HC6000v2 Hi-Lo Electronic Pump Controller (Dual Float)



Overview:

The **HC6000v2 Hi-Lo Electronic Pump Controller with Smart Button** 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:

- The "piggyback plug" attached to the mechanical float switch cannot be used with the HC6000v2. 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**. Visit our website **www.hydrocheckproducts.com** for recommended installation instructions for these applications.

Step-by-Step Installation (SUMP PIT)

Step 1	Unplug the sump pump from the back of "piggyback plug".	"Piggyback Plug" Sump Pump
Step 2	Unplug the "piggyback plug" from the 120 VAC and set aside. The HC6000v2 completely replaces this component.	"Piggyback Plug"

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Step 3	Secure the RED SENSOR (High Sensor) to the discharge pipe with tie wrap where the pump is intended to turn on. NOTE: Recommended height for the Red Sensor is slightly below the Drain Tile (Water Inlet Pipe).	Tie Wrap Red Sensor Drain Tile
Step 4	Secure the BLACK SENSOR (Low Sensor) to the discharge pipe with tie wrap where the pump is intended to turn off.	Black Sensor
Step 5	Check that the Red Sensor is positioned above the Black Sensor so that the pump cycle is at least 3 seconds. NOTE: If the cycle time is too short (less than 3 seconds) the LED will flash and a steady alarm will sound.	Red Sensor
Step 6	Plug the control module into the 120 VAC outlet. NOTE: The output will turn on briefly and the LED will illuminate red. If the Red Sensor detects water, a pump cycle will begin.	Control Module

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Step 7	Plug the sump pump motor into the control module.	
	NOTE: The HC6000v2's output is rated for a maximum of ³ / ₄ HP and/or 13.8 amps at 120 VAC.	Control Module Sump Pump Power Cable
Step 8	TEST YOUR INSTALLATION BEFORE LEAVING IT FOR UNATTENDED USE. NOTE: This product will not work if tested in a cup of water. See How the Sensor Works: Do I need a ground wire? below for more information.	 Fill the pit with water until the water level reaches the tip of the Red Sensor. The pump should turn on and the water level drop. When the water drops below the tip of the Black Sensor, the switch should turn off the pump.

Step-by-Step Installation (UTILITY PUMP)

Complete steps 3-8 (see above) where the sensors are secured to the utility pump instead of the discharge pipe. **NOTE:** In a typical utility pump installation, the sensors **Utility Pump** are secured directly to the utility pump at a minimum of 1/4" apart. Red Sensor -Tie Wrap **Black Sensor**

How the Sensor Works: Do I need a ground wire?

The sensor detects the presence of water by using a continuity circuit. The continuity circuit works by allowing a very small current to flow from the sensor, through the water, to the ground when the tip of the sensor is 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. If the pump cycle is at least 3 seconds long, a Flashing Red LED and audible alarm indicate a weak ground reference. When this happens, it is necessary to provide a ground reference for the sensor to work.

Adding a Ground Wire:

Step 1	Strip 1 inch of insulation off each end of a 14 AWG length of wire.
Step 2	Secure one end of the wire to a metal water pipe or other metal electrical conduit.
Step 3	Place the other end of the wire into the pit so that it is below the bottom sensor.
	NOTE: No danger of electrocution. Visit our website www.hydrocheckproducts.com for more information.

TROUBLESHOOTING:

Alarm & LED Guide

	Meaning	Possible Cause
Green LED	The switch's output is on (the pump is on).	None-Normal operation
Red LED	The switch's output is off (the pump is off).	None—Normal operation
Fixed Rate Alarm & Flashing LED (Green or Red)	 Weak ground reference detected during last cycle. Pump cycle is too short (less than 3 seconds) 	See website for more information www.hydrocheckproducts.com
2-Beep Alarm	The switch did not detect a motor current during the previous pumping cycle.	Pump is not plugged inMechanical float switch is not disabledPump failure
3-Beep Alarm (High Water Alarm)	Water level did not drop below the Red Sensor (High Sensor) within 20 seconds of pump cycle start.	Pump failureBlocked or frozen discharge pipe

Smart Button Features

Goal	Method	
Silence Alarm	Pressing and releasing the Smart Button while an alarm is active will	
	silence the alarm for 24hrs.	
Disable Alarm	Pressing and holding the Smart Button while an alarm is active will	
	disable the alarm until the switch is reset. The Smart Button should be	
	pressed and held until the device sounds a short beep followed by a long	
	beep, indicating that the alarm was successfully disabled.	
Switch Reset	Press and hold Smart Button while plugging switch into a 120 VAC outlet.	
Manually Run Pump	Press and hold the Smart Button for 5 seconds while the LED is solid	
	red. The pump will run until the button is released.	
Turn Pump Off	Press and hold the Smart Button for a minimum of 5 seconds while the	
	pump is on. The pump will turn off when the button is released.	

Warranty:

STAK Enterprises Inc. warrants the **Model HC6000v2 Hi-Lo Pump Controller** 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 HC6000v2 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. Units in need of repair should be returned, shipping prepaid, to:

Customer Service Department STAK Enterprises, Inc. 2413 West Algonquin Road #309 Algonquin, IL 60102

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