

Controller Operation - The most current/up to date version of this can always be found at <http://www.hootsystems.com/controls>

Time Dose (& Drip) Control

Designed to Time Dose effluent from the treatment system throughout the 24-hour day. The system doses effluent based on the settings of Dose Frequency and Dose Time.

Water must be present over the Low Probe for the effluent pump to turn on. (can be jumpered for inspection)

When water is Above the Low Probe and Below the High Probe, the Dose Frequency and Dose Time settings will be in effect.

When water is over the High Water Probe, the pump will run in a Demand Configuration (continuous operation).

If the water "clears" or goes below the High Water Probe the pump will operate for one "complete" dose (according to your set time between 1 and 20 minutes), then turn off.

If the water does not clear the High Water Probe and continues to fill the tank, when water touches the Alarm Probe, the Audible and Visual Alarm will sound.

When Water is Above High Water and Alarm Probe, Pump will remain in continuous operation to prevent backup into a home.

Field Flushing - (If Equipped for Drip)

If a Solenoid Valve is present on the return line, automatically every 2 weeks, or 256 doses, the Solenoid will open during the dose, for 4 doses in a row.

This allows for the field flushing of up to 4 zones on a hydraulic zone valve.

Demand Override

Designed to Dose effluent from the treatment system whenever the probe contacts the High Water Probe.

When water is over the High Water Probe, the pump will run in a Demand Configuration (continuous operation).

If the water “clears” or goes below the High Probe the pump will operate for the programmed dose time or in the case of spray for up to 1 hour or until it clears the “low” probe, then turn off.

If it does not clear the low probe in 1 hour, it will set Alarm Code #5 -Pump could not pump below low probe in > 60 minutes.

If the water does not clear the High Probe and continues to fill the tank, when water touches the Alarm Probe, the Audible and Visual Alarm will sound.

When Water is Above High Probe and Alarm Probe, Pump will remain in continuous operation.

This works at any time in the controller operation.

After the sixteen seconds timeout, you will hear two quick chirps, at that time release the switch to restart the controller.

Enter Modes

After Reset, To enter one of the troubleshooting modes press and hold the switch again before the lights go out on the lamp test and the system sounds the startup beep. Restarting the controller this way will not clear the error memory.

If there are error codes in memory, the controller will chirp three times followed by a beep at startup.

If there are no errors in memory, the controller will sound a single beep at startup.

Resetting Controller

You can restart the controller by either powering down the system or holding the silence alarm switch for 16 seconds.

This works at any time in the controller operation.

After the sixteen seconds timeout, you will hear two quick chirps, at that time release the switch to restart the controller.

Mode 1

When you hear one chirp, release the switch.

In this Mode the controller will check the status of the probes and the photocell.

The green light will be on if the photocell is illuminated and off if it's dark (close the door when performing this test to keep light off of the photocell from the rear).

The yellow lights at the bottom of the controller are redefined to indicate the probe status. If the probe is wet the light is on and off if dry. The bottom light is for the low probe, the second from the bottom (aeration problem) is for the high probe and the third from the bottom (water level problem) is for the alarm probe.

SYSTEM OK- Green Light – Steady if light is present

SYSTEM ALARM – Red Light -On (To indicate it is in this Mode)

WATER LEVEL PROBLEM – Yellow Light – if Water Over Alarm Probe

AERATION ALARM – Yellow Light -if Water Over High Probe

BLANK – Yellow Light -if Water Over Low Probe

To exit this mode, press the silence alarm switch the controller will restart.

Mode 2

When you hear one chirp then two chirps release the switch.

This is the "Force the Pumps" Mode.

This is a good method to find an air leak, as the controller will not power off the air pump, because of low air pressure.

If water is present over the low probe, the controller will start the water pump (the air pump will also be running.)

The water pump will run for up to 16 minutes and then restart the controller. Switch off the water pump circuit breaker if you do not need to check the water pump.

If you press the Silence Alarm Switch at any time during this mode, the water pump will stop and the controller will restart. (Remember to switch the water pump circuit breaker back on if switched off earlier.)

If water drops below the low probe at any time the system will exit this mode and reset.

Mode 3

When you hear one chirp, then two chirps, then three chirps release the switch.

This mode Indicates the Air Pressure in Water Column Inches and displays the software version on exit.

The controller will turn on the aeration problem lamp to indicate the air pressure mode and chirp/flash the air pressure in Water Column Inches (WCI).

A Chirp indicates a number, a beep (longer) indicates a zero (0).

For example, 65in/water 6 chirps pause 5 chirps long pause repeat.

For example, 102in/water chirp pause beep pause 2 chirps long pause repeat.

Normal air pressure for a:

500/600 GPD Hoot System is about 65 WCI

750/900 GPD 72 WCI

1000/1200 GPD Hoot is 78 WCI

Pressure must be between 28 and 100 for the system to operate without an alarm/error

To exit this mode, press and hold the switch which will flash (the red light) & chirp the software version number.

