

MiniWash 2 & 3











INSTRUCTION & OPERATION MANUAL

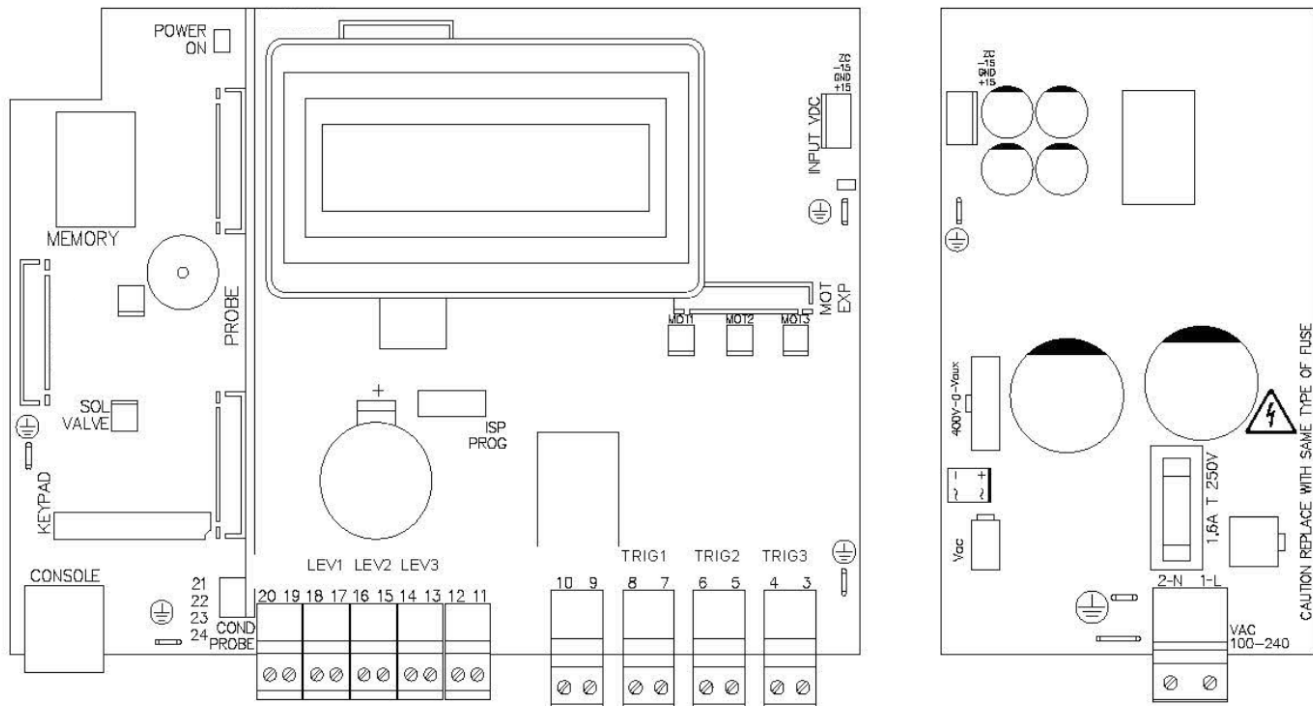
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SAFETY

-  Follow the instructions in this manual.
-  Check the voltage of the main power source and make sure that it matches one of the three available input voltages (115/208/230 vac) of the transformer inside the MiniWash 2/3.
-  All electrical connections to the MiniWash 2/3 should first be verified with a multimeter. Application of incorrect voltage will permanently damage the unit and is not covered under warranty. Avoid wiring to any power source that has large fluctuations in voltage and/or is prone to surges. Refer to the wiring diagram in this manual for all power and signal connections.
-  For all connections, please refer to the circuit board schematic contained in this manual.
-  Check the model of the equipment you have purchased for the references about installation, setting and programming.
-  **CAUTION:** The MiniWash 2/3 has high voltage connected to the transformer. Always disconnect power when servicing the unit.
-  **CAUTION:** During installation and electrical connections remove all power from the dishwasher.
-  Failure to follow these instructions may lead to personal injury, damage to the product or poor product performance.

Circuit Board Diagram



CAUTION!!! Disconnect ALL POWER before installing or servicing the MiniWash.

