BaseStation 1000 Irrigation Controller Shutting Down Irrigation Due to Low Water in a Pond or Cistern

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 sensor 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.
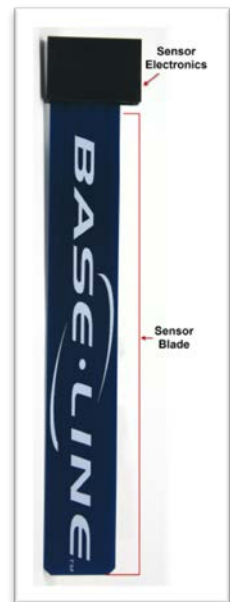
Step 2 – Programming the Controller

Assign the biSensor

1. On the BaseStation 1000 controller, press the **Search & Assign** button. The Search & Assign menu displays.

2. Press the ⇧ or ⇩ button to highlight the **Moisture Sensor** option, and then press the **OK** button to select it. The Moisture Sensor screen displays.

3. If the **Device Assignment** option is highlighted, press the **OK** button to select it. If Device Assignment is not highlighted, press the ⇧ or ⇩ button to highlight it, and then press the **OK** button. The Moisture Assignment screen displays.

4. When the **Search** option in the Action column is highlighted, press the **OK** button to search for biSensors.

   When the controller finds the devices, their serial numbers display in the Action column.

5. Press the ⇧ or ⇩ button to move through the list of devices in the Action column. Highlight the serial number of the biSensor that you installed in the reservoir.

6. Press the ⇨ button to move to the **Moisture Sensor** column.

7. Press the ⇧ or ⇩ button to move through the list. Highlight the number that you want to assign the biSensor to.

8. Press the **OK** button. The serial number of the device that you selected in the Action column now displays next to the number in the Moisture Sensor column.

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 1000 controller, press the **Test** button. The Test menu displays.

3. Press the ⇧ or ⇩ button to highlight the **Test Moisture Sensor** option, and then press the **OK** button. The Test Moisture Sensor screen displays.

4. Press the ⇧ or ⇩ button to select the biSensor that you installed in the reservoir.

5. Press the **OK** button to test the biSensor.

   Note: If any zones or programs are running when the test is activated, watering will pause for 10 minutes. The test results display the moisture percentage.

6. Write down the moisture reading, and then press the **RUN** button to return to the Run menu.

Configure the Stop Condition

1. On the BaseStation 1000 controller, press the **Program Setup** button. The Program Setup menu displays.

2. If the program that you want to configure the stop condition for displays in the upper-left corner of the screen, continue to step 3. Otherwise, press the **PRG** button until the correct program displays in the upper-left corner of the screen.

   Note: To move backwards in the list of programs, press and hold the PRG button, and then press the **–** button repeatedly.

3. Press the ⇩ button to highlight the **Setup Prg. Stop** option, and then press the **OK** button. The Setup Prg. Stop screen displays.

4. Press the ⇩ button to highlight **Moisture Stop**, and then press the **OK** button. A checkmark displays next to the option.

5. Press the **OK** button again. The Moisture Stop screen displays.

6. Notice that the serial number for one of your biSensors is highlighted in the **Moisture** field. If this is the serial number for the biSensor that you installed in the reservoir, no change is required. If you need to assign a different biSensor to the program, press the **+** or **–** button to select a different serial number.

7. Press the ⇩ button to highlight the **Moisture Limit** field, and then press the **+** or **–** button to change the number in the field to match the reading that you wrote down from the biSensor test.

8. Press the ⇩ button to highlight **Less Than Limit**, and then press the **OK** button. A checkmark displays next to the option.

9. Press the ⇩ button to highlight the **Stop** field, and then press the **+** or **–** button until **Immediately** displays in the field.

10. Press the **RUN** button to return to the Run menu.

When the biSensor reading matches the value that you entered in the Limit field, the controller will stop watering.