EtherRain Rain Sensor Installation Guide

Introduction

The EtherRain Rain Sensor (ER-RD) is a small lightweight sensor that detects moisture. When the sensor is connected to an EtherRain controller and moisture is detected the sensor will signal EtherRain to stop irrigation.

This Rain Sensor holds moisture and so it will continue detecting moisture until well after a precipitation event has occurred. This sensor will continue blocking irrigation until the felt wick is dried out. The length of the drying time depends on surrounding temperature and humidity. The sensor was designed to mimic the drying properties of soil, to a certain extent.

This sensor may detect “rain” in cases of fog or damp conditions.

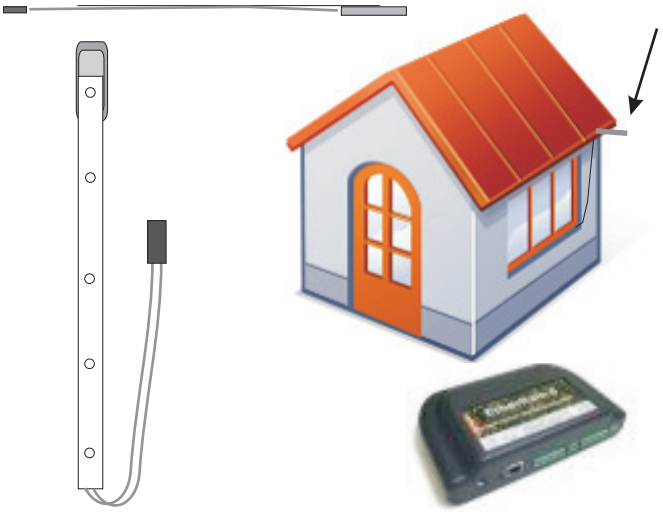
When the Rain Sensor detects rain the Yellow Rain detect LED on EtherRain will illuminate.

Sensor Location

Location of the sensor will effect it’s operation. If installed at a sunny location it will dry faster and will not hold the “rain” signal on as long. If installed at a damp location the wick will take longer to dry and the rain signal will be held on longer.

Care should be taken to install the sensor so that it does not catch early morning condensation as this might inadvertently block irrigation. If installed near a roof eve it is a good idea to ensure that the sensor extends at least an inch beyond any overhanging roofing material, to avoid condensation

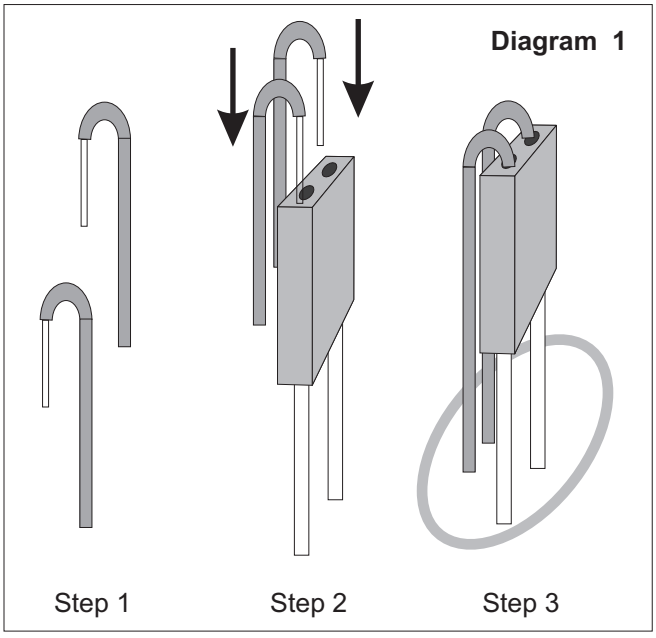
The sensor should be installed with the felt side up. The sensor can be pointed up, down, or installed level.



Installation Procedure

Use 22 AWG wire (2/22 or equivalent) to connect the sensor to the controller.

Step 1. Establish a Mounting Point for the Sensor
Step 2. Scope out a path for the connecting wire
Step 3. Run the wire. Use cable mounting clips to secure the wire where necessary.
Step 4. Attach the connecting wire to the Sensor (See Below)
Step 5. Mount the sensor. Screws are provided
Step 6. At the controller end, attach the connecting wire to the provided green plug. (See Below)



Attaching Sensor to Connecting Wire

Refer to Diagram 1 for sensor connection technique:

Step 1: Remove ½” insulation and bend the wire as shown
Step 2: Insert wires into sensor connector terminal
Step 3: Using the cable tie or tape secure the wire bundle under the bottom of the sensor connector as shown

Attaching Green Plug to Connecting Wire

Step 1: Strip off 1/4 inch of wire insulation and insert each bare copper wire into rectangular holes in the green plug.
Step 2: Using a 2mm screw driver, turn the retaining screws on the green plug clockwise until tight.
Step 3: Connect the plug to the controller as shown below.