Function	Description
Main Power (2-N, 1-L)	Connect the main power here. 100-240V tolerance.
Trig 1	Pump 1 / Trigger 1 signal—24-240V
Trig 2	Pump 2 / Trigger 2 signal—24-240V
Trig 3:	Pump 3 / Trigger 3 signal—24-240V
LEV1	Level sensor for pump 1
LEV2	Level sensor for pump 1
LEV3	Level sensor for pump 1

Technical Specs

Description	Specification
Power Input	115/208/230 Vac 50/60 Hz
Signal Input	20-240VAC 50/60 Hz
Power Consumption	14W
Fuse	315mA @ 250VAC 5x20

Installation

INSTALLATION

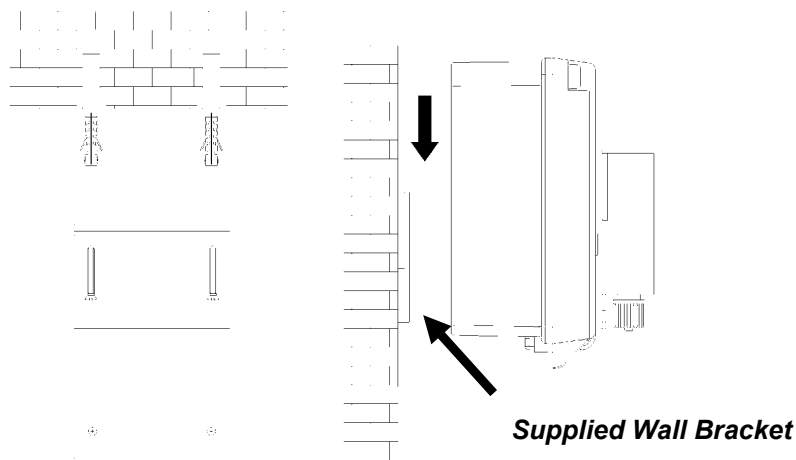
Mount the unit on a nearby wall (using suitable hardware) of the laundry machine. Locate a mounting spot within no more than 10 feet of the chemical supply. Always install the system at a safe, convenient height for the operators to load or unload solid containers or to perform maintenance.

Check all applicable plumbing and electrical codes before proceeding with the installation. This will help to ensure that the system is installed in safe and suitable manner. A wiring schematic of the laundry machine should be used as reference for making electrical connections this is typically provided by the laundry machine manufacturer if one cannot be located on the machine itself.

MOUNTING THE SYSTEM

Apply the panel unit system with the brackets and screws supplied:

- Determine a suitable location for the system;
- Using the bracket as a template, mark and drill holes for bolting the system to the wall;
- Insert the anchors in the holes;
- Bolt the bracket in place with the hardware provided;
- Mount the system with the bracket as the picture below;
- Open the Cabinet Front by unscrewing the upper screws ¼ of a turn:



Powering ON

Once the unit is powered ON...



