

# BaseStation 3200 Irrigation Controller Shutting Down Irrigation Due to Low Water in a Pond or Cistern

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When an irrigation system is designed to draw from a limited water source, it's important to monitor the quantity of water in order to avoid pumping the source dry.

You can use a Baseline biSensor soil moisture sensor with your Baseline controller to monitor the water level in a pond or cistern and stop watering when the water drops below a specified level.

Perform the following steps to use a biSensor and a stop condition to shut down watering when water drops below a specified level in a reservoir:

Step 1 – Install the biSensor in the reservoir and wire it to the controller.

Step 2 – Program the controller to shut down at a specified moisture reading.

## Step 1 – Installing the biSensor in the Reservoir

Take note of the serial number of the biSensor that you are installing in the reservoir. You will need this number when you program the controller.

For best results, position the biSensor vertically in the reservoir. It doesn't matter which end is up, but mount the biSensor so the wires can be routed out of the reservoir. Make sure that some portion of the biSensor blade is below the water at the low water level.

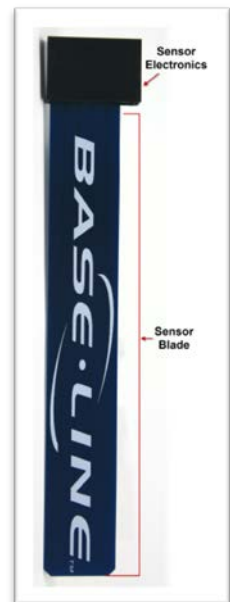
**IMPORTANT!** When mounting the biSensor, do not drill or nail through any part of the biSensor. A perforation in any part of the biSensor will prevent it from working and will void the biSensor warranty. A suggested method for mounting the biSensor is to install a pole in the reservoir and attach the biSensor to the pole with zip ties.

Mount the biSensor securely so it does not move. Variations in the position of the biSensor will result in incorrect readings.

Follow the wiring instructions in the biSensor installation guide to connect the biSensor to the two-wire path or to the biSensor ports on the controller.

Make sure that you maintain polarity on the wire connections.

Fasten the wiring with wire nuts, and then test communication with the controller before you complete the installation with waterproof connectors.



## Step 2 – Programming the Controller

You can shut down the entire controller or a specific program when the water level reaches the low level.

### Assign the biSensor

1. On the BaseStation 3200 controller, turn the dial to the **Start, Stop, Pause** position.
2. Press the **Next** or **Previous** button to highlight the **Moisture Control Setup** option.
3. Press the **Enter** button. The Moisture Sensors screen displays.
4. **All** is highlighted in the Program column. Perform one of the following:
  - To associate the moisture sensor with the full controller, continue to step 5.
  - To associate the moisture sensor with a specific program, press the + button to move to the program number. Continue to step 5.
5. Press the **Next** button to highlight **Search**.
6. Press the **Enter** button to search for moisture sensors. The serial numbers of the biSensors are shown in the Moisture Sensors column.
7. Press the + or – button to highlight the serial number of the moisture sensor that you installed in the reservoir.

Moisture Sensors		Start, Stop, Pause	
Prog	Moisture Sensors	Enable	Value
-	-	Start	<input type="text"/>
-	-	Stop	<input type="text"/>
All	Search	Pause	<input type="text"/>
1	SB01130		<input type="text"/>
2	-		<input type="text"/>
3	-		<input type="text"/>

Full Controller - Everything Help

### Take a biSensor Reading

1. Make sure the water in the reservoir is at the level where you want the system to shut down.
2. On the BaseStation 3200 controller, turn the dial to the **Self Test** position.
3. Press the **Next** or **Previous** button to select **Test Single Two-wire Device**, and then press the **Enter** button.
4. In the **Device to Test** column, press the + or – button to select the serial number of the biSensor that you installed in the reservoir.
5. Press the **Enter** button to test the biSensor. The test results display the moisture percentage.
6. Write down the moisture reading, and then turn the dial to the **RUN** position.

Self Test	
Device to Test	Test Results
6: Q006643	Sensor: SB01130
MV1: D003329	06/11/2012 09:01
SB01130	-----
FM1: 00W0268	Moisture: 0.0%
ED: P000116	Soil Temperature: 77.0
-	Two-wire Drop: 0.6

Help

## Configure the Stop Condition

1. On the BaseStation 3200 controller, turn the dial to the **Start, Stop, Pause** position.
2. Press the **Next** or **Previous** button to highlight the **Moisture Control Setup** option.
3. Press the **Enter** button. The Moisture Sensors screen displays.
4. In the **Program** column, press the **+** button to highlight the program that you assigned the biSensor to.
5. Press the **Next** button to move to the **Moisture Sensors** column. Press the **+** button to highlight the serial number of the biSensor that you installed in the reservoir.
6. Press the **Next** button to move to the **Enable** column of the **Start** field. Make sure the value is set to **Off**.
7. Press the **Next** button to move to the **Enable** column of the **Stop** field. Press the **+** button to set the value to **Below**.
8. Press the **Next** button to move to the **Value** column of the **Stop** field. Press the **+** button to enter the biSensor reading that you wrote down from the test.
9. Press the **Next** button to move to the **Enable** column of the **Pause** field. Make sure the value is set to **Off**.
10. When you have finished making changes, turn the dial to the **RUN** position.

Moisture Sensors		Start, Stop, Pause	
Prog	Moisture Sensors	Moisture 0.0%	Value
99	-	Start	Off
All	Search	Stop	Below 26.0%
1	SB01130	Pause	Off
2	-	Pause Time	
3	-		
4	-		
{Program 1}			
{Moisture Sensor Description}			
			Help

When the biSensor reading matches the value that you entered in the Stop field, the controller will stop watering and display a message on the Run Status screen.