

To Measure Is To Know

## **Leaf Wetness Sensor Product Manual**



## INTRODUCTION

Thank you for purchasing a Leaf Wetness Sensor to use with your WatchDog Data Logger or Weather Station. This manual will aid you in placement and mounting of the Leaf Wetness Sensor. Read it thoroughly to ensure proper and effective use of the sensor. The Leaf Wetness Sensor includes a cable which connects to an external port of a WatchDog data logger or weather station. Once the sensor is positioned in a representative microclimate, log leaf wetness data by plugging cable into a WatchDog external channel.

Gold Plated Sensor Grid: The sensor reads wetness by measuring the resistance on the grid. The resistance measurement is converted to a Leaf Wetness value from 0-15, in whole numbers. Any value over 6 is considered "wet". Accurate measurements require this surface be kept clean of all conductive matter (leaves, grass, dirt, and salts). Periodically wipe the sensor with distilled water to remove dust, pesticide residue, irrigation water salts, etc.

Use SpecWare Software to program the WatchDog to log leaf wetness. Refer to the SpecWare Users Guide for detailed launch and/or readout instructions. Leaf Wetness Hours can be calculated through Reports in the SpecWare Software.

## POSITIONING THE SENSOR

- 1. Locate the sensor in a typical "micro-climate" away from the edge of an orchard, vineyard, or field.
- 2. Attach the sensor on a 1" to  $1-\frac{1}{4}$ " mast (pipe) using the u-bolt with the sensor pointing to the north.
- Place in an area of the plant canopy appropriate for the disease to be noticed. For example to simulate the impact of rain only, the leaf wetness sensor would be positioned under the canopy. For full impact of both rain and dew the sensor would be positioned closer to the top of the plant canopy. Contact your cooperative extension office for further suggestions.
- Inspect the sensor frequently to make certain the sensor has not fallen from the mounts or that leaves or debris are not stuck to the sensor surface.



Place leaf wetness sensor in a position that mimics plant conditions while in reach of the external WatchDog data port.

## WARRANTY

This product is warranted to be free from defects in material or workmanship for one year from the date of purchase. During the warranty period Spectrum will, at its option, either repair or replace products that prove to be defective. This warranty does not cover damage due to improper installation or use, lightning, negligence, accident, or unauthorized modifications, or to incidental or consequential damages beyond the Spectrum product. Before returning a failed unit, you must obtain a Returned Materials Authorization (RMA) from Spectrum. Spectrum is not responsible for any package that is returned without a valid RMA number or for the loss of the package by any shipping company.

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