WELCOME			
4.2			

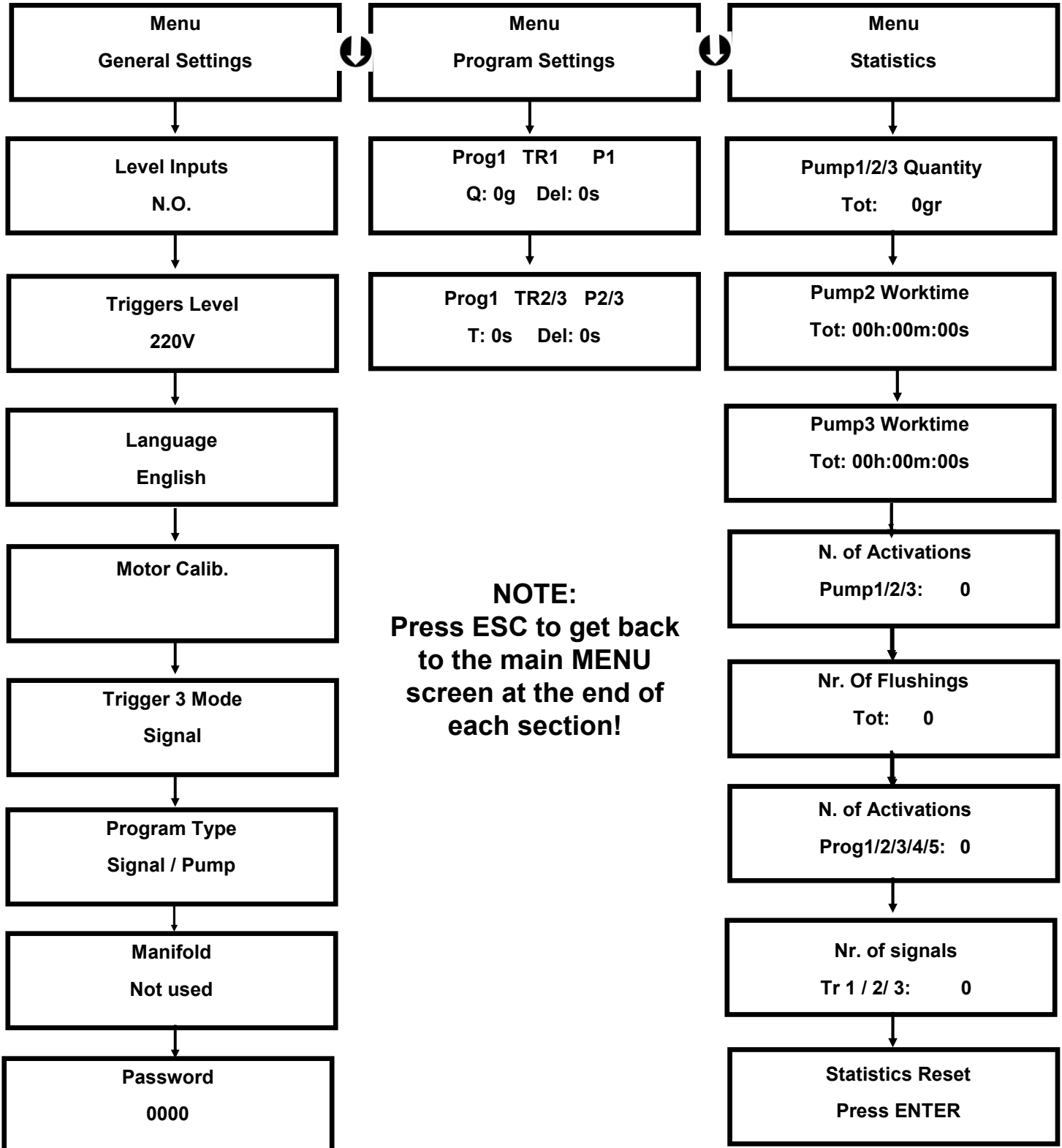
Idle or Main Screen when not in Programming mode

Prog1	TR1	2	3
P1	P2	P3	

Menus

Programming:

