (0.2) second increments press flavor button 1 (far left button). To decrease the time (-) by two-tenths (0.2) second increments press flavor button 3 (far right button). The default setting is one (1.0) second.

PURGE/SANITIZE

1. Purge/Sanitize mode allows the user to purge air from the syrup lines during initial start-up. The second function of this mode is to energize the valves to move sanitizer through all syrup lines automatically.
2. Enter the Purge/Sanitize Mode by press the program button until "P – S" is displayed.
3. Pressing flavor button 1 (far left button) will activate a sequenced four (4) second dispense that starts with flavor 1 then to flavor 2 etc. The valves will continue to cycle for 15 minutes or until the program button is pressed once.

DISPENSING MODES

Normal Dispense

With power applied to the control board, it will automatically start in dispense mode after a five (5) second delay. The LED display will count down from four (4) to zero (0) and then show " - - - " while in dispense mode. Simply pressing the desired flavor on the touchpad dispenses Flavor Magic.

Flavor Counter

The flavor counter tracks the number of flavor shots dispensed per flavor. To access Flavor Counter Mode, press the program button on the control board once for at least three (3) seconds. The LED display will show "C n t". In the count mode the Flavor Magic module will not dispense.

Check the number of dispenses for any flavor by pressing the corresponding touchpad button. To check another flavor press the program button once and then the corresponding flavor button on the touchpad. To return to dispense mode press the program button until the LED display shows " - - - ".

CHANGING NUMBER OF ACTIVE FLAVORS

To line up flavors with valves, note that valve outlets number from left to right 1...2...3...4. Touch pad flavor tab is numbered as shown below. Connect vinyl tube from outlet 1 and dispense with flavor tab 1, etc..



The current Flavor Magic control board is set up in the 4 flavor default mode. This mode will handle all dispensing situations whether 3 or 4 flavors are used. Some early boards were set up as default in the 3 flavor mode. If the customer desires to add another flavor for a total of 4, proceed as follows:

1. Power down the circuit board by disconnecting the 24 volt connector in the lower left hand side of the board. "24VAC" is imprinted on the board next to the pin connection.
2. Wait a minimum of 10 seconds.
3. Power up the board by connecting the 24 volt connector.
4. IMMEDIATELY (within 5 seconds) press and hold the "PROG" button down.
5. After a few seconds, the number "4" will appear on the display.
6. Release the "PROG" button. The board will cycle the display from "Pro" to "4.....3.....2.....1.....0" and then to " - - - ".
7. The circuit board is now enabled to dispense the 4th flavor. The 4th flavor button is the top middle button.

8. A flavor tab for the 4th flavor will have to be added to the touch pad. To do this, obtain one (1) P/N 5030780 20 flavor decal pad. Remove the P/N 5031579 decal overlay and add the 4th flavor tab as well as replace any flavor tabs which came off when removing the decal overlay.

NOTE: Position of 4th flavor on the touch pad in the picture and placed tab where indicated.

9. Obtain a new P/N 5031579 decal overlay and place over the tabs.

If the customer decides to go back to 3 flavors, it will not be necessary to change the board back to 3 flavors. However, it can be done by following steps 1 through 6 above. The number "3" will appear on the display. Then disconnect the number "4" syrup from the system, remove the 5031579 decal overlay, remove the flavor tab "4" and replace the 5031579 decal overlay.

NOTE: It would be a good idea to have an additional P/N 5030780 in case flavor tabs are damaged in the process.

TOUCH PAD LED



The blue LED on the touch pad can be set to one (1) of two (2) display modes:

Steady LED

1. Steady illumination is the default mode, the LED will remain on steady until dispense is activated. The light will flash only when product is being dispensed. In this mode, the control board display will read "Off".
2. To program the steady LED, press the program button until a flashing "- - -" is displayed. Press flavor button 1 (far left button) to switch from "On" to "Off", "Off" is the default. The LED will now stay on steady.
3. Press program button to exit to the next program function.

