

## Hydro-Mixer V4 Installation/Operation Manual

Thank you for your purchase of our Hydro-Mixer V4 proportioning blending unit. Below are instructions on how to setup and install your new Hydro-Mixer. If you ordered an installation kit you should have all the necessary hoses and hose clamps for a quick and easy install. If you did not order an install kit it is recommended you use stainless steel hose clamps and non-collapsible reinforced connecting hoses. In order to have similar draw on both your water and SH valves, it is recommended your connecting hoses are similar in length so one valve is not favored over the other. Thread sealant like Rectorseal Tru-Blu is recommended over teflon tape for a proper air tight seal on all threaded connections. Most threaded connections only require hand tight plus about 1/2 turn.

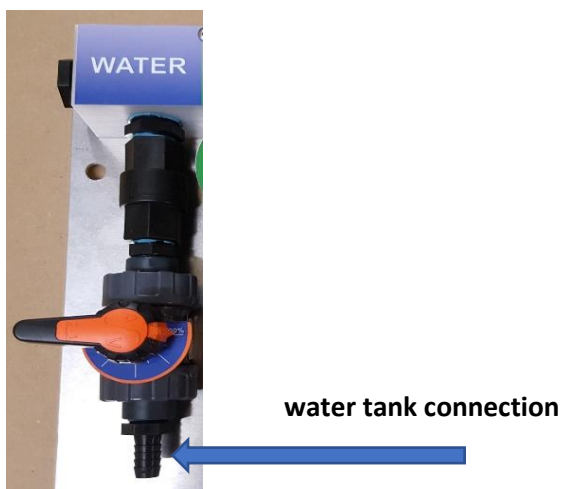
### Pump Connection

-standard outlet location is right side of manifold. Outlet connection is either 1/2" or 3/4" hose barb. Other connection sizes available upon request. Attach a non-collapsible reinforced suction hose with hose clamp. Slight heating of hose may be required. Firmly tighten clamp. Connect opposite end of hose to inlet side of your pump.



### Water tank connection

-standard water tank connection is either 1/2" or 3/4" hose barb. Hose barb is located on the bottom side of the water valve. Attach a non-collapsible reinforced suction hose with a hose clamp. Slight heating of hose may be required. Firmly tighten clamp. Connect opposite end to your water tank bulkhead. It is recommended you pull from the top of your water tank, but not necessary. Water supply should have a filter or strainer in line before the Hydro-Mixer in order to prevent debris entering the valves. This can be on the suction between the tank and Hydro-Mixer or on the bottom of your drop tube inside the tank.



### SH/bleach tank connection

-standard SH tank connection is either 1/2" or 3/4" hose barb. Hose barb is located on the bottom side of the SH valve. Attach a non-collapsible reinforced suction hose with a hose clamp. Slight heating of hose may be required. Firmly tighten clamp. Connect opposite end to your SH tank bulkhead. It is recommended you pull from the top of your tank, but not necessary. Be sure to make water and SH connecting hoses similar in length.



SH tank connection

### Soap tank connection

-standard soap tank connection is 1/4" hose barb. Hose barb is located on the bottom side of the soap valve. Attach a non-collapsible reinforced suction hose with a hose clamp. Slight heating of hose may be required. Firmly tighten clamp. Connect opposite end to your soap tank bulkhead or drop hose in tank/5 gallon bucket. It is recommended to have a strainer on the end of your 1/4" tube inside tank or bucket. This will prevent debris from entering your soap line and valve. Repeat for soap valve #2 if you upgraded to 2 soap valves.



soap line connection

# Hydro-Mixer Operation

Your Hydro-Mixer V4 consists of (1) water metering valve, (1) SH metering valve and (1) or (2) precision soap needle valves.

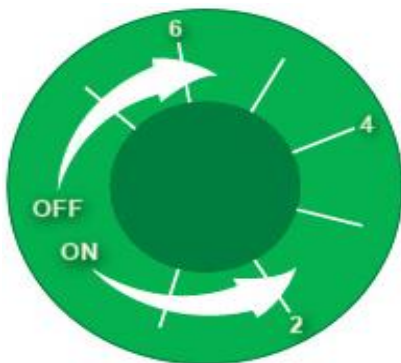
-Water valve operation-valve handle turns 180 degrees, 0-100% open as marked on valve. You will run the water valve 100% open the majority of the time



-SH valve operation-valve handle turns 180 degrees, 0-6% in 1/2% increments as marked on valve. % output is based on 12.5 % SH and water valve 100% open. In the event a higher mix is required partially close the water valve with SH valve at 6%.



-Soap valve operation-valve knob turns 360 degrees 5 X for 100% open. Clockwise closes valve and is off when you feel resistance. Do not over tighten. Counterclockwise opens valve and typically requires 1 full turn to start draw then adjust from there. The soap valve is a precision needle valve that allows for very precise changes in your soap concentration. Markings on soap dial are for reference points. Many soaps and surfactants only require the soap knob to open 1/2 to 1 full turn for proper ratios.



## Warranty

1 year warranty. Does not cover shipping costs, stripping of threads, overtightening and cracking poly and PVC fittings. Does not cover damage caused by freezing. 5 year warranty on manifold against corrosion and chemical damage. Stripping or damage of threads from overtightening not covered.

## Options

-flush valve kit enables you to flush your SH valve and line with fresh water. The kit consists of 3 way valve, hose barbs, tee for your water tank. 3 way valve is to be installed on your SH tank bulkhead as shown below. The tee is to be installed on your water tank bulkhead as shown below. One of the tee connects to the water valve on your Hydro-Mixer the end of the tee connects to the top of the 3 way valve. The common port on the 3 way valve is connected to the SH valve on the Hydro-Mixer. When the arrow on the yellow handle is point down at the SH tank you will draw SH, when pointing up at the hose connected to the water tank, it will draw water through the SH valve on the Hydro-Mixer. This enables you to completely flush the entire system.