

Optical IR Rain Sensor



Operation & Installation Manual

IMPORTANT

Disconnect power and read installation and operation instructions before installing or operating.

Installation Instructions

1. Determine the Mode / Set DIP switches.

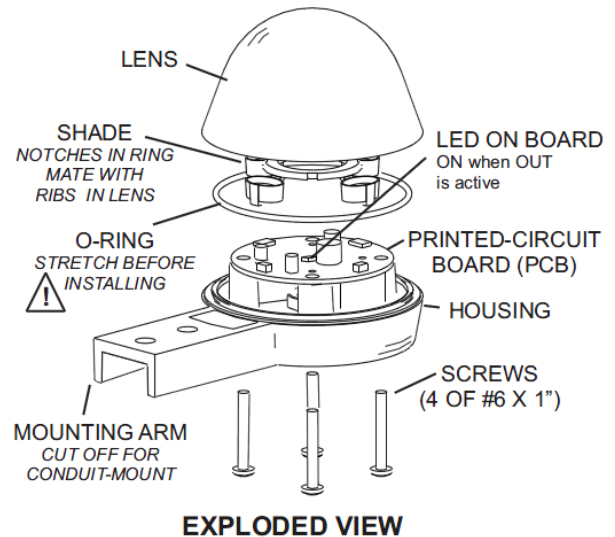
You must set the DIP switches so that the sensor behaves the right way for your application. The pages that follow describe each of the possible modes, and how to set the DIP switches.

2. Mount the Rain Gauge

Mount the rain gage where it gets a clear measurement of precipitation— away from overhangs, etc. The mounting arm is designed to fit over a strap 0.75" (19 mm) wide. Two 0.25" (holes 6.35 mm) are placed 0.75" (19 mm) part. The gland style connector goes in the bottom hole. Be sure to use wire rated for outdoor (high-UV) use. For conduit applications, the mounting arm may be removed, and the wiring hole drilled out using a step drill to accommodate a ½" EMT compression connector or similar style of conduit connector.

3. Assemble the Rain Gauge as shown.

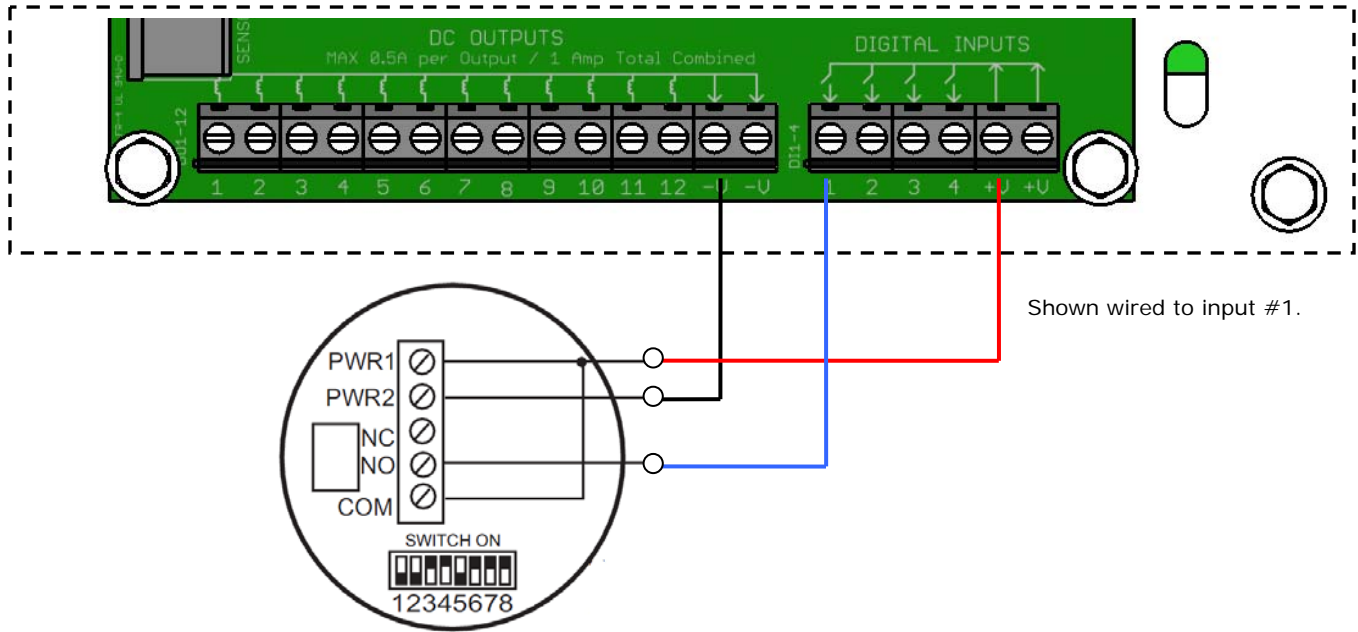
Stretch and release the silicone o-ring (size -036) a few times, so it fits easily in the groove. Optionally, you may coat the O-ring and screws with silicone grease. The Rain Gauge must be assembled when dry. Any water trapped inside can condense and cause corrosion. You may optionally add extra desiccant packets (not supplied.) If the Rain Gauge is not subject to splashing or sprayed water, you may optionally vent the enclosure by drilling a 1/8" (3 mm) hole in the bottom of the case.



Wiring Connections

Three wires are required to connect a rain sensor to GrowControl systems; V+, V- and the input signal. Connect the input signal to any available digital input terminal and set this value in the rain sensor control settings.

Rain Sensor Connection to Digital Inputs



DIP Switch Positions

The DIP switches determine how sensitive the sensor will be to rain and how long it will remain activated after rain has stopped.

Switch							Sensitivity	Function
7	6	5	4	3	2	1		
0	0	1	0		0	0	High	First detection of a rain drop.
Switches 4-7 must be set as shown.					0	1	Normal	Light rain fall (0.1" per hour.)
					1	0	Medium	Medium rain fall (0.25" per hour.)
					1	1	Low	Heavy rain fall (1"+ per hour.)
				0			Sensor Off when rain stops.	
				1			Monostable 15 minute delay.	

IMPORTANT

TO AVOID DAMAGE TO THE SENSOR ensure wiring is correct before applying power to the controller.