DAVIS

LEAF WETNESS SENSOR

INSTALLATION MANUAL

The leaf wetness sensor enables the Vantage Pro2™ Wireless Leaf & Soil Moisture /Temperature Station (#6345) to detect the presence of surface moisture on foliage and calculate the duration of wetness. When moisture is present, the sensor detects an electrical resistance change between the gold-plated elements of the grid. This is displayed by the Vantage Pro2 console as a value between 0 (dry) and 15 (wet). With WeatherLink® software and the Agricultural/Turf Management Module (#6511), you may select your own wetness threshold; the software will then calculate leaf-wet hours.
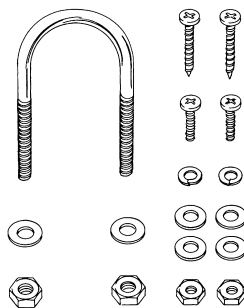
COMPONENTS

The leaf wetness sensor includes the following components. Please make sure you have all listed components before continuing.

- **Leaf Wetness Sensor with attached mounting bracket**
  Includes an attached 40′ (12 m) cable.

- **Installation Hardware Kit**
  One 1-1/2" U-Bolt
  Two 1/4" Flat Washers
  Two 1/4" Hex Nuts
  Two #8 Wood Screws
  Two #8 x 3/4" Machine Screws
  Four # 8 Flat Washers
  Two # 8 Lock Washers
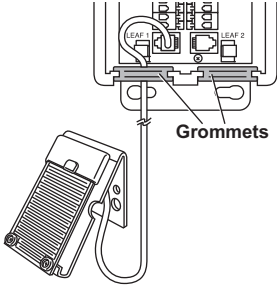 Two # 8 Hex Nuts

TOOLS AND MATERIALS NEEDED

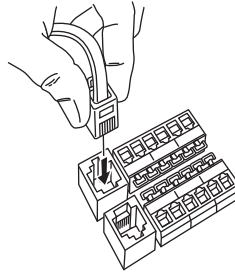Medium Phillips Screwdriver
Wrench

INSTALLING THE SENSOR

Connecting Leaf Wetness Sensors

1. Run the sensor cables up through the grommets on the bottom of the station housing.

2. Insert the sensor cable modular plug into the Leaf 1 or Leaf 2 modular connector.
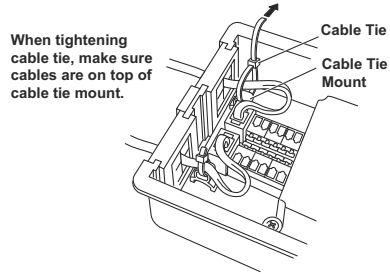

Leaf Wetness Sensor Cables Run Through Grommets
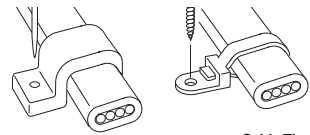

Connecting Leaf Wetness Sensors

Finishing the Sensor Connections

1. Secure sensor cables to the cable tie mounts located next to the grommets.

Securing Sensor Cables in the Station

2. To prevent fraying or cutting of cables, secure them so they will not whip about in the wind. Secure a cable to a metal pole by wrapping electrical tape around them both. Make sure cables are secure by placing clips or ties approximately every 3 – 5' (1 – 1.6 m)

Securing Cables with Clips and Ties

Note: Do not use metal staples or a staple gun to secure cables. Metal staples — especially when installed with a staple gun — have a tendency to cut the cables.
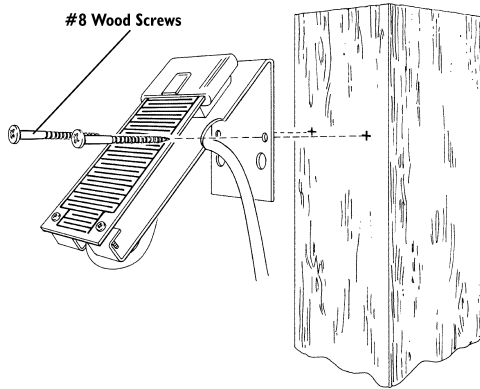
TESTING THE SENSOR

You may test the sensor before or after you mount it.

1. **Connect the sensor.**
2. **Make sure you are getting a leaf wetness reading on the console.**
   Consult the Vantage Pro2 Console manual for instructions.
3. **Drop or spray water onto the sensor and make sure the reading changes.**
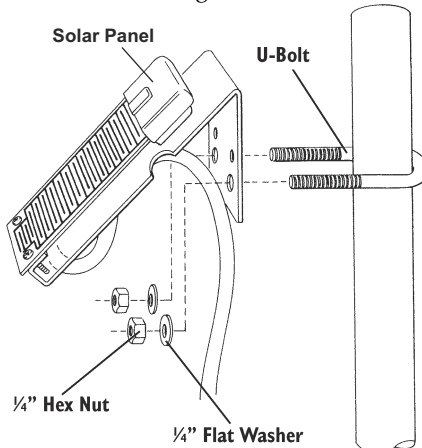
MOUNTING THE SENSOR

Mounting the Sensor On a Wooden Surface

Use the #8 wood screws to mount the sensor on a wooden surface as shown.

Mounting the Sensor on a Pipe

To mount the sensor on a pipe, stake, or pole with outside diameter between 1" and 1-1/4" (25 mm and 31 mm), secure the sensor to the pipe using the 1-1/2" U-bolts, 1/4" flat washers, and 1/4" hex nuts as shown below. Use a 7/16" wrench or adjustable wrench to tighten the hex nuts.

TECHNICAL SUPPORT

Before calling Technical Support (1-510-732-7814), carefully check all cable connections from the sensor to the console. Cable connections account for a large portion of the potential problems. Connections should be firmly seated in the jacks and plugged in straight. If you think a connection may be faulty, try jiggling the cable while looking at the display. If a reading appears intermittently on the display as you jiggle the cable, the connection is faulty.

Contacting Davis Technical Support

If you have questions about your leaf wetness sensor, or encounter problems installing or operating the station, please contact Davis Technical Support.

Note: Please do not return items to the factory for repair without prior authorization.

(510) 732-7814 – Monday – Friday, 7:00 a.m. – 5:30 p.m. Pacific Time.

support@davisnet.com – E-mail to Technical Support.

(510) 732-9229 – For callers outside the USA or Canada.

(510) 670-0589 – Fax.

www.davisnet.com – Copies of User Manuals are available on the "Support" page. Watch for FAQs and other updates. Subscribe to the e-newsletter.

info@davisnet.com – General e-mail.