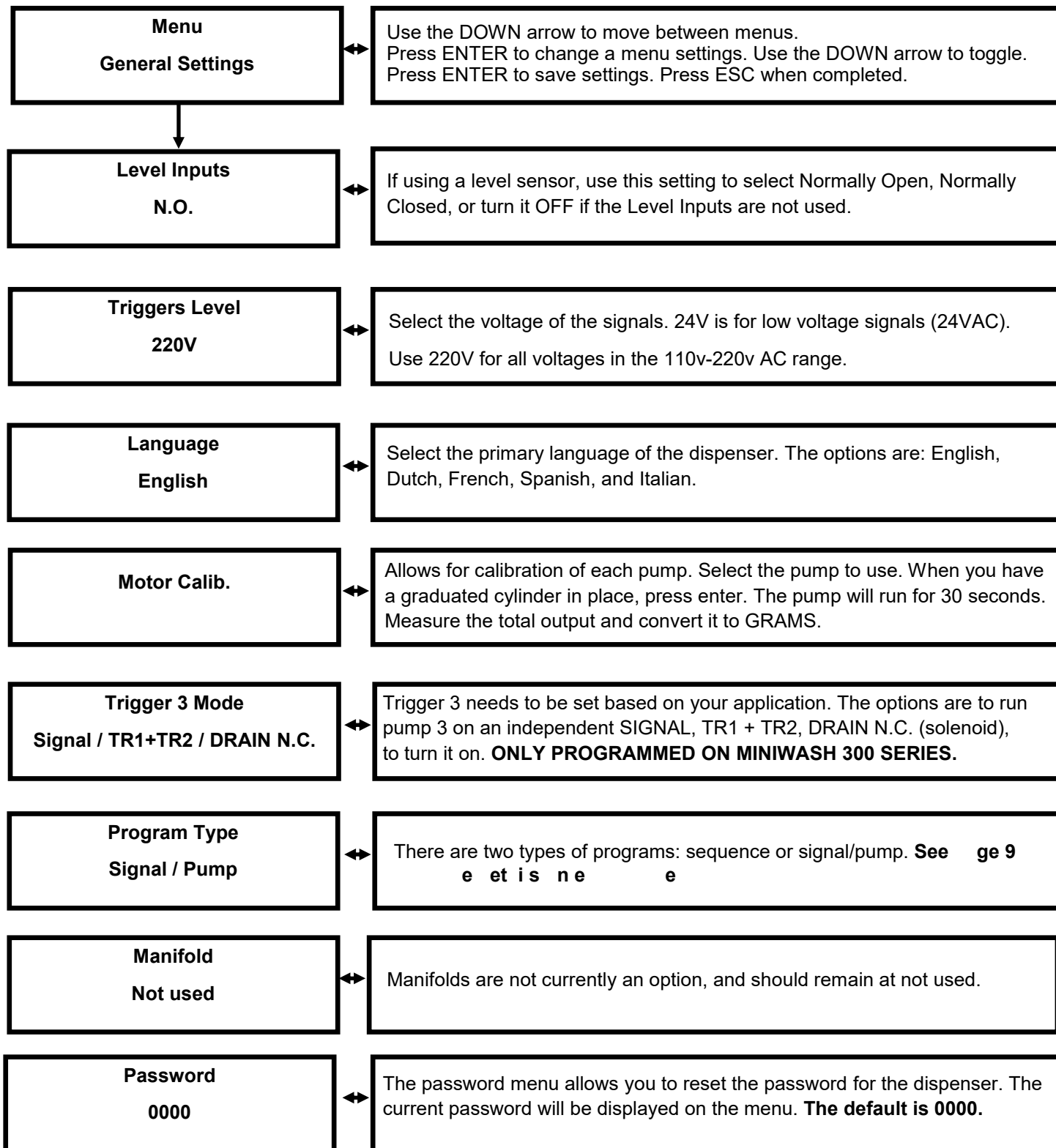
To enter **MENUS**, hold down the ENTER key for 2-3 seconds. Enter your password and press ENTER. Factory default pass-word is 0000. Press Enter. You will have access to set up the dispenser; here is the menu structure.



Menu—General Settings

Programming:

To enter **General Settings**, hold down the **ENTER** key for 2-3 seconds. Enter your password and press **ENTER**. **Factory default password is 0000**. Press **Enter**. You will have access to set up the dispenser; here is the menu structure.



Menu—Program Settings

Programming:

To enter **Program Settings** mode, hold down the ENTER key for 2-3 seconds. Enter your password and press ENTER. **Factory default password is 0000.** Press Enter. You will have access to set up the dispenser; here is the menu structure.

Menu
Program Settings

Use the DOWN arrow to move between menus. Press ENTER to change a menu settings. Use the DOWN arrow to toggle. Press ENTER to save settings. Press ESC when completed.

Prog1 TR1 P1
Q: 0g Del: 0s

Use the program settings to set the triggers, pumps, run time, and delay time for each program. There is an option to choose up to 5 programs.

Prog1 TR1 P2/3
Q: 0g Del: 0s

Prog1: Press ENTER to select the program that needs to be defined. There are 5 program options. Use the RIGHT ARROW to move to the trigger.

TR1: Select the trigger that will be used (1, 2, or 3). Use the RIGHT ARROW to move to the pumps.

P1/2/3: Select the correct pump for the signal. NOTE: Pump 1/2/3 will have volume entered as a weight (grams).

Q: When you are programming PUMP 1/2/3 amounts to be dispensed, you will need to enter the QUANTITY (Q) in Grams. For a quick conversion (grams to ounces) see table to the left.

Del: All 3 pumps have an option for a delay time programmed in seconds

Save all of your settings by pressing ENTER. Press ESC to go back to the main menu.

Conversions:

Grams to Enter	Oz Dispensed
29	1
43	1.5
57	2
72	2.5
85	3
100	3.5
114	4
128	4.5
142	5
156	5.5
170	6
185	6.5
199	7
213	7.5
227	8
241	8.5
256	9
270	9.5
285	10

Menu—Statistics

The **Statistics** menu allows you to measure the performance of your MiniWash dispenser.