The aeration lamp turns off to indicate this mode. If you continue to hold the switch, it will continue to repeat the software version.

Release the switch to restart the controller.

Mode 4

When you hear one chirp, then two chirps, then three chirps, then four chirps release the switch. The fourth mode is flash the display the last four error codes.

The beeper will chirp out the last alarm code. If there are no errors the controller will chirp once and repeat.

If there are stored errors, then the controller will chirp out the error code for the last error then light the bottom yellow light and chirp out the next to last error code.

This will continue, lighting the two lights and then three lights for a total of the last four error codes.

Then the sequence will repeat.

The controller only displays memory locations that contain error codes.

If there is not an error then that location will be skipped.

Alarm Codes

1=no error

2=excess water usage (greater than 1 hr. in spray)

3=extra alarm input

4=could not pump below high probe (spray mode)

5=Demand mode or in spray mode>60 minutes

6=photocell error

7=water over alarm probe

8=low air pressure

9=high air pressure

10=low line voltage

12=connected to 220 volts

If error codes are stored, the controller will chirp three times followed by a beep at startup. If all of the errors are clear the controller will sound the normal beep at startup.

Mode 5

When you hear one chirp, then two chirps, then three chirps, then four chirps continue holding 8 more seconds. When you hear five chirps release the switch.

The controller will then go “beep-beep” and will repeat.

You have 2 options:

Press and hold switch for 2 seconds, the controller will “triple beep” and restart. This indicates the “error” memory and “bullet” mode was erased. Your run time settings will be kept.

– or –

You can “quickly” press and release the button to “escape” out of this mode in case you accidentally got here before reading the service codes.

Memory will no longer be erased by powering off and removing the battery (since there is no battery).

Mode 6

When you hear one chirp, then two chirps, then three chirps, then four chirps continue holding 8 more seconds. When you hear five chirps, then six chirps, then release the switch.

This mode will allow you to select between time dose operation and demand dose

Timed Dose Control

This mode is sets the dose time or converts the panel to Demand Control.

The controller can be set for doses, in 1 minute increments between 1 and 20 minutes per dose.

The default, factory setting is 8 minutes per dose, 24 times per day.

To change this setting, you can change the setting by “quickly” pushing and releasing the button WHILE the controller is beeping out the current setting.

The next “display” of the setting will “add” in the number of times you pressed and released the switch

A zero is indicated by a long beep

Eight is indicated by 8 chirps. 10 is indicated by a chirp and a long beep. 12 is indicated by a chirp a delay and two chirps then a long delay and repeat.

If you want to increase from 8 to 10, push twice, from 8 to 20, push 12 times.

Verify you have the setting you want, then store the change by holding the button for 2 seconds.

Demand Dose Control

With the Controller set to "0" – (a long beep) there are no longer time settings.

In this mode the pump will not come on until the water reaches the "high" probe.

After a 30 second delay, the pump will turn on and run until it clears the "low" probe.

If an hour elapses, and the pump has not "cleared" the low probe, it will turn off the pump and store the maintenance code of "5" Pump Ran > 60 minutes.

In both Timed and Demand Dose Control Settings, the "Alarm" runs independent of pump control which is on the low and high probes only.

Dose Frequency

For Timed dosing, switch 3 & 4 are used to set 12, 24 or 36 doses per day. Default (with switches off) the system will pump up to 24 scheduled times per day if water is present over the low probe.

Switch 3 AND 4 off, 24 times per day.

Switch 3 or 4 on (with the other off) 12 times per day

Switch 3 AND 4 are on, 36 times per Day.

After new setting is made, Reset Controller or Power Down and back on and the new Settings will take effect.

If you need to add the options of 6 times per day (every 4 hours) and 18 times per day (every 1:20 minutes), you need to change out a wire on the Water Pump Relay. For all controllers manufactured after the summer of 2015 there is a "purple wire" located within the black

fiberglass sleeve with a fork end. It replaces the blue wire, with a fork end that is landed on the Water Pump Relay.

With the Purple wire hooked up you have:

Switch 3 AND 4 off, 12 times per day.

Switch 3 or 4 on (with the other off) 6 times per day

Switch 3 AND 4 are on, 18 times per Day.

Disable Air Pressure (Bullet Mode)

It may be necessary to disable air pressure monitoring on a system for several reasons. Among these are:

- Broken Pressure Switch
- Failing Compressor (Overheats and shuts down)
- Leaking pressure sensor hose

The panel computer monitors the Pressure Transducer and cannot be “jumpered” around to keep the system operating. We have provided a “Software” disable to the switch for emergencies to keep the system operating if one of the above, or other conditions occur.

Please note that this should be used only in case of an emergency and that the system is technically in violation of the Standard 40 while this condition is being ignored.

To Disable Air Pressure Sensing, Reset Controller.

During Startup while Green Light is Flashing press and hold silence alarm switch until green light stops flashing (20 Seconds)

Yellow light (Aeration Problem) will light

Release switch, System is no longer monitoring Pressure

To Clear, Reset Controller and clear memory in Mode 5.