

HC8000T Timed Sump Pump Controller (Float Switch)

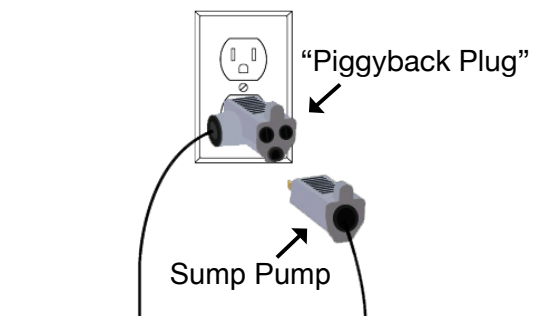
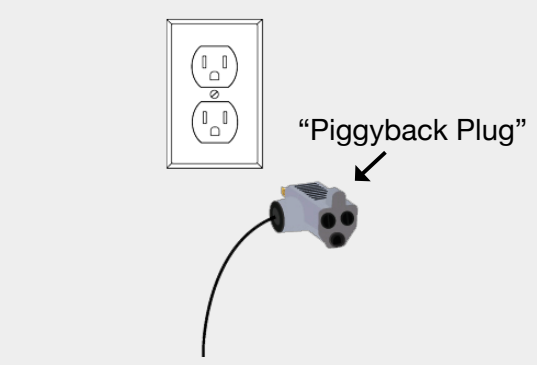
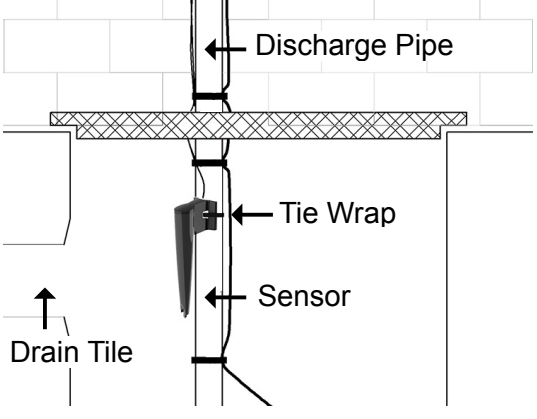
Overview:

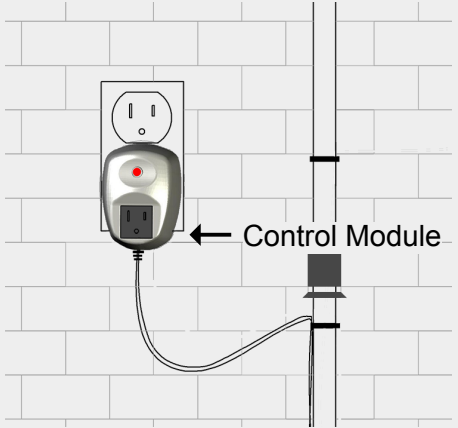
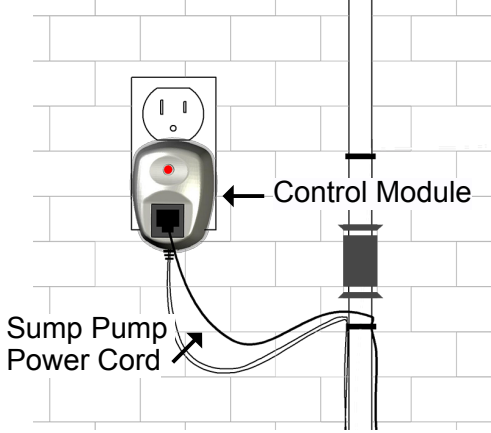
The **HC8000T Timed Sump Pump Controller** will provide years of reliable and trouble-free service after completing a simple and straightforward installation process. See **Alarm & LED Guide**, **Smart Button Features**, and **Troubleshooting** sections for product details. This product is not rated for outdoor use.

READ PRIOR TO INSTALLATION:

1. The “**piggyback plug**” attached to the mechanical float switch **cannot be used with the HC8000T**. 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.

Step-by-Step Installation

Step 1	Unplug the sump pump from the back of “piggyback plug”.	
Step 2	Unplug the “piggyback plug” from the 120 VAC and set aside. The HC8000T completely replaces this component.	
Step 3	Secure the SENSOR to the discharge pipe with tie wrap where the pump is intended to turn on. NOTE: Recommended height for the Sensor is slightly below the Drain Tile (Water Inlet Pipe).	

<p>Step 4</p>	<p>Plug the control module into the 120 VAC outlet.</p>	
<p>Step 5</p>	<p>Plug the sump pump motor into the control module.</p>	
<p>Step 6</p>	<p>Adjust run time by following Run Time Adjustment steps on Page 3.</p> <p>NOTE: This product defaults to a 10 second run duration and can be reprogrammed at anytime.</p>	
<p>Step 7</p>	<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 pit with water until the water level reaches the tip of the sensor. • The pump should turn on and the water level drop. • When the adjusted runtime is up, the switch should turn off the pump.

Run Time Adjustment

This product defaults to a 10 second run duration and can be reprogrammed at anytime by following these steps.

Step 1	Silence or eliminate all active alarms: There should be no audible alarms active (See “ Smart Button Features ” on how to disable alarm).
Step 2	Press and hold the Smart Button for approximately 5 seconds, or until the output turns on and the light starts to flash green. The output turning on marks the start of the desired run time duration NOTE: If the pump is in the middle of a run cycle when the Smart Button is pressed and held, the output will turn off for a moment (canceling the cycle) then restart to mark the start of the run time programming.
Step 3	Release the Smart Button when the desired run time is reached. The output will turn off and the switch is now reprogrammed with the new run time duration. NOTE: Loss of power does not affect the programmed run time.

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 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 into the pit so that it is <i>below</i> the bottom sensor. 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 (the pump is on).	None—Normal operation
Red LED	The switch's output is off (the pump 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 is not plugged in • Mechanical float switch is not disabled • Pump failure
3-Beep Alarm (High Water Alarm)	Water level did not drop below the sensor within 30 seconds of pump cycle start.	<ul style="list-style-type: none"> • Pump failure • Blocked 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.

Troubleshooting

Problem	Meaning	Method
Pump doesn't turn on	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. Install a ground wire. See Adding a Ground Wire .
Pump turns off too soon	The pump starts a cycle, but turns off before the cycle is complete.	Check that the switch is programmed for the proper run time. See Run Time Adjustment .
Pump doesn't turn off	The pump is drawing in 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 the switch is programmed for the proper run time. See Run Time Adjustment. • Check that there isn't anything creating a bridge between the sensor and the pump. This can cause an alternate ground path for the sensor.
Pump turns on when no water present	Something is triggering the sensor, causing the switch to "think" water is present.	Check that there isn't anything creating a bridge between the sensor and the pump. This can cause an alternate ground path for the sensor.

Warranty:

STAK Enterprises Inc. warrants the model **HC8000T Timed Sump 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 HC8000T 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.