

HC7000 Utility Pump Controller (Automatic Utility Pump Switch)

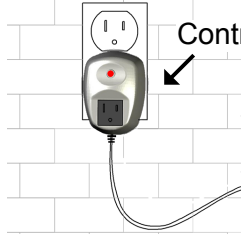
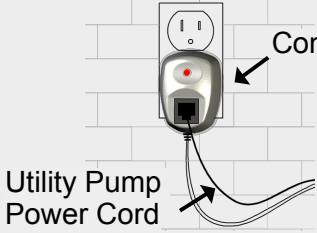
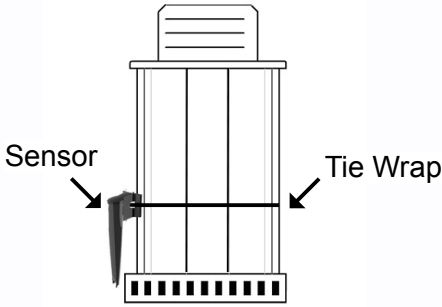
Overview:

The **HC7000 Electronic Utility Pump Controller** is specially designed to control the operations of a utility pump after completing a simple and straightforward installation process. See **Alarm & LED Guide** product details. This product is not rated for outdoor use.

READ PRIOR TO INSTALLATION:

1. Once triggered, pump **must pump water for a minimum of 5 seconds**.
2. The discharge hose should be of good quality, non-kinking, with a minimum I.D. of 5/8" and should be kept as short as possible (**Max. 25ft hose**).
3. Most utility pumps need a **minimum water depth** before they should be **turned on**. Consult your pump's owner's manual for this requirement and adjust the sensor position accordingly.

Step-by-Step Installation

Step 1	<p>Plug the control module into the 120 VAC outlet.</p> <p>NOTE: The output will turn on briefly and the LED will illuminate red. If the Sensor detects water, a pump cycle will begin.</p>	 <p>Control Module</p>
Step 2	<p>Plug the utility pump motor into the control module.</p> <p>NOTE: The HC7000's output is rated for a maximum of 3/4 HP and/or 13.8 amps at 120 VAC.</p>	 <p>Control Module</p> <p>Utility Pump Power Cord</p>
Step 3	<p>Secure the SENSOR directly to the utility pump with tie wrap where the pump is intended to turn on.</p> <p>NOTE: The sensor should be positioned above the pumps minimum water depth in order to function properly.</p>	 <p>Sensor</p> <p>Tie Wrap</p>
Step 4	<p>TEST YOUR INSTALLATION BEFORE LEAVING IT FOR UNATTENDED USE.</p> <p>NOTE: This product will not work if tested in a cup of water. See <i>How the Sensor Works: Do I need a ground wire?</i> below for more information.</p>	<ul style="list-style-type: none"> • Fill the area with water until the water level reaches the tip of the Sensor. • The pump should turn on and the water level drop. • When the pump begins to draw air, the switch should turn off the pump.

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. 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 under the pump so that the wire is held in place. NOTE: No danger of electrocution. Visit our website www.hydrocheckproducts.com for more information.

Alarm & LED Guide

	Meaning	Possible Cause
Green LED	The switch's output is on.	None—Normal operation
Red LED	The switch's output is off.	None—Normal operation
2-Beep Alarm	The switch did not detect a motor current during the previous pumping cycle.	<ul style="list-style-type: none">• Pump intake overlaid• Discharge hose is blocked• Debris on sensor
3-Beep Alarm (High Water Alarm)	Water level did not drop below the Sensor (High Sensor) within 30 seconds of pump cycle start.	<ul style="list-style-type: none">• Air Lock• Pump failure• Blocked or frozen discharge pipe

Troubleshooting

Problem	***	Corrective Method
Pump doesn't turn on	The sensor is in water, but the pump doesn't start. LED is solid Red.	The sensor isn't getting a good ground from the pump. See "Adding a Ground Wire" .
Pump turns off too soon	The pump starts a cycle, but turns off before it starts to draw air.	Check the hose for kinks, length, and improper diameter that may be causing too much resistance in the pump's discharge path.
Pump doesn't turn off	The pump is drawing air, but continues to run.	<ul style="list-style-type: none">• Check that the sensor isn't placed too low. The pump needs to be able to pump the water level below the tip of the sensor.• Check that it takes at least 5 seconds for the pump to evacuate all of the water.• Check that there isn't anything creating a bridge between the sensor and the pump. This can cause an alternative ground path for the sensor.
Pump turns on when no water is present	Something is triggering the sensor that is causing the switch to "think" water is present.	<ul style="list-style-type: none">• Check that there isn't anything creating a bridge between the sensor and the pump. This can cause an alternative ground path for the sensor.

Warranty:

STAK Enterprises Inc. warrants the model **HC7000 Electronic Utility 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 HC7000 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

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.