Flashing LED

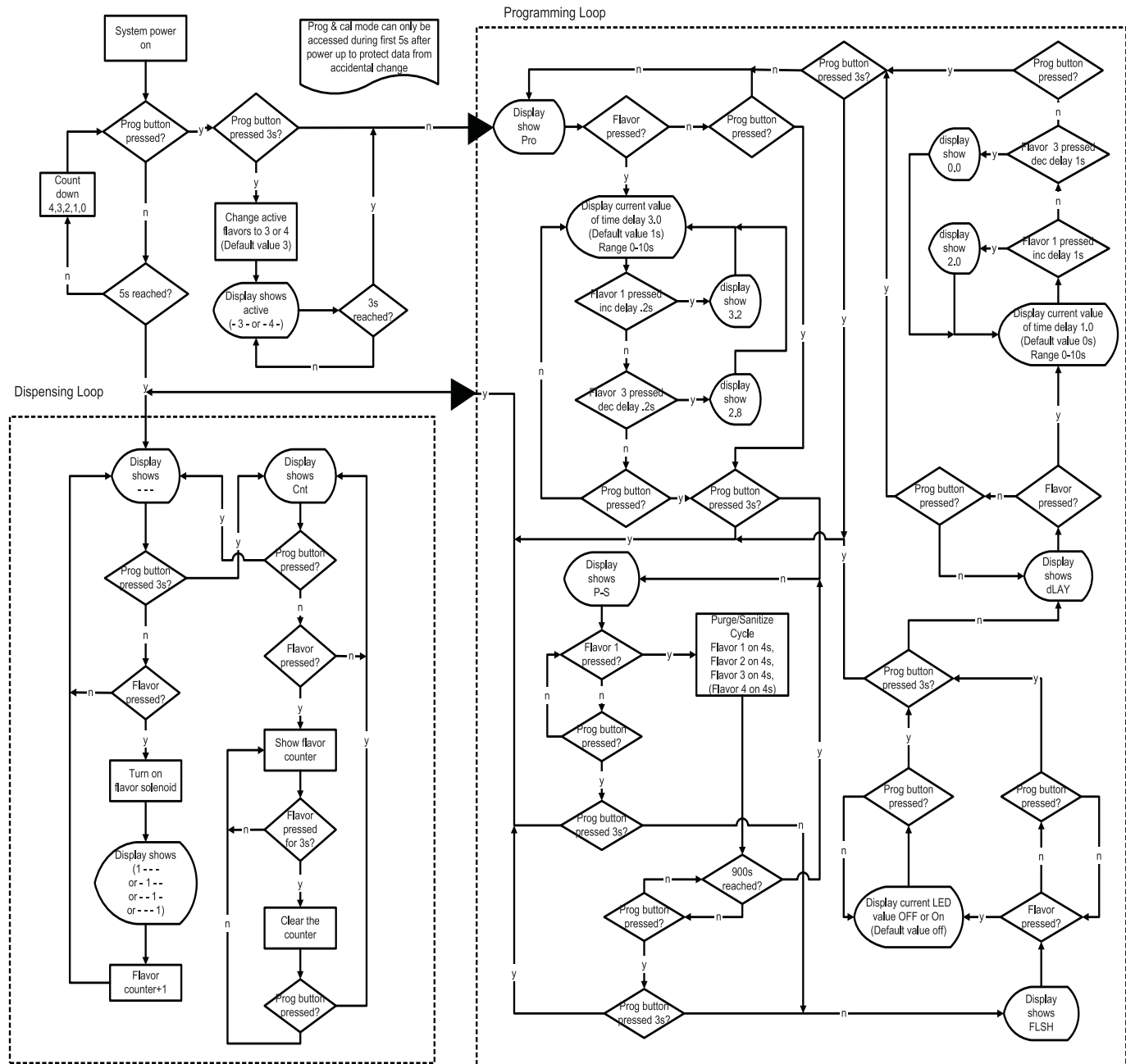
1. In Flash mode the LED will turn on for ½ second and off for ½ second.

