

Sump Watch SW-120V-3L High Water Alarm and Monitor

The Sump Watch High Water Alarm and Pump Monitor is designed for monitoring a 120 V pump up to ½ HP. It is intended to fit into an existing installation and work with Standard 120V Pumps. *It is designed for outdoor use, sun, rain, and temperature resistance, and contains only Long Life LED Pilot lights.* It's designed for non-continuous service, defined as pumps that generally do not run for 3 hours or more continuously, and the application of the unit requires a pump that has integrated / thermal overload protection.

Properly installed, Sump Watch provides control of the pump and status lights to indicating current conditions.

Sump Watch is equipped with a high water alarm system. It activates when the water level in the basin or sump rises above the desired level. The alarm system includes a red LED beacon with integrated audible alarm buzzer.

The high level alarm system will automatically reset when the high level condition is corrected. The enclosure is weatherproof to allow outdoor installation and has a flammability rating which meets UL 94-5V. **Figure 1** shows the front of the control panel.

Read and follow all instructions and safety guidelines thoroughly before installing or operating the control panel system. Failure to follow the instructions could result in serious bodily injury or death and/or property/pump damage.



SAFETY & APPLICATION GUIDELINES

WARNING: DISCONNECT ALL POWER BEFORE INSTALLING OR SERVICING THE PUMP OR THE CONTROL PANEL! IT IS IMPORTANT TO YOUR SAFETY THAT YOU READ THE FOLLOWING SECTION AND FOLLOW THE GUIDELINES.

1. Read and follow all safety guidelines and installation/operation instructions.
2. Follow all national, state or provincial, and local building, plumbing and electrical codes and ordinances. This includes the requirements of your state for GFCI protection.
3. Do not install or operate the control panel while standing on a wet or damp surface.
4. The conductors in your sump watch unit are sized for an expected temperature of 30°C or 86°F for ½ HP pumps drawing 9.8 Amps in 110V service. If the unit will see more extreme temperatures, contact the factory for applications assistance.
5. This unit does not have overload protection, it is suitable for use only with pumps that have self-contained, integrated overload protection. If you question if your pump has this, email your pumps manufacture and part number, and nameplate data to us, and we will confirm it for you.
6. Do not energize the head unit if an electrical component is damaged or appears damaged or the head unit is open.
7. Do not energize if there are wires are disconnected or appear loose, frayed, or damaged.
8. Secure the head unit to prevent unauthorized persons or those who may be unfamiliar with its operation from opening the control panel.
9. Do not install the unit in locations classified as hazardous in accordance with the most recent National Electrical Code.
10. Follow all installation/operation instructions and safety guidelines accompanying the grinder pumps and/or basin system.



www.SumpAlarm.com

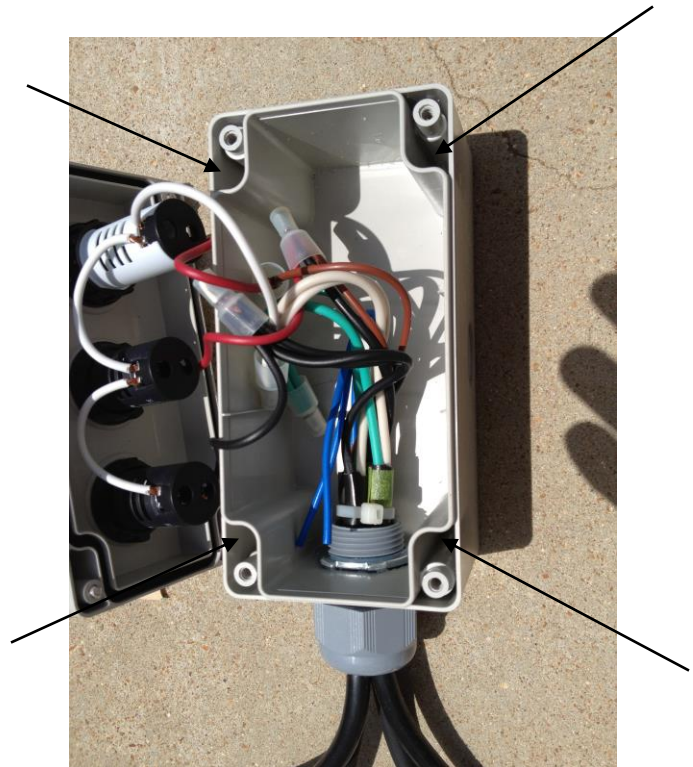
Should you have questions at any time on the installation or application of your Sump Watch unit, please contact us at CustomerService@SumpAlarm.Com.

LOCATING THE CONTROL PANEL

The control panel should be mounted in a convenient location. Cable lengths need to be considered, and extra cable can be stowed above or below the water line. The location should allow “line-of-sight” visibility of the indicating lights from the desired vantage point. The surface on which it is mounted should not be subject to substantial vibrations. Follow the National Electrical Code and all local and state or provincial codes.

