

# MiniWash 2 & 3



## INSTRUCTION MANUAL









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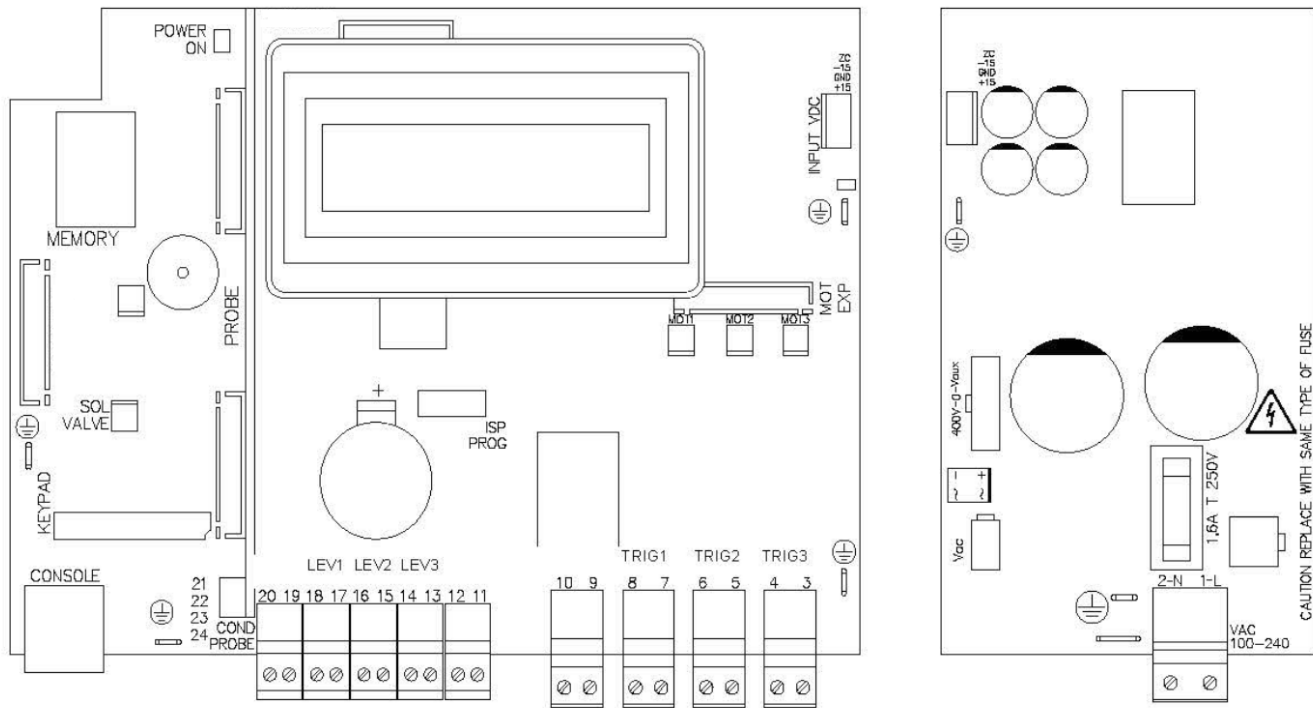
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## Safety

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-  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

