

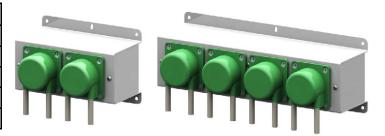
### INSTRUCTION MANUAL

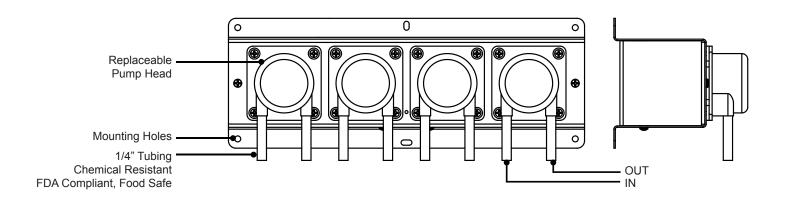
ADZ/AD4

## **AgrowDose Peristaltic Pump**

## **Specifications**

Power	12Vdc, 1Amp
Flow Rate	FIXED, ~50mL/min
Tubing Material	FDA Approved Norprene
Tubing Size	1/4" O.D. x 3/16" I.D.
Max Outlet Pressure	20psi
Minimum Dose Size	1mL







Disconnect power from all devices before connecting or disconnecting cables to prevent damage to any components.

### **Installation Instructions**

Mount the pump on a vertical wall surface using the holes in the mounting flanges. The center flange hole may be used to hang and level the pump, however, the corner screw holes should be used for final mounting. Use caution to avoid over-tighteneing the screws and bending the flanges.

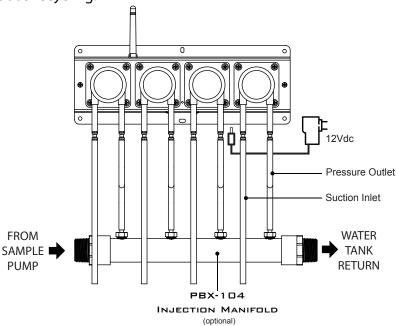
A 120Vac wall receptacle will be required within 6ft of the pump for the power adapter.

# **Tubing Connections**

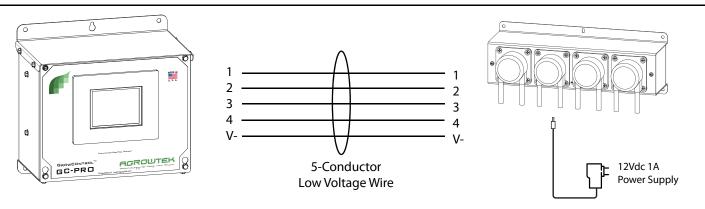
Each pump has an inlet (suction) and outlet (pressure) tube. Using barbed tubing connectors, install an inlet tube for each pump into the respective concentrate container, then install an outlet tube to the mixing reservoir or injection manifold as shown below. Zip-ties are recommended for securing tubing to barbed fittings.

### **Injection Manifold**

Shown with optional PBX-104 injection manifold designed for easy installation with a dedicated recirculating pump for continuous recycling.



## **Connection to GC-Pro Controllers**



AgrowDose pumps are connected via 24V dc discrete control wires for each output, plus one additional wire for DC ground (V-).

- 1. Connect terminals 1-4 (1-2 on AD2) to the desired output terminals of the GrowControl system.
- 2. Connect the V- terminal to a V- terminal on one of the controller's module cards.
- 3. Connect the 12Vdc power supply to the pump and 120V wall outlet.
- 4. Manually activate each controller output one at a time to verify operation of the pumps.

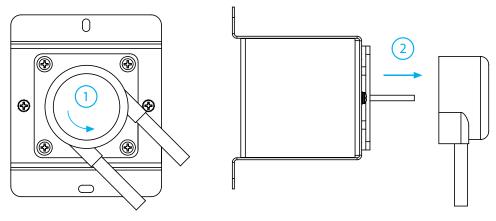
Note: Operate only one pump at a time. The 12V power supply is only sized for one pump motor operating.

# **Replacing Pump Head**

Pump heads are replaceable when the tubing wears out from extended use. Pump heads typically last 12-24 months depending on the volumes being dispensed and frequency of use. When the tubing begins to leak, replacement is a simple process:

- 1. Rotate the pump head counter-clockwise 1/8 turn
- 2. Slide the head off of the motor shaft.

Replace in reverse order.



# **Storage and Disposal**

### Storage

Store equipment in a clean, dry environment with ambient temperature between 10-50°C.

#### Disposal

This indsutrial control equipment may contain traces of lead or other metals and environmental contaminants and must not be discarded as unsorted municipal waste, but must be collected separately for the purpose of treatment, recovery and environmentally sound disposal. Wash hands after handling internal components or PCB's.

# **Warranty**

Agrowtek Inc. warrants that all manufactured products are, to the best of its knowledge, free of defective material and workmanship and warrants this product for 1 year from the date of purchase. This warranty is extended to the original purchaser from the date of receipt. This warranty does not cover damages from abuse, accidental breakage, or units that have been modified, altered, or installed in a manner other than that which is specified in the installation instructions. Agrowtek Inc. must be contacted prior to return shipment for a return authorization. No returns will be accepted without a return authorization. This warranty is applicable only to products that have been properly stored, installed, and maintained per the installation and operation manual and used for their intended purpose. This limited warranty does not cover products installed in or operated under unusual conditions or environments including, but not limited to, high humidity or high temperature conditions. The products which have been claimed and comply with the aforementioned restrictions shall be replaced or repaired at the sole discretion of the Agrowtek Inc. at no charge. This warranty is provided in lieu of all other warranty provisions, express or implied. It is including but not limited to any implied warranty of fitness or merchantability for a particular purpose and is limited to the Warranty Period. In no event or circumstance shall Agrowtek Inc. be liable to any third party or the claimant for damages in excess of the price paid for the product, or for any loss of use, inconvenience, commercial loss, loss of time, lost profits or savings or any other incidental, consequential or special damages arising out of the use of, or inability to use, the product. This disclaimer is made to the fullest extent allowed by law or regulation and is specifically made to specify that the liability of Agrowtek Inc. under this limited warranty, or any claimed extension thereof, shall be to replace or repair the Product or refund the price pai