K28 Flow Controller Setup and Use for the Em2

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STEP 1 – Attach Power Supply

Attach the power supply brick to the leg of the shorter support using the mushroom fasteners on the support and the brick power supply. Wrap the Velcro® strap around the support leg and the brick power supply to fasten securely. See Figure 1.

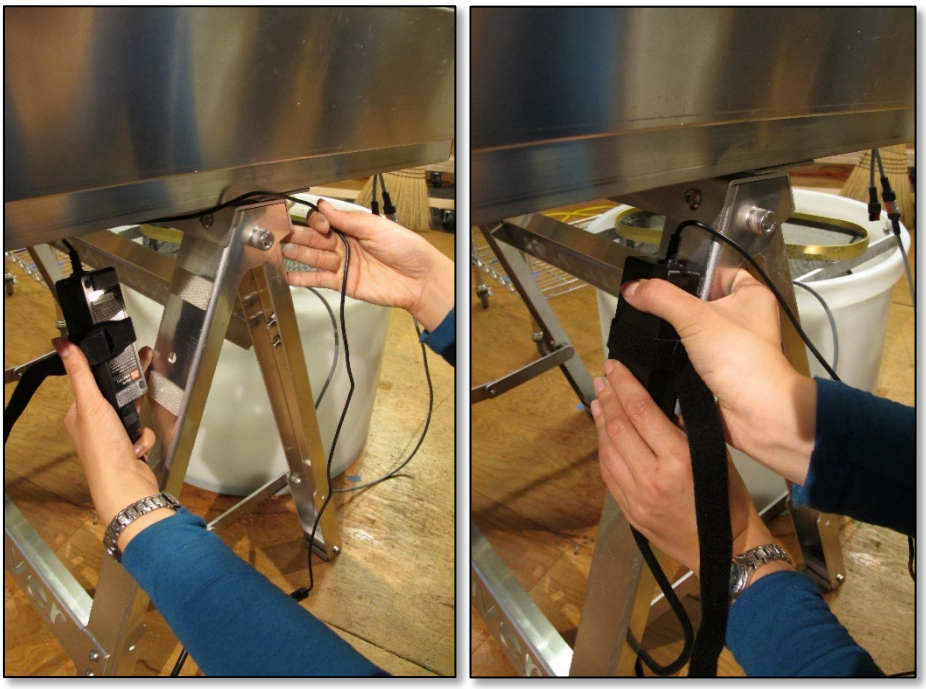

Figure 1. Attach the brick power supply to the leg of the downstream support.

Connect the power cord to the Ground Fault Circuit Interrupter (GFCI) (US users only). If you are using an extension cord, connect the extension cord to the GFCI. Do not plug the model's power cord directly into a wall outlet. **Always use the GFCI.**

If the red indicator light on the GFCI is on, it is ready for use and the model should be powered. If the red indicator light is off, press the red “Reset” button.

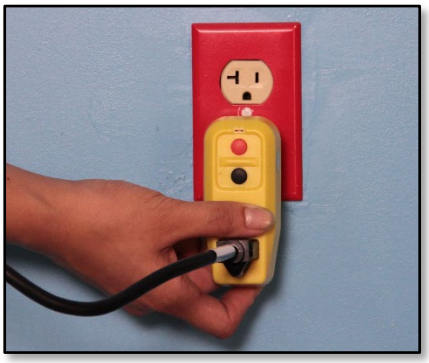

Figure 2. Always connect the power cord to the GFCI. Never plug the model's power supply directly into a wall outlet.

STEP 2 - Attach the Flow Controller

Attach the flow controller to the downstream end of the box using the hook. See Figure 3**.**

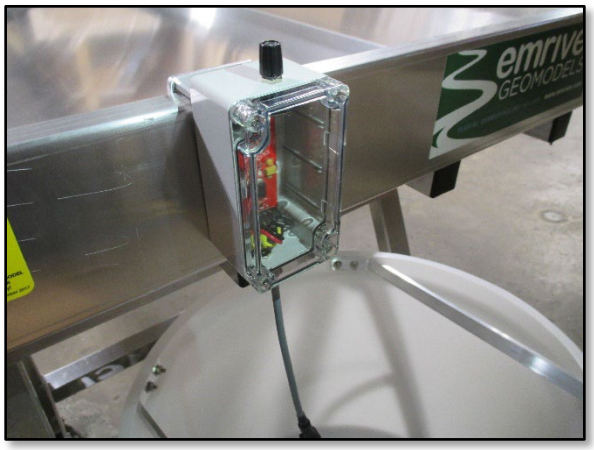

Figure 3. Attach the controller to the downstream end of the box.

Connect the pump to the controller using the gray, blue, and orange connectors (note there is one red tab that is not a connector). Then, connect the controller to the power supply using the barrel jack with the red mark. Make sure the power brick is secured to the support so there is no weight pulling on the power connection at the controller. See Figure 4.