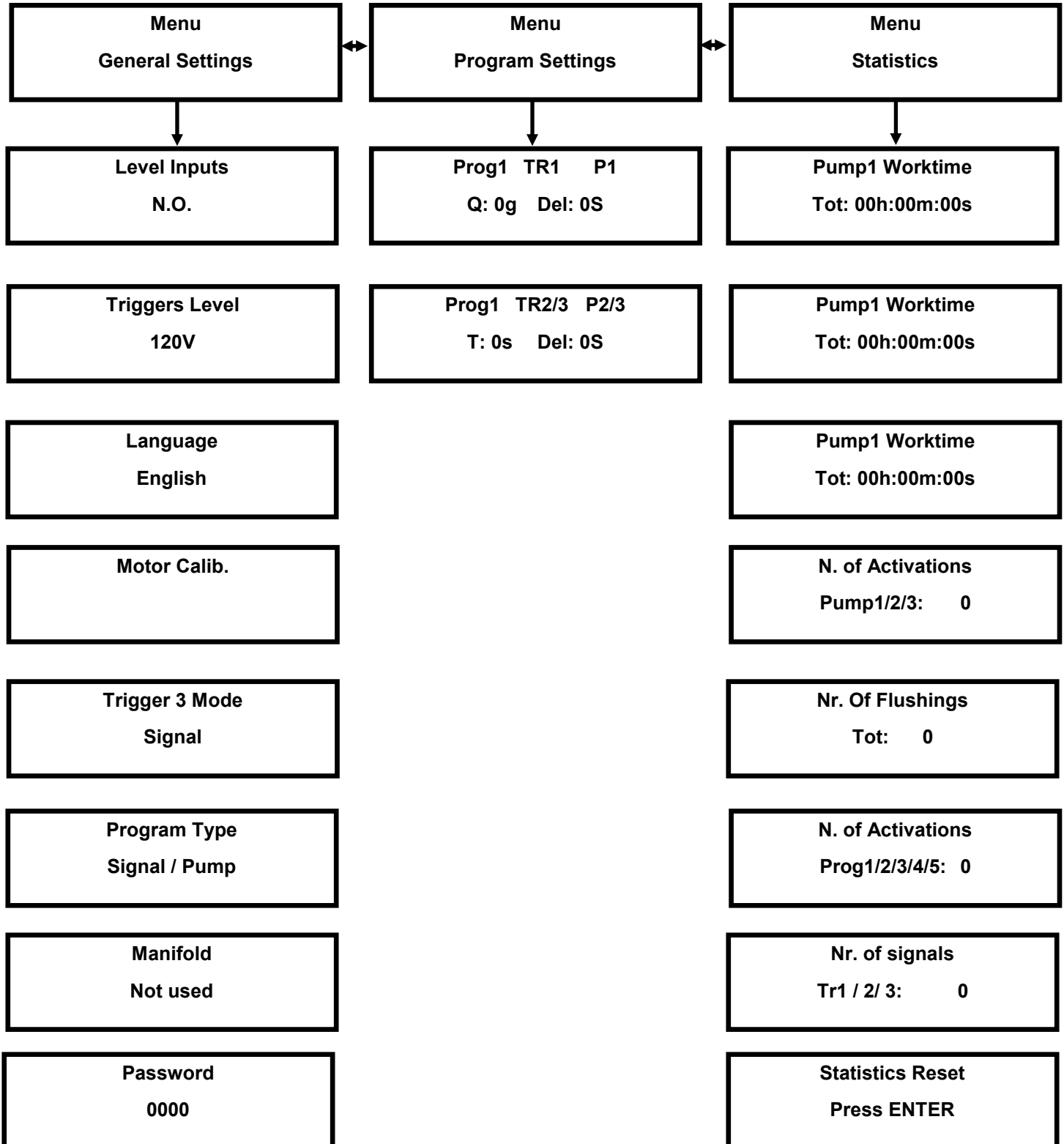
## Technical Specs

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

# Menus

## Programming:

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

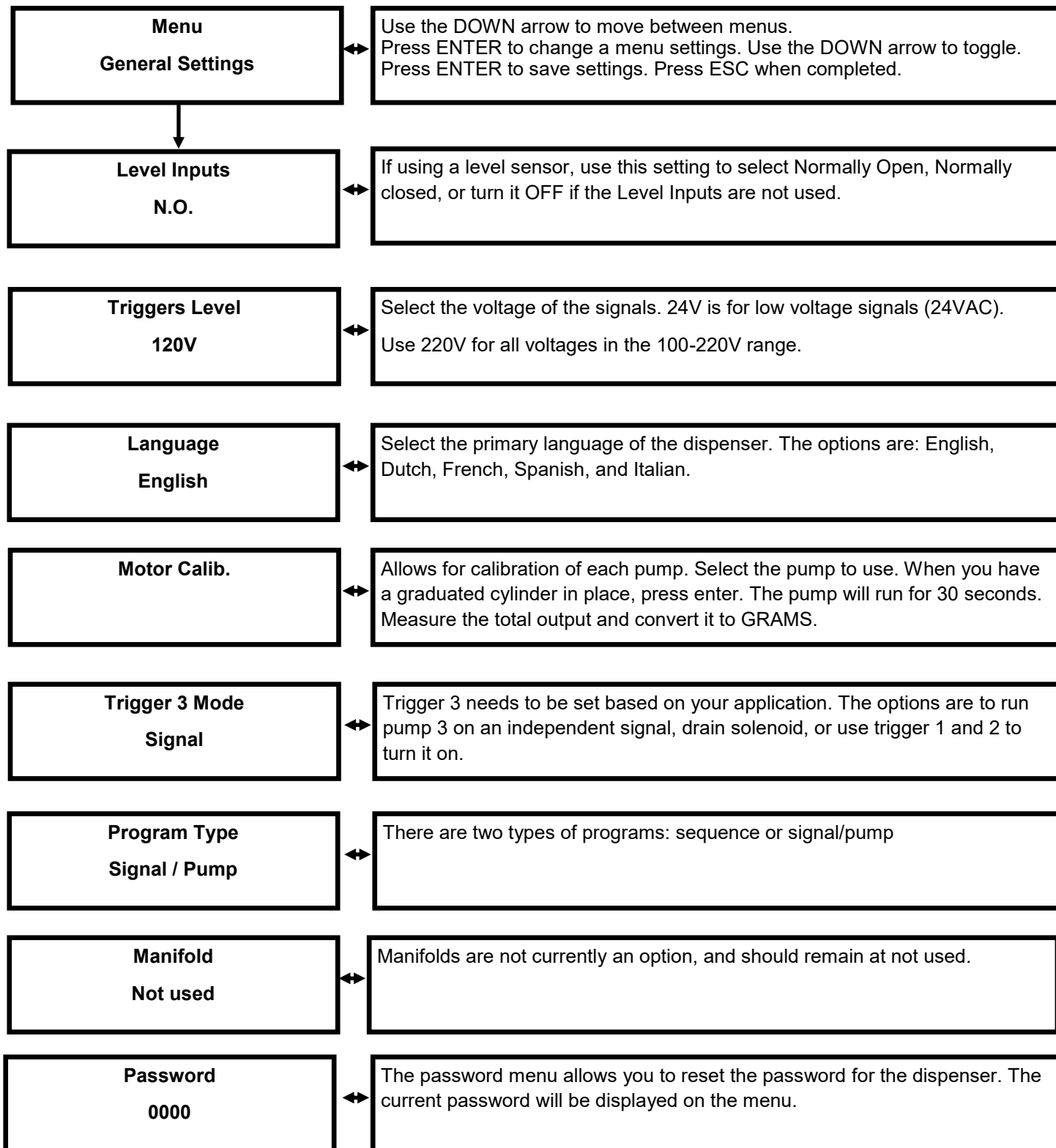


# Menu—General Settings

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## Programming:

To enter programming mode, hold down the ENTER key for 2-3 seconds. Enter your password. 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 programming mode, hold down the ENTER key for 2-3 seconds. Enter your password. 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**  
**T: 0s 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 will have volume entered as a weight (grams), pumps 2/3 will be entered as time. For a quick conversion sheet (grams to ounces) the table to the left.

**Q:** When you are programming PUMP 1, you will need to enter the QUANTITY (Grams). Use the conversion chart to input the correct ounces.

