## **Application Note**



January 2017

## **Quick Testing a System from the Irrigation Controller**

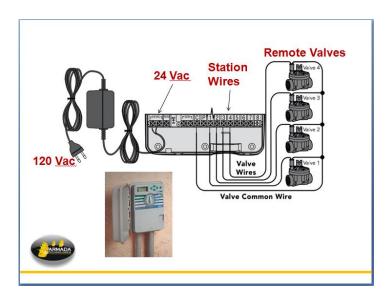
<u>Using an electrical multi-meter like the Armada Technologies Pro90</u>: Turn on a station and verify that the voltage across the selected station terminal and 'Common' terminal is 24-27 volts AC. This means the controller hardware is OK. If there is no voltage the controller fuse may be open.

Disconnect the station wire from the controller terminal, then measure the resistance from the wire to the controller 'Common' terminal. If it is between 20 and 60 ohms, the wire and the solenoid at the far end are probably good. Just above or below that and the solenoid may be bad; if the resistance is very high (above 100 ohms or 'OL' on meter) there is a break in the connection along the field wire or at the valve box. A good solenoid checked in the valve box should read between 20 and 60 ohms.

<u>Using a Solenoid Tester like the Armada Technologies Pro48</u>: Turn on a station, and with the Pro48 toggle set to 'OFF' connect the red leads to the station terminal and black to 'Common'. If the right voltage is present, the 'CLOCK 24 VAC' light will come on. If not, you have a controller problem.

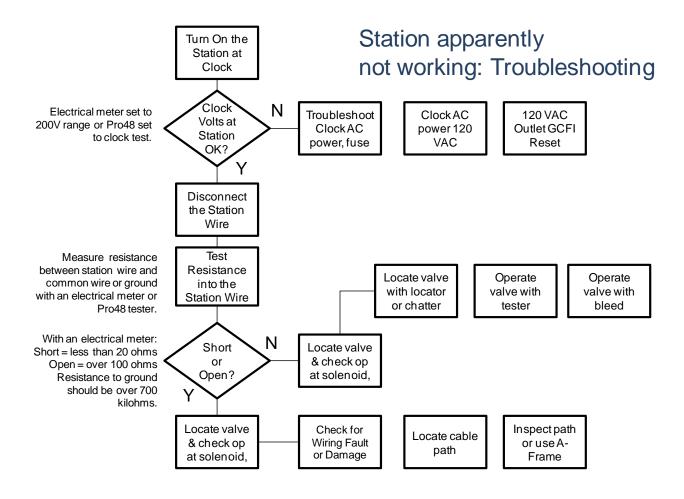
Disconnect the station wire from the controller terminal. Connect the red and black test leads between 'Common' and the station wire, and with the side slide switch set to 'ACTIVATE', move the toggle switch at the top of the Pro48 from 'OFF' to 'SOLENOID'. If the wiring and solenoid are good, you will get a 'GOOD' green LED and the solenoid will operate (water may come on if there is pressure in the pipe!). If there is a 'SHORT' or 'OPEN' light, the solenoid should be retested in the valve box to determine if it is the wiring or the valve solenoid.

Complete those steps for each station on the controller.



## ARMADA

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