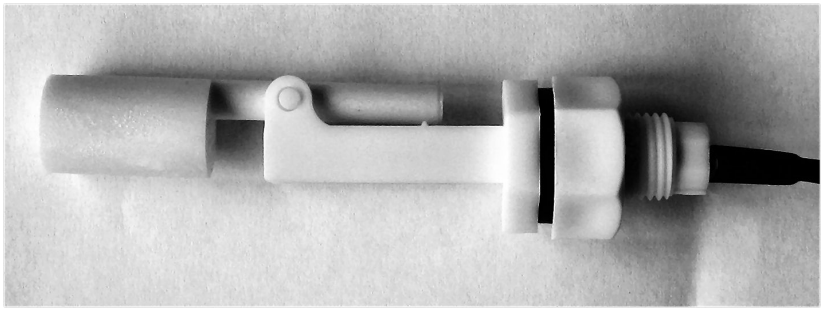
LIGHTHOUSE PRO XLS™
Float Switch



Thank you for purchasing the Lighthouse Pro™ Float Switch. The float switch uses Magnetic Reed Technology where a small magnet on the end of the float activates a vacuum sealed switch. Both the switch and the magnet are completely encapsulated in nylon and is NSF approved for potable water. The switch is rated for >10 million cycles, about 20 times longer than conventional float switches.

Installation

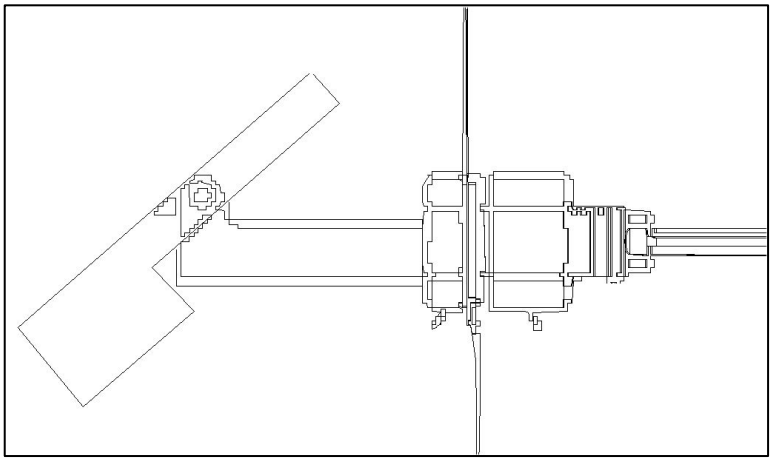
1. The float switch requires a ½-inch mounting hole. Either drill the tank wall or fashion a bracket and drill a ½-inch diameter hole. The bottom edge of the float switch defines the water level. Drill the hole approximately ¼-inch above the desired water level.

2. Tighten the nut so that the swing arm is pointing down. The rubber washer must be placed on the water (wet) side of the threaded body.

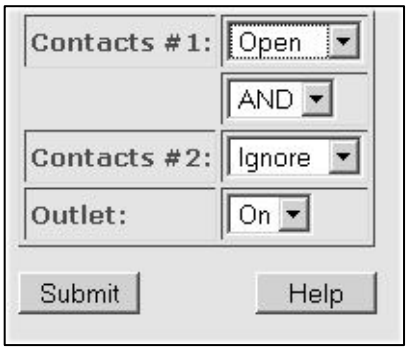
3. Connect the two wires to either CONTACT-1 or CONTACT-2 on the back of the Lighthouse Pro console. Push back on the spring loaded clips and insert the two wires in the two holes.

Controller Setup

Shown to the right is the float switch in the “dry” position. As the water level rises the float moves up and closes the contacts. In the dry or hanging down position the contacts will be OPEN. When the water level pushes the float up (as in the photo above) the contacts will be CLOSED.



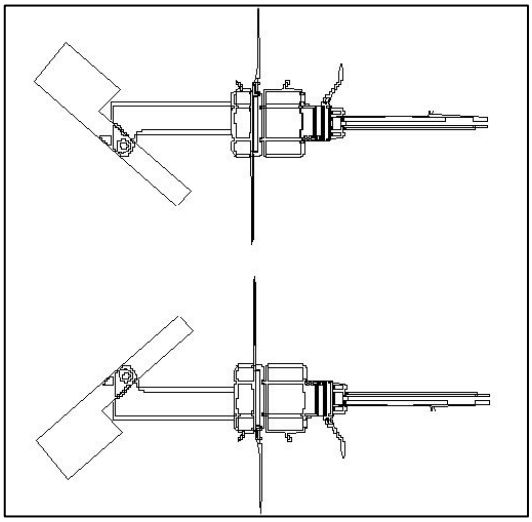
A typical auto-topoff setup is to turn on a small powerhead in a bucket of fresh water when the tank water drops due to evaporation. To setup this system, follows these steps:



1. Open a web browser to the Lighthouse Pro and select *Outlet Setup*.
2. Choose an unused outlet, then select *Contact-Ctrl* for the outlet.
3. Shown to the right is a setup for Contact #1. This indicates that when Contact #1 is OPEN (the float drops), the outlet will turn on. This will supply power to the powerhead and begin pumping fresh water into the tank. When the float rises and indicates a CLOSED signal to the controller, the powerhead will be turned off.

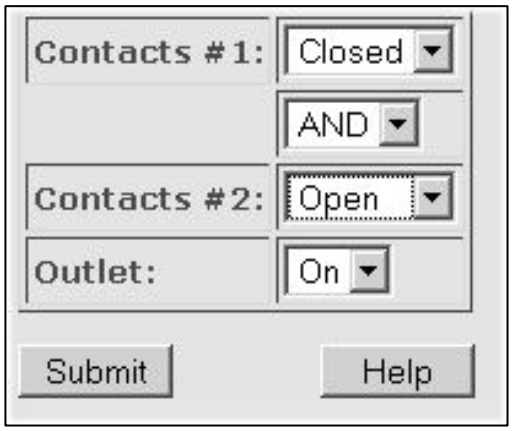
Redundant Mode

We recommend two float switches be used to add redundancy. This will dramatically increase reliability in the event of a failure. To setup a redundant auto-topoff system, follow these steps:



1. Mount the two float switches, with the second one mounted 1-inch higher than the first.
2. Mount the higher float switch upside-down. That is, the float portion is normally level with the body.
3. Connect the wires from the higher float switch to Contact#1 and the lower float switch to Contact#2.
4. Setup the controller as shown below.

This tells the controller to turn on the outlet ONLY if the upper float switch is CLOSED and the lower float switch is OPEN. In the event that either float switch fails, the powerhead connected to the outlet will not turn on.



Manufactured By:
MCU Research, LLC
276 Jones Cove Blvd.
Asheville, North Carolina 28805
www.mcuresearch.com