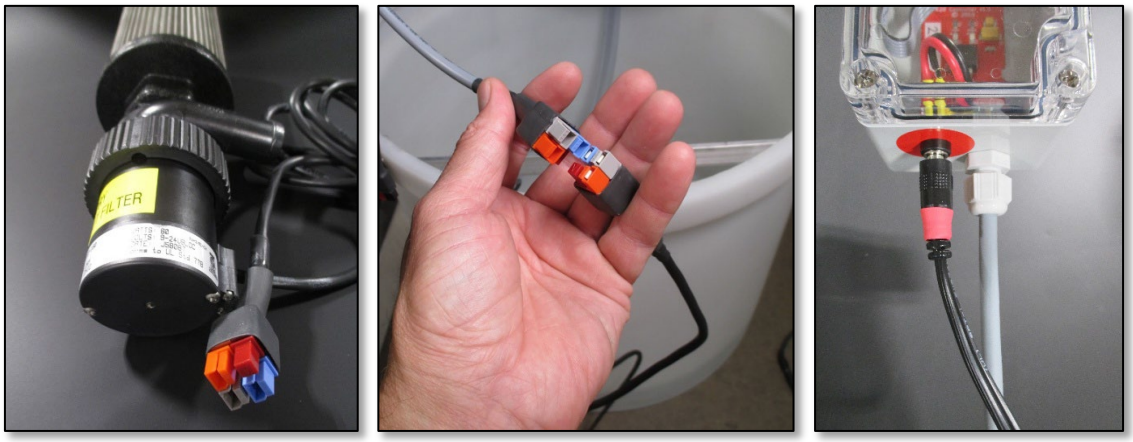

Figure 4. The pump, at left, connects to the flow controller, middle. The flow controller, right, connects to the power supply. The color-coded connectors on each component will match up.

A square, red indicator light in the circuit board displays when the power is on. Change flow rate using the knob on the controller. Pressing the knob resets the flow to zero. ***Note*****:** The knob does not turn the pump off completely; it merely stops flow. The pump is on as long as the power is connected. To completely turn off the pump, the power must be disconnected.

Troubleshooting: If the controller does not produce flow, and there are no lights on the circuit board, check the power supply to ensure that the cord is fully connected and that there is a light on the power brick.

If the power light is on, but there is no flow, check to see that the flow indicator LED is lit on the circuit board (red LED). If it is lit, check the connection between the controller and the pump. Also check for any obstructions or clogged filters. Expel all air from pump and hose by shaking the pump and filter under water. If the flow indicator LED is not lit, adjust the knob clockwise until the LED is lit and there is flow.

***Note*:** If the pump is reluctant to prime when started, reorient or shake it a bit (while underwater) to remove air trapped in its intake. If necessary, clean any debris from the filter by unscrewing it from the pump and flushing it with water.

Flow Pathways

After the Emriver Em2 model has been assembled according to the instructions in this manual, it is ready for use. Figure 5 is a conceptual chart that shows flow pathways of water and electricity through a properly assembled Emriver Em2 model during use.

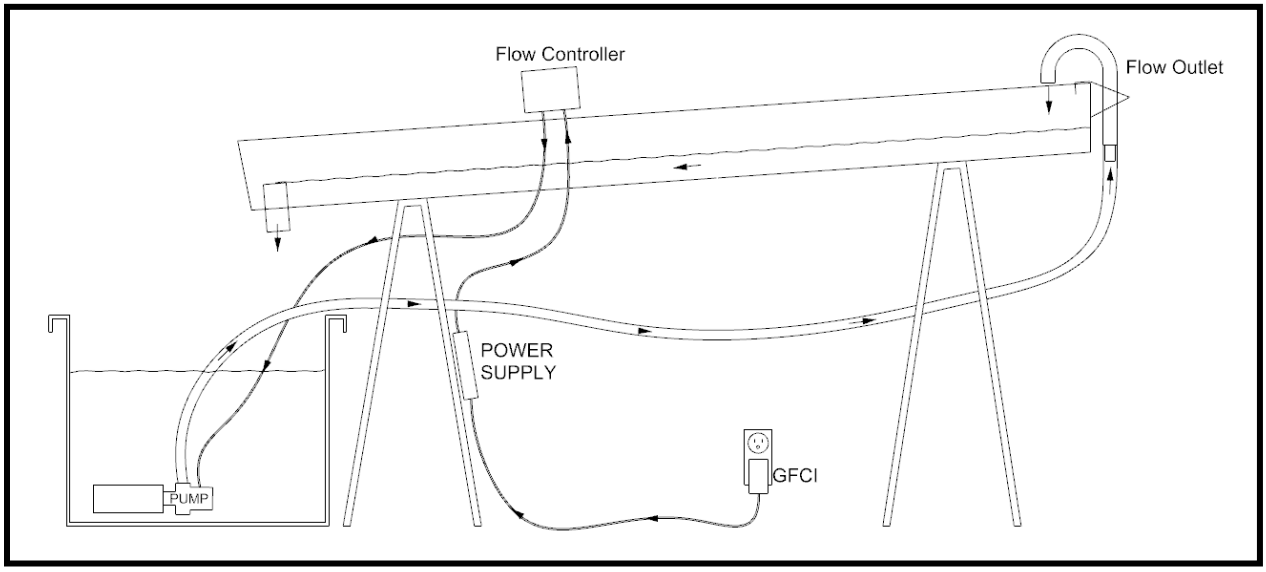

Figure 5. Flow pathways for water and electricity.

For questions or troubleshooting beyond this manual, please see our website, emriver.com, or call Emriver, Inc. at 618-529-7423.