

SodaShop

7" Touchscreen Interface

Carbonated –or– Still Water

Up to Four Syrup Options

120 VAC 69 W

Pumping Current/Power

Water	0.41 A	9.84 W
+1 Syrup	0.61 A	14.64 W
+2 Syrups	0.82 A	19.68 W
+3 Syrups	1.03 A	24.72 W
+4 Syrups	1.24 A	29.76 W

Standard Features

- Operation is controlled via a 7" touchscreen providing the user with complete control of ratios between water and each individual flavor.
- SodaShop allows a selection of pre-determined volumes at a press of a button.
- SodaShop is capable of storing hundreds of flavor combinations and five user-determined favorite recipes.
- Stored combinations automatically fall into *valid* and *invalid* recipe bins based on the entered current syrups installed to inform the user of selectable saved combinations based on current availability.
- Favorites can quickly be dispensed from the home screen to provide a drink with minimal wait time.
- The system can plug directly into a wall 120VAC outlet to provide fast and easy access and operation.
- SodaShop uses four peristaltic pumps for syrup control providing precise control and easy-to-swap tubing for replacement and cleaning.
- Main water is pumped via air pressure to prevent cavitation maximizing carbonation for the optimal drinking experience. This method also provide self-pressure relief preventing over-pressure conditions in the water container.
- The system is designed to allow any standard 2-liter bottle for water. Flavors are currently relegated to using third-party syrups bottle with modified caps.



Component Ratings

24 VDC Power Supply	AC Input 100-240 VAC	DC Output 24 VDC	Rated Current 6 A	Rated Power 144 W	Input Freq 50-60 Hz	Input Type 3-Terminal AC
5 VDC Power Supply	AC Input 110-220 VAC	DC Output 5 VDC	Rated Current 3 A	Rated Power 15 W	Input Freq 50-60 Hz	Input Type 2-Terminal AC
Main Water (Air) Pump	Voltage 24 VDC	Max Power 10 W	Tubing Size 5/32" ID	Flow Rate ~ 60 oz/min	Max Pressure 65 kPa	Safety Overpressure
Peristaltic Syrup Pumps (4)	Voltage 24 VDC	Max Power 5 W	Tubing Size 3 mm ID	Flow Rate 90 ml/min	Motor Life 800 hrs	Rollers 3
System Tubing	Inner Diameter: Outer Diameter:			Main Water & Air 5/32" 1/4"	Flavors/Syrup 3 mm 5 mm	
Raspberry Pi — RP2040	Voltage 5 VDC	Max Power 15 W	Communication Serial (USB-C)	GPIO Voltage 3.3 VDC		
Display	Voltage 5 VDC	Max Power 15 W	Communication Direct	Size 7 "	Touch Capacitive	
Motor Control Relays	Voltage 24 VDC	Max Load (Each) 30 VDC — 10 A		Safety Opto-Isolation	Trig. Voltage/Current 0-8 V (low) — 5 mA	