

Irrigation Wiring

Irrigation Wiring can look like a tricky task to undertake. It's not as hard as it looks but it has to be done right or else your system won't work. Follow these steps to get the job done right.

Product Guides by [SunshowerOnline](#)



Irrigation Wiring

Wiring Solenoid Valves to Controllers

Wiring [Solenoid Valves](#) to [Controllers](#) is a simple process for the experienced irrigation technician and needs to be done very carefully because one mistake can mean your system won't operate.

Knowing Your Solenoid Valves

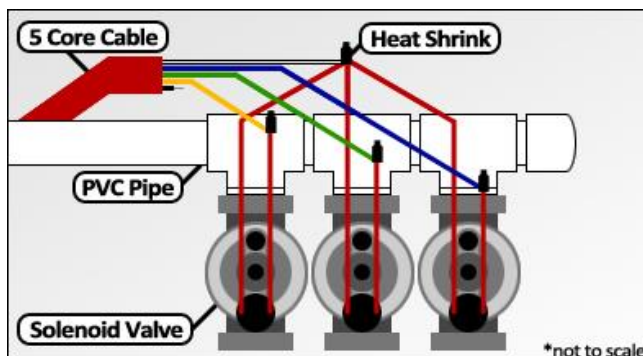
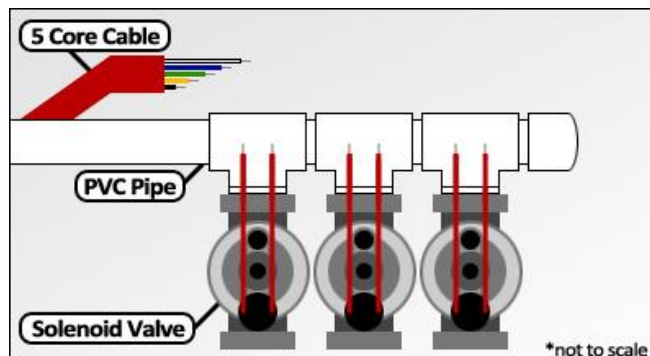


Now that you've installed your drip or spray system, all that's left is to wire your solenoid valves to your controller. Your solenoids should look similar to the ones in the picture, notice each has two wires coming out of the "coil" (shuts the valve on & off). Take note of which solenoid valve opens for each zone, for when it comes time for programming. The valve pictured is the [Irritrol 205 MT Series Solenoid Valve](#).

Joining Multi-Core Irrigation Cable to Your Valves

Firstly look at the "[5 Core Cable](#)", notice the 5 small wires inside the red insulation are all different colours, this is important for distinguishing the "Common" wire and the "zone" wires.

The "Common" wire needs to be connected to one wire on each of the solenoid valves (see below) to allow electrical current to travel back to your time clock. The common wire can be any coloured wire but to avoid confusion Sunshower uniformly uses the white wire.



Then connect one coloured wire to each of the remaining solenoid valve wires for your "zones" (see left). To avoid confusion Sunshower connects zone wires alphabetically. Eg: Zone 1 = (B)lue, Zone 2 = (G)reen, Zone 3 = (Y)ellow.

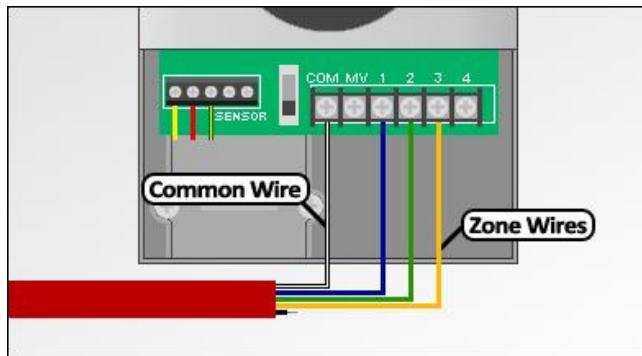
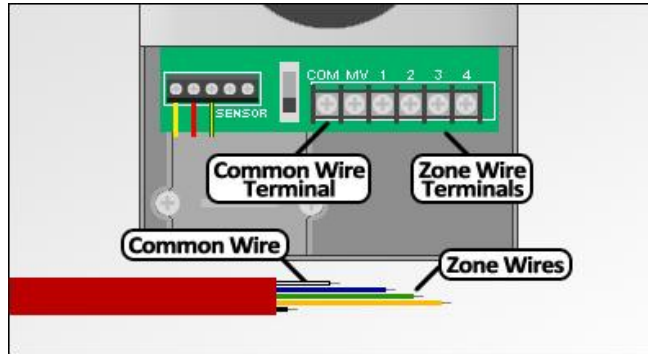
Once all wires have been connected securely seal the joins with either [Heat Shrink](#) or [Scotchlok Gel Filled](#) wire connectors.

Correctly Wiring Your Controller

Most [Controllers](#) are the same, but for the purpose of this Water Saver Tip we will be wiring an [Irritrol KwikDial 4 Station Outdoor Time Clock](#), a popular brand of controller at Sunshower. It is reliable, easy to program and is compliant with Water Restrictions Regulations.

Taking note of the wires you've already connected at your valves, it's time to wire up your Controller.

If you take off the cover at the bottom of your time clock you will notice some circuitry and some labelled wire terminals. On a KwikDial 4 station controller there are terminals for the "Common" wire, a "Master Valve" wire, 4 "Zone" wires and 2 "Rainsensor" wires.



First, take your "Common" wire, in this case the white wire, place it in the "Common" wire terminal and tighten the screw. Next take your "Zone 1" wire, in this case the Blue Wire, place under the terminal labelled with a "1" and screw in. Make sure it's not the "Master Valve" terminal labelled MV. And do the same process for the remaining zones eg: Zone 2 wire (Green) into the "2" Terminal etc.

Wiring a Master Valve

A Master Valve is an extra Solenoid Valve placed before the main Solenoid Manifold to relieve it of constant pressure. It is wired the same way as the other valves, one wire joined to the "Common" wire and the other joined to a spare, Sunshower uses the Black wire.

Wiring a Rain Sensor

Wiring a [Rain Sensor](#) is the simplest part of wiring. Each Sensor comes with 2 wires and simply need to be secured into each terminal labelled "sensor." A rain sensor is the best way to avoid the embarrassing look of your irrigation system spray water everywhere while it's raining. Sunshower stocks a range of rain sensors, the most important thing to keep in mind is to match the brand of wire sensor to the Controller. In this example the best Rain Sensor would be the [Toro RS500](#), which is compatible with Irritrol Controllers.



SunshowerOnline sells only the highest quality Drip Irrigation components we use all of the trusted brands to make sure your system works first time everytime!