

# HC6000-PRO

## Sump Pump Float Switch and Performance Monitor

### Overview:

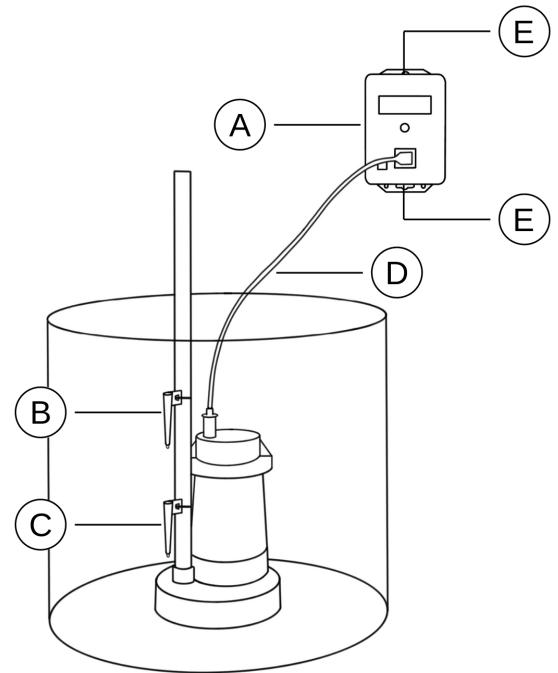
The **HC6000-PRO** Sump Pump Float Switch and Performance Monitor with LCD display will provide you with years of trouble-free, worry-free service after completing a simple and straightforward installation process. See **Troubleshooting** section for Smart Button, LED, and alarm specifications. This product is not rated for outdoor use.

### READ PRIOR TO INSTALLATION:

1. The “**piggyback plug**” attached to the mechanical float switch **cannot be used with the HC6000-PRO**. It must be disconnected and remain disconnected.
2. If your sump pump has **internal float switch wiring**, i.e. does not have a “piggyback plug”, then you **must** secure the float in an **upward position** as if the pit were full. This assures that the internal switch is always closed and that the pump is enabled.
3. Pits that receive water from a water softener or that have **high mineral/iron content** require an **alternative installation method** for maximum reliability. Visit our website [www.hydrocheckproducts.com](http://www.hydrocheckproducts.com) for recommended installation instructions for these applications.

### Step-by-Step Installation

<b>Step 1</b>	Unplug the sump pump from the back of “piggyback plug”.
<b>Step 2</b>	Unplug the “piggyback plug” from the 120 VAC and set aside. The HC6000-PRO completely replaces this component.
<b>Step 3</b>	Secure the control module (A) to a wall near the sump pit using the screws provided (E). <b>NOTE:</b> The control module should be mounted within reach of the sump pump’s power cable and a 120 VAC outlet.
<b>Step 4</b>	Secure the <b>RED SENSOR</b> (B) to the discharge pipe with tie wrap where the pump is intended to turn on. <b>NOTE:</b> Recommended height for the Red Sensor is slightly below the Drain Tile (Water Inlet Pipe).
<b>Step 4</b>	Secure the <b>BLACK SENSOR</b> (C) to the discharge pipe with tie wrap where the pump is intended to turn off.
<b>Step 5</b>	Plug the control module (A) into the 120 VAC outlet (not pictured).
<b>Step 6</b>	Plug the sump pump power cable (D) into the control module (A). <b>NOTE:</b> The HC6000-PRO’s output is rated for a maximum of ¾ HP and/or 13.8 amps at 120 VAC.
<b>Step 7</b>	TEST YOUR INSTALLATION BEFORE LEAVING IT FOR UNATTENDED USE. <b>NOTE:</b> For the most accurate test, manually fill up the sump pit to mimic a cycle. This product <b>will not work properly if tested in a cup of water</b> as it does not have a ground reference.



### Installation Key

A. Control Module	D. Sump Pump Power Cable
B. Red Sensor (High Sensor)	E. Screws
C. Black Sensor (Low Sensor)	

\*Sensor wires and HC6000-PRO power cable are not pictured in installation graphic.

### How the Sensors Works: Do I need a ground wire?

The sensors detect the presence of water by using a continuity circuit. The continuity circuit works by allowing a very small current to flow from the sensors, through the water, to the ground when the tips of the sensors are in water. When no water is present, the circuit is broken and no current flows. Normally, the pump provides the ground reference needed for the continuity circuit to work, but occasionally it won't. When this occurs, the “Weak Ground” alarm will activate, indicating that it is necessary to provide a ground reference.