**T:** When you are programming PUMP 2 and PUMP 3, you will enter in the time to dose in seconds.

**Del:** All 3 pumps have an option for a delay time.

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

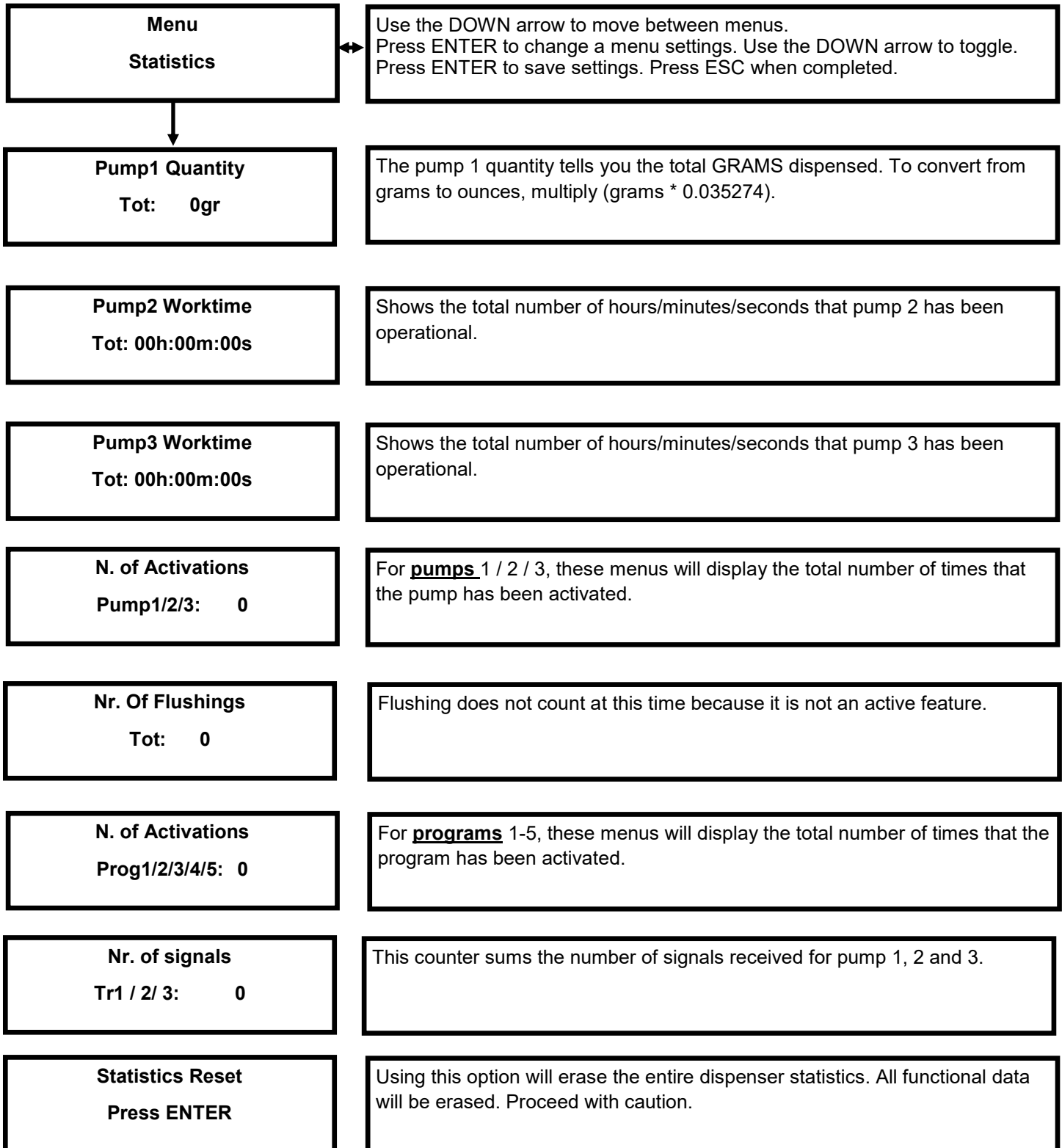
## Conversions:

Grams to Enter	Ounces 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

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



# Operation

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There are two types of operational modes. Understanding each mode will determine how you set up your dispenser. The two modes of operation are SIGNAL/PUMP and SEQUENCE.




## TWO OPERATIONAL DEFINITIONS:

**Signal / Pump:** In this mode of operation, the dispenser will pump for each time signal for trigger 1, 2, or 3 are received.

**Sequence:** In this mode of operation, the signals must go in sequence. For example, signal 1 to pump, than signal 2, then signal 3. In sequence mode, the FINAL pump in operation is automatically the load count pump. I.E. if you're running a 3 pump system, signal 1 and 2 and 3 must activate before the system resets to pump 1/signal 1.

**PRIMING THE PUMPS:** Hold the UP ARROW (P). 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 <sup>L</sup>	1. The letter L will flash next to the pump number if there is a level error caused by a level sensor.



# Troubleshooting

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

# Terms & Conditions

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