<p>Menu Statistics</p>	<p>Use the DOWN arrow to move between menus. Press ENTER to change a menu settings. Use the DOWN arrow to toggle. Press ENTER to save settings. Press ESC when completed.</p>
<p>Pump1/2/3 Quantity Tot: 0gr</p>	<p>The pump 1 quantity tells you the total GRAMS dispensed. To convert from grams to ounces, multiply (grams * 0.035274).</p>
<p>Pump2 Worktime Tot: 00h:00m:00s</p>	<p>Shows the total number of hours/minutes/seconds that pump 2 has been operational.</p>
<p>Pump3 Worktime Tot: 00h:00m:00s</p>	<p>Shows the total number of hours/minutes/seconds that pump 3 has been operational.</p>
<p>N. of Activations Pump1/2/3: 0</p>	<p>For Pumps 1 / 2 / 3, these menus will display the total number of times that the pump has been activated.</p>
<p>Nr. Of Flushings Tot: 0</p>	<p>Flushing does not count at this time because it is not an active feature.</p>
<p>N. of Activations Prog1/2/3/4/5: 0</p>	<p>For programs 1-5, these menus will display the total number of times that the program has been activated.</p>
<p>Nr. of signals Tr 1 / 2 / 3: 0</p>	<p>This counter sums the number of signals received for pump 1, 2 and 3.</p>
<p>Statistics Reset Press ENTER</p>	<p>Using this option will erase the entire dispenser statistics. All functional data will be erased. Proceed with caution.</p>

Operation

There are two Modes of Operation. Understanding each mode will determine how you set up your dispenser.

The two modes of operation are SIGNAL/PUMP and SEQUENCE.

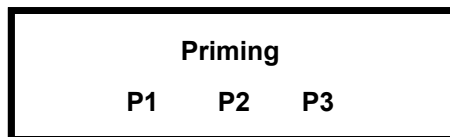
MODES OF OPERATION DEFINED:

SIGNAL/PUMP MODE: In this mode of operation, the dispenser will pump the volume amount entered into each Program for each pump and trigger 1, 2, or 3. The triggers are the washer machine signals, where a signal and common wire are attached to the washer and to the dispenser in the appropriate connection location. See Circuit Board Diagram.




SEQUENCE MODE: In this mode of operation, the signals must be received by the dispenser in sequence. For example, signal 1 to pump, then signal 2, then signal 3. In sequence mode, the FINAL pump in the operation is automatically the load count pump.

I.E. if you're running a 3 pump system, signal 1 & 2 & 3 must activate before the system resets to P1 / T1.

PRIMING THE PUMPS: Hold the UP ARROW (P) for 2-3 secs. Select the pump to prime using the RIGHT ARROW. Press ENTER and the pump will prime for 60 seconds. To escape before the 60 seconds has expired, press the ESC button.



Notable operational symbols:

Symbol	Meaning
	1. The water drop will flash next to the pump number when the pump is dosing.
	1. The hourglass symbol will flash next to the pump number if a delay time is programmed.
	1. The bell symbol will flash next to the pump number when the motor is starting to fail.
P^L	1. The letter L will flash next to the pump number if there is a level error caused by a level sensor.

Troubleshooting

Problem	Solution
Power Light not turning on	<ol style="list-style-type: none"> 1. Check the fuses on the circuit board. 2. Ensure the power to the circuit board is within range. 3. If the power is within range, make sure your jump is on the correct position.
Pump will not run	<ol style="list-style-type: none"> 1. Check pump output terminals for loose screws and disconnected wires. 2. Check for correct voltage across motor terminals. 3. Check for obstruction in the pump head. 4. If you're activating with a washer signal, make sure there is voltage at the terminal connection.
Too much detergent pumping	<ol style="list-style-type: none"> 1. Check the concentration set point for the correct setting. 2. Re-calibrate the dispenser if the squeeze tube was replaced.
Too little detergent pumping	<ol style="list-style-type: none"> 1. Check the concentration set point for the correct setting. 2. Re-calibrate the dispenser if the squeeze tube was replaced.
Pump runs too slowly	<ol style="list-style-type: none"> 1. Check roller block for binding. 2. Check for proper input voltage (24 VDC applied to the pump motor terminals will result in the highest speeds). 3. Check for lubrication on squeeze tube.
Fuses continues to blow	<ol style="list-style-type: none"> 1. Replace the motor 2. Check the incoming voltage and make sure the jumpers are in

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