

The Rain8net is a modular 8-zone sprinkler controller module that is driven by a RS232 serial port

- Control each of the module's eight zones individually and all off.
- Global all off.
- Supports status request.
- Default run timers for each zone prevent over watering.

Additional units may be daisy chained to provide control and 24 VAC power to as many as 2040 irrigation zones from a single COM port.

A 12 position terminal strip is found on all modules. Connect the 24 VAC to **only one** module; the remaining modules are powered by means of the 8-conductor network cable.

There is a single RS232 connection between the controlling computer and the "master" Rain8. The 24VAC power and network communications are transferred from master to slave-to-slave etc.

The network connection for the slave units is an 8 conductor RJ45. Each slave has a pair of these modular jacks to pass on data and power to the next one in a daisy chain. Each slave also has a RS232 connection that is used only to assign the address during the initial configuration.

Software

Down load software from:
http://www.wgldesigns.com/downloads/rain8net_software.zip.

Installation

Controller Location

- Select a mounting location that is close to an electrical outlet and the valve wires that will connect to it.
- The controller should not be exposed to water. If used outside, it is necessary to provide a weather proof housing for your Rain8.
<http://www.wgldesigns.com/r8outdoor.html>
- Mount your controller to a smooth dry surface by means of the enclosed Velcro strips.

Wiring the Valves

- If the maximum distance is less then 600 feet, use a single 20 gauge, plastic insulated wire for each valve.
- Each valve has two wires. One wire is designated as the common. All of the common valve wires can be connected together to one wire going to the controller.
- All connections should be made using wire nuts in grease caps to prevent corrosion.
- Only one valve should be connected to each zone.
- The rated output is 24 VAC at .25 amps (250ma), per zone. Some valves require a greater current then .25 amps to initially open and drop back to a lower value. This will present no problem as long as the drop back value is .25 amps or less.

Connecting the Valve Wires to the Controller

- Determine which valve is to be connected to each zone. Insert each valve wire into its respective position on the terminal strip and gently tighten the setscrew.
- Connect the common wire from the valves to the terminal labeled "common".

Connecting the Transformer (Master unit only)

- Connect the 24-VAC transformer to the two terminals labeled "24 VAC". Note that this is required only on the first module installed as the power for additional units is supplied by means of the network connections.

Wiring the RS232 connection (Master unit only)

- Connect the RS232 cable's RJ11 plug to the RJ11 jack labeled "RS-232" on the left side of the module. The other end of the cable with the DB9 connector attaches to your computers serial port.

Adding additional modules

- As many as 254 additional 8 zone modules may be added by daisy chaining the modules "Rain8 Network Jacks".

Individual Rain8net modules are shipped set to an address of "1" and the default run timers disabled. For most eight zone, single module applications this is the desired configuration and the hardware installation is complete.

Prepare to Configure the Rain8 module (only if you are installing multiple modules)

- Please note that the Rain8 terminal strip is removable. Gently unplug the portion with screw heads from the socket mounted on the PCB. Remove the Rain8 from the wall and bring it to the location of the PC that will be used for programming.
- Connect the DB9 cable and adapter into the RJ11 jack on the Rain8 labeled "RS-232". The DB9 end is plugged into a serial port on your PC. It is not necessary to provide power for the unit as it can derive what it needs for programming from the serial port.
- It is very important that no attempt is made to program modules that are still connected to the network.
- Right click on Rain8 Irrigation Server Icon and select "Configure Rain8Net Module Address
- Click on OK
- You should now see the Rain8 Configuration screen
- Set up the Serial Port assignment by selecting the COM port number.
- At this point there is no need for anything to be connected to the Rain8 other than the serial cable. The power for the unit is derived from the serial port.

Configuring your Rain8net

- Select desired address (1 – 255) for this module from list box.
- If the default run time feature is not desired, check "disable" and click on "load Module".
- If the timers are to be enabled do not check "disable". Enter the desired default run time for each zone in the appropriate box. Click on "load Module".
- Click on "Configure Now"
- Click on "done"

Problems or Questions?

If help is needed, please do not hesitate to contact us. We want to make your installation as painless as possible. Your suggestions or questions will help us improve this document and our product.

WGL & Associates

5418 Lancashire
San Antonio, TX 78230
(210) 342 2858
wgl@wgl designs.com

www.wgl designs.com