### Adding a Ground Wire:

<b>Step 1</b>	Strip 1 inch of insulation off each end of a 14 AWG length of wire.
<b>Step 2</b>	Secure one end of the wire to the screw labeled “Ground” on the front of the control module.
<b>Step 3</b>	Place the other end of the wire into the pit so that it is <i>below</i> the lower sensor. <b>NOTE:</b> Ground wires are electrically neutral and possess no shock hazard.

### Alarm Messages

Alarm Type/Display Message	Condition
<b>High Water</b>	Triggers after 25 seconds if the Red Sensor is still detecting water after two “air lock” attempts.
<b>Pump Not Detected</b>	Triggers if the switch turns the pump on, but no pump current is detected.
<b>Auto Test No Amp</b>	Triggers if the switch turns the pump on during an Auto Test and no pump current is detected.
<b>Weak Ground</b>	Triggers if water reaches the Red Sensor and the Black Sensor isn’t detecting water due to a weak/missing ground.
<b>Red Sensor Dirty</b>	Triggers during an Auto Test if the switch determines that the Red Sensor should be cleaned.
<b>Black Sensor Dirty</b>	Triggers during an Auto Test if the switch determines that the Black Sensor should be cleaned.
<b>Black Sensor Fail</b>	Triggers if the Black Sensor isn’t detecting water at the start of the pump cycle.

### Display Messages

	Description
<b>Total Cycles:</b> 000,000,000	Total number of pump cycles since the switch was installed.
<b>Cycles Since Reset:</b> 000,000,000	Total number of cycles since the switch was installed or reset (See “Reset” description below).
<b>Max. Amps:</b> xx.x <b>Avg. Amps:</b> xx.x	Max Amps = Maximum recorded pump amps since switch reset. Avg. Amps = Average pump amps over the previous 16 pump cycles. <b>NOTE:</b> Average amps data will not be displayed until the pump has run 16 cycles.
<b>Max. Cycle:</b> 0:00:00 <b>Min. Cycle:</b> 0:00:00	Maximum and minimum pump cycle time since last switch reset. <b>NOTE:</b> Maximum and minimum cycle data will not be displayed until the pump has run at least one cycle.
<b>Fill Time/Cycle:</b> <b>Last:</b> 0:00:00	Displays the time it took to fill the pit between the last two cycles. <b>NOTE:</b> Data will not be displayed until the pump has run at least one cycle.
<b>Fill Time/Cycle:</b> <b>Current:</b> 0:00:00	Displays the time since the last cycle. <b>NOTE:</b> Data will not be displayed until the pump has run at least one cycle.

### Push Button Features

Action	Response
<b>Scrolling Function</b>	Press the Smart Button to scroll through the different data screens.
<b>System Test</b>	Press and hold the Red Button. Release after 3 beeps.
<b>Alarm Menu Access</b>	Press and hold the Smart Button to access the Alarm Menu. Release after 3 beeps. Press and hold the Smart Button to exit the Alarm Menu. Release after 3 beeps.
<b>Silence Active Alarm</b>	Press the Smart Button to silence an active alarm.
<b>Disable Active Alarm for 24 Hours</b>	Press and hold the Smart Button to disable an active alarm for 24 hrs. 3 beeps indicates that the alarm has been disabled.
<b>Disable or Enable Alarms</b>	1. Press and hold the Smart Button to access the Alarm Menu. Release after 3 beeps. 2. While the desired alarm is displayed, press the Red Button to either disable or enable that alarm. 3. Press and hold the Smart Button to exit the Alarm Menu. Release after 3 beeps.

#### WARRANTY:

STAK Enterprises Inc. warrants the model **HC6000-PRO** to be free from defects in materials and workmanship for its normal, useful life, for a period of 5 years from the date of purchase. STAK Enterprises Inc. makes no other express warranty for this device. No agent, representative, dealer, or employee of STAK Enterprises Inc. has the authority to increase or alter the obligations or limitations of the warranty. The company's obligation of this warranty shall be limited to the repair or replacement of any part of the HC6000-PRO which is found to be defective in materials or workmanship under normal use and service during the 5 year period of product use by original product owner commencing with the date of purchase. Owner must pay all shipping charges necessary to replace product covered by this warranty. This warranty shall not apply to acts of God, nor shall it apply to products which, in the sole judgment of STAK Enterprises, Inc. have been subject to negligence, abuse, accident, tampering, alteration, misapplication, or improper installation.

THE DURATION OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING THAT OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSES, SHALL BE LIMITED TO THE NORMAL, USEFUL LIFE OF THE PRODUCT, COMMENCING WITH THE DATE OF PURCHASE. IN NO CASE SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WHATSOEVER.