



PWY-400-S01 Pathway

Wire Sharing System

Pre-Qualifying a Site

The Pathway system uses field wiring as a signal carrier between the two control modules. The Pathway system has been designed to operate using existing, direct burial irrigation valve control wire. In most situations it will provide a simple way to retrofit a flow sensor and/or a master valve to a site. However, if there is extreme distance between the modules, over 1500 feet, or if the wire insulation is defective or splices are poorly made, the Pathway System may not work.

The following instructions outline a simple test using the Pathway modules that can pre-qualify the wire path in thirty minutes or less.

Step 1- Identify the Host zone valve

The first priority is to find a working zone valve closest to the proposed location of the new flow sensor and master valve to minimize the amount of new wire installation. Identify the irrigation controller zone number that operates this valve. You will need to disconnect this zone wire at the controller for the test.

Step 2- Connect the Field Module

Disconnect the solenoid leads from the field wiring. Confirm which field wire is the power wire and which is the common. The insulation of the power wire is usually red or some color other than white. The common wire is typically white in color. Re-connect the zone valve power wire to the Blue lead of the field module. Connect the zone valve common wire(s), there may be two or more, to the Purple lead on the field module.

Do not connect any other leads and leave the valve solenoid disconnected.

Step 3- Connect the Controller Module

At the irrigation controller location, you will need a temporary 24 volt power supply for the Pathway Controller module. Use the 24 VAC auxiliary power output of the controller if available. If not, use a spare irrigation controller transformer or other plug in style 120 Volt to 24 VAC power supply for this test. Make sure the power to the irrigation controller is off before proceeding. Disconnect the power wire to the host zone valve from the irrigation controller terminal strip. Reconnect this wire to the Network "L" terminal on the Pathway controller module. Connect a wire from the controller valve common terminal of the controller to the Network "C" terminal of the controller module. Leave all common wires from the field connected to the controller common terminal. Connect 24 volt power leads to the Power terminals on the lower left side of the Pathway controller module. Power up the controller and the module.

Step 4- Observe the LEDs

When power is applied to the controller module, observe the Power and Network LEDs. They should blink four times, then the red Power LED and the green Network LED should blink continuously. Next check the field module. If its green Network LED is also blinking continuously, then the wire path will support the Pathway System and you may proceed with the permanent installation of the flow sensor and master valve. If the Network LED remains off, check your wire connections and polarity, this indicates an open circuit. There is no two-way communication between modules unless both green Network LEDs blink continuously. Take corrective action if possible.

Do not proceed with the installation of the Pathway or the flow sensor and master valve until you observe blinking Network LEDs on both devices.