2. Enter the Flash mode by pressing the program button until a flashing "- - -" is displayed. Pressing flavor button 1 (far left button) will switch from "Off" (default) to "On". The LED will now flash.
3. To change back to the default simply press flavor button 1 again and the display should read "Off".
4. Press program button to exit to the next program function.

TIME DELAY AFTER DISPENSE

1. A time delay can be programmed into the control board which will prevent the system from dispensing another flavor for a period of from 0 to 10 seconds following a dispense. The default is 0 seconds.
2. Enter the Time Delay mode by pressing the program button until "d L A Y" is displayed. To check the current delay time press any flavor button one time and the current value will be displayed. To increase the time (+) by 1.0 second increments press flavor button 1 (far left button).
3. To decrease the time (-) by 1.0 second increments press flavor button 3 (far right button). When done move on to another programming mode or if you are finished return the control board to the dispense mode by pressing the program button and holding for 3 seconds or until the LED displays 0.

Control Logic Matrix



Section 4 Maintenance

PREVENTATIVE MAINTENANCE

Proper care of the Flavor Magic is a vital part of keeping your unit in top condition. Following the guidelines below will assist you in continued trouble free operation. Contact Multiplex at 1-800-367-4233 for more information about our ProActive Maintenance Program.



Warning **Electric Shock Hazard**

Unplug unit before servicing or cleaning.

Important

Under normal operating conditions, periodic cleaning is minimal but absolutely necessary

1. Conduct daily maintenance of the unit. Clean the nozzle and retainer area in order to prevent syrup buildup in this area by doing the following:
 - a. Fill a small cup with warm to hot water.
 - b. Immerse the nozzle area fully by drawing the cup up and around the nozzle.
 - c. Allow syrup to dissolve into the water. Change the water several times to assure the syrup is adequately removed.
 - d. Discard water.
2. After each removal from an empty bag and prior to placing connector on new bag clean BIB connectors to prevent syrup residue by doing the following:
 - a. Prepare a bucket of warm to hot water.
 - b. Submerge connector in water until syrup residue is dissolved.
 - c. Place connector on new bag.
 - d. Discard water.

CLEANING CHECKLIST

- Check CO₂ supply. If CO₂ supply is low, an arrow on the primary regulator gauge will point to a shaded area that reads "Low CO₂" or "Change CO₂ Cylinder."
- Check syrup supply.
- Clean drain pan, grid, and splash panel.
- Clean the nozzles.

BEVCLEAN™ PROCESS

To efficiently clean entire dispensing circuit:

1. Hook up BevClean™ system per BevClean™ instructions.
2. Set Control Board to "Purge" mode. Press Flavor 1 tab to initiate "Purge" Cycle to draw BevClean™ into system. Allow cleaner to remain in system for five (5) minutes.
3. Disconnect BevClean™ system and reconnect disconnects to BIB's.
4. Set Control Board to "Purge" mode. Press Flavor 1 tab to initiate "Purge cycle to completely remove BevClean™ from syrup lines and vinyl tubing. (See PURGE/SANITIZE in the Programming Modes section)
5. Set Control Board to "Purge" mode. Press Flavor 1 tab to initiate "Purge cycle completely fill system with syrup.
6. Restore Control Board to "DISPENSE" mode. Dispense and discard sufficient samples to assure all BevClean™ is removed from system.

CONVENTIONAL CLEAN/SANITIZE METHOD

Important

When changing syrup boxes, immerse connector in warm water (100° F, 38° C - maximum temperature) to remove syrup residue. **RECOMMENDED SANITATION INTERVAL IS EVERY 90 DAYS**



Warning

Flush sanitizing solution from syrup system. Residual sanitizing solution left in system could create a health hazard.



Warning

When using cleaning fluids or chemicals, rubber gloves and eye protection must be worn.

Sanitize the beverage system at initial start-up as well as regularly scheduled cleaning. The drain pan must be in place under soda valves, to carry away detergent and sanitizing agents that will be flushed through valves.

BAG-IN-BOX SYSTEM SANITATION

The procedure below is for the sanitation of one syrup circuit at a time. Repeat to sanitize additional circuits.