MOUNTING THE CONTROL PANEL

The control panel should be securely mounted to a wall or secure vertical structure. The control panel has four corner-located mounting holes, which can be accessed by removing the face plate.

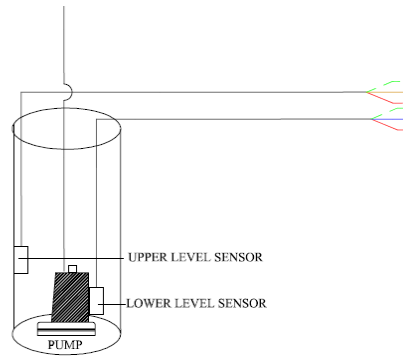


Note that the four weather proof mounting holes can be accessed by opening the head unit and are directly adjacent to the posts for mounting the face of the head unit.

MOUNTING FLOAT SWITCHES

Sump Watch is equipped with two (2) float sensors, shown at right. Positioning and installation of the float switches is application dependent and will require consideration by you, the user.

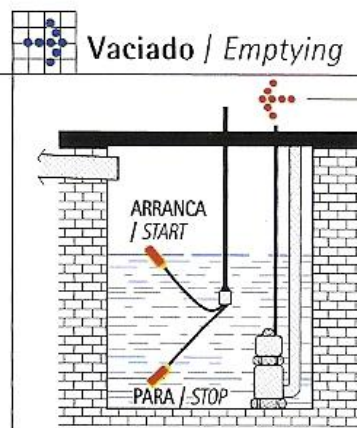
The LEVEL sensor on the longer (15 Foot) cable labeled "L" is the sensor that controls the pump. The ALARM sensor labeled (A) on the short (10 foot) cable is for the high water alarm. The ALARM (A) sensor is mounted ABOVE the LEVEL (L) sensor. For longer cord units the cables may be the same length.



Alarm Sensor

Level Sensor

Both Float sensors will need to be positioned in the sump and TESTED in their final locations in order to fill their intended function. Each sensor contains a counterweight positioned on the cord. The sensors require a range of motion relative to the counterweight. When the float switch drifts above the counterweight, the switch closes, and when it returns below the counterweight the switch will open. The switches must be free to rise and fall without interference. The counterweights on the float switches can be moved up and down the cable as required. A minimum of 3" of cable is required between the float and counterweight. **IT MAY BE NECESSARY TO ANCHOR THE CABLES AT THE TOP OF THE SUMP TO CONTROL THE SENSOR HEIGHTS.**



3" Minimum Clearance

Move Stopper to Adjust Counterweight Positions



CONNECTING THE PUMP

After the unit has been installed (but before connected to power) the pump can be plugged in directly to the head unit.



TESTING THE UNIT

1. If not already complete, with POWER OFF make the connection from the head unit to the pump.
2. With **NO POWER** on the unit, **FILL THE SUMP** using a hose or other means. Observe the LEVEL (L) and ALARM (A) float switches rise above the counterweights in the desired locations.
3. If they do not, adjust the counterweights and or cable anchoring such that the floats are active when the sump or tank is full.
4. **WITH THE SUMP FILLED, AND BOTH FLOAT SWITCHES ACTIVE** Plug SUMP WATCH into a 120V power supply.
5. Observe that all three lights should be on in this condition:
 - a. The WHITE POWER LIGHT is ON
 - b. The GREEN "PUMP RUNNING" LIGHT is ON
 - c. The RED "HIGH WATER ALARM LIGHT" is ON, and AUDIBLE ALARM is heard.
6. The pump should be active and drain the water from the sump. As the water drains:
 - a. The RED "HIGH WATER ALARM LIGHT" should turn OFF, and AUDIBLE ALARM will STOP.
 - b. The GREEN "PUMP RUNNING" LIGHT will TURN OFF as the level drops
7. IT IS SUGGESTED TO FILL AND EMPTY THE SUMP SEVERAL TIMES and ensure the float switches are properly located, with the correct range of motion, and cables are free from any obstacles.

After the TESTING check has been completed, the unit is ready for operation.

TO PREVENT PUMP DAMAGE, DO NOT OPERATE THE PUMP WITHOUT WATER FOR AN EXTENDED DURATION. CONSULT THE PUMP MANUAL FOR GUIDANCE.

Note: Common causes of HIGH WATER ALARM include:

1. Dirt, leaves, rocks, sticks, and other debris are blocking the pump inlet.
2. The pump has been angled or turned over by the presence of the above and the level switch is permanently submerged.
3. The discharge of the pump is blocked or restricted (including frozen)
4. The pump is undersized for the application (generally a new pump which runs constantly)
5. The lower level switch is not operating properly, or is stuck.
6. The bearings or impeller internal to the pump are worn

The light is an indicator to investigate these conditions, note that only condition #6 requires work to the pump, the others would continue indefinitely and would continue to exist in many cases even if the pump were replaced.