

# BL-5406 Pressure Sensor biCoder™ Kit Installation Guide

The BL-5406 pressure sensor biCoder allows a BaseStation 3200™ irrigation controller to communicate with a standard 4-20 mA pressure sensor device. Baseline's Pressure Sensor biCoder Kit supplies the biCoder and a Dwyer® Series 628 pressure sensor. You can check the real-time readings from the sensor by running a test on the device from the controller or by looking at Quick View in BaseManager™.

**Note:** The pressure sensor biCoder kit is compatible with BaseStation 3200 firmware version 16 or greater.

## Installation Instructions

1. Power off the two-wire when installing devices. Leave 24 to 36 inches of slack on the two-wire to allow for easy installation and maintenance.
2. Connect the red and black wire from the biCoder to the corresponding red and black wires on the two-wire using 3M™ DBR/Y-6 or equivalent connectors. It is critical that polarity be maintained.
3. Install the pressure sensor on the pipe that you want to monitor. The sensor to pipe connection is ¼ inch male NPT. Refer to the instructions included with the Dwyer product.
4. Continue with the procedure on page 2 of this Installation Guide to assign the biCoder in the BaseStation 3200 irrigation controller.



Use 3M™ DBR/Y-6 or equivalent connectors to connect the red and black wires to the two-wire. Make sure to maintain polarity.

## Product Notes

- Baseline's Pressure Sensor biCoder Kit comes with 72 inches of wire connected between the biCoder and the pressure sensor. We recommend that you do not attempt to customize this connection.
- Baseline's tests have shown that freezing conditions can damage a pressure sensor. If a small amount of water remains inside the pressure sensor after an irrigation system is winterized, that water can freeze and permanently deform the diaphragm. In regions where freezing temperatures are expected, Baseline recommends that you remove the pressure sensor and store it indoors until the threat of freezing has passed.
- The Dwyer® Series 628 pressure sensor has a rugged, stainless steel, general purpose housing that provides protection in harsh environments. While it can be exposed to some moisture, it is not suitable for complete or ongoing submersion.

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After you have connected the BL-5406 Pressure Sensor biCoder to the BaseStation 3200 irrigation controller, you need to assign the biCoder in the controller.

## Assigning the BL-5406 Pressure Sensor biCoder in the Controller

1. On the BaseStation 3200, turn the dial to the **Assign** position.
2. Press the ↓ or ↑ button to move to the **Assign biCoders to Pressure Gauges** option, and then press the **Enter** button. The Pressure biSensors screen displays.
3. If **Search** is highlighted in the left column, press the **Enter** button to search for the biCoder. If **Search** is not highlighted, press the + or – button to highlight it, and then press **Enter**. The devices that are found display in the left column.
4. Press the + or – button to highlight the serial number of the pressure sensor biCoder that you want to assign.
5. Press the **Next** or **Previous** button to move to the PSI Assignments column and select an available slot.
6. Press the **Enter** button to assign the selected biCoder to that slot.
7. When you have finished making changes, turn the dial to the **RUN** position.

REMOTE DISPLAY		Pressure biSensors	
biCoders [minus] [plus]		PSI Assignments [previous] [next]	
-		7	-
Help		8	-
Search	Press ENTR To Search for Devices	1	00W0000
Unassign		2	C000238
-		3	-
-		4	-

## Pressure Sensor Uses

- Set a low-pressure value for a water source to indicate that the water source is not available
- Set a high-pressure or low-pressure limit for a point of control. If this value is exceeded, the system triggers an alarm and/or shuts the point of control down.
- Set a delay based on a pressure setting before running zones on a mainline
- Start, stop, or pause a program based on a pressure reading
- Set a pressure to be reached before irrigation zones attached to the mainline will activate a master valve or operate a pump
- Set a time or pressure to be reached when zones shut down before allowing new zones to open
- Set a time or pressure to be reached before a master valve or pump shuts off