You will need the following items to clean and sanitize the Bag-in-Box (BIB) beverage system:

- Three (3) clean buckets
- Plastic brush or soft cloth
- Mild detergent
- Unscented bleach (5% Na CL O) or Commercial sanitizer
- Bag-In-Box bag connector

1. Prepare the following in the buckets:
 - Bucket 1 — warm to hot tap water for rinsing.
 - Bucket 2 — mild detergent and warm to hot water.
 - Bucket 3 — mix a solution of unscented bleach (5% Na CL O) or commercial sanitizer and warm to hot water. Mixture should supply 100 PPM available chlorine (1/4 oz. bleach to 1 gallon water).
2. Disconnect the “syrup-line side” of the BIB connector.
3. Rinse connector with warm tap water.
4. Connect syrup connector to BIB connector and immerse both into Bucket 1. A “bag-side” connector can be created by cutting the connector from an empty disposable syrup bag.
5. Set the Control Board to the “Purge” mode by pressing flavor button 1 (far left button) to activate a sequenced four (4) second dispense that starts with flavor 1 goes to flavor 2 etc. (The valves will continue to cycle for 15 minutes or until the program button is pressed once). (See PURGE/SANITIZE in the Programming Modes section)
6. Draw rinse water through system until clean water is dispensed.
7. Connect Bucket 2 to system.
8. Draw detergent solution by activating “Purge” mode as described in step 5 and operating valves until detergent solution is dispensed.
9. Allow detergent solution to remain in the system for 5 minutes.
10. Connect Bucket 3 to system.
11. Draw sanitizing solution by activating “Purge” mode as described in step 5 and operating valves until sanitizing solution is dispensed.
12. Allow sanitizer to remain in system for fifteen (15) minutes.
13. Remove the nozzle(s) and retainer(s) from the Flavor Magic Module(s) and scrub them with a plastic brush or cloth using the detergent solution.
14. Soak plastic tubing ends at retainer in sanitizing solution for fifteen (15) minutes.
15. Soak nozzle(s) and retainer(s) in sanitizer for fifteen (15) minutes.
16. Replace nozzle(s) and retainer(s).
17. Connect Bucket 1 to system.
18. Draw rinse solution by activating “Purge” mode as described in step 5 and operating valves until rinse water is dispensed.
19. Attach syrup connectors to BIB’s.
20. Draw syrup by activating “Purge” mode as described in step 5 and operate valves until only syrup is dispensed.
21. Place Control Board in dispense (“- - -”) mode and operate each flavor three (3) times into a disposable cup.
22. Discard the cup and contents. Shipping, Storage and Relocation

 **Caution**

Before shipping, storing, or relocating this unit, syrup systems must be sanitized. After sanitizing, all liquids (sanitizing solution and water) must be purged from the unit. A freezing environment causes residual sanitizing solution or water remaining inside the unit to freeze, resulting in damage to internal components.

Section 5 Before Calling for Service

Checklist

If a problem arises during operation of your dispenser, follow the checklist below before calling service. Routine adjustments and maintenance procedures are not covered by the warranty.

Problem	Possible Cause
Flavor Magic syrup does not dispense when flavor button is depressed.	Syrup supply depleted. CO ₂ supply depleted. BIB disconnect loose or packed with dried syrup residue. Check CO ₂ regulator for proper setting — 20 PSI (1 Bar). Check CO ₂ lines for kinks. Check syrup line for kinks. BIB pump inoperative. Valve solenoid inoperative. Vinyl tubing off at nozzle or at solenoid. Vinyl tubing plugged with syrup at nozzle or at solenoid.
No power to control board.	Check power supply at transformer — 24 VAC. Check connector to transformer and Control Board Flavor Shot. Check wiring for loose connections or open wires.
Control board inoperative.	Assure that Control Board is set to dispense — “ _ _ _ _ ”. Check for damage to Control Board.
If flavor syrup does not shut off.	Check for stuck solenoid.

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Continuing product
improvements may necessitate
change of specifications without
notice.

Part Number 020004002 04/12

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