

# SOLAR POWER KIT FOR WIRELESS VANTAGE PRO

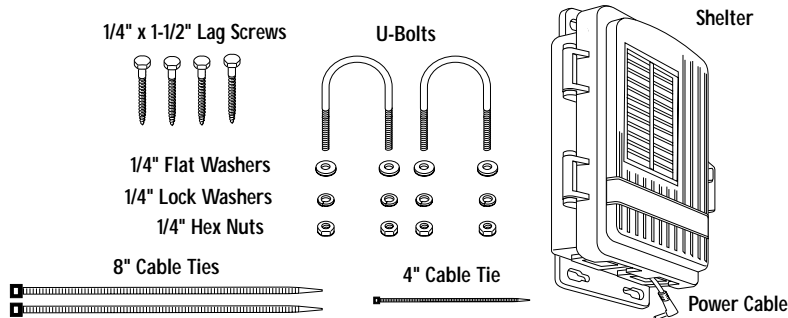
## INSTALLATION MANUAL

The Solar Power Kit (#6610) provides power to a Wireless Vantage Pro console when mounted in a remote location or in a field station. The kit consists of three key elements – a solar panel, a 6-Volt battery, and a regulator circuit – mounted in a protective housing:

**Note:** Use Solar Power Kit #7707 with Cabled Vantage Pro consoles.

### Components

The Solar Power Kit includes the following components and hardware:



### Tools for Setup

- ◆ Adjustable wrench or 7/16" wrench
- ◆ Drill and 3/16" (5 mm) drill bit (if mounting on a vertical surface)

### Location Tips

The following tips should help you find the best possible location and position for your Solar Power Kit.

- ◆ The panel should be mounted facing South in the Northern Hemisphere and North in the Southern Hemisphere.
- ◆ Position the solar panel to have maximum exposure to the sun. The solar panel works best when the surface of the panel receives full sunlight. Mount the panel away from fences, buildings, trees or other equipment or obstructions that may cast a shadow over the panel.

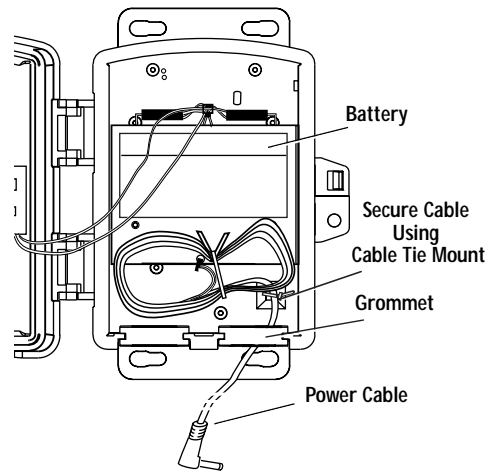
---

## Securing the Power Cable

Secure the power cable to prepare the Solar Power Kit for installation.

1. Determine how much of the 20' (6 m) power cable is needed to reach your Wireless Vantage Pro console.
2. Pull that length of cable through the rubber grommet located in the bottom of the shelter.
3. Secure the cable inside the shelter with a 4" Cable Tie fastened to the cable tie mount.

The cable tie provides strain relief for the power cable.



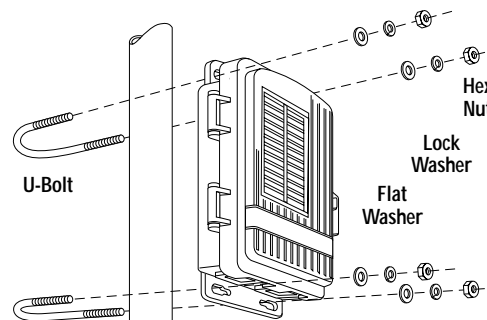
Securing the Power Cable

## Mounting the Solar Power Kit on a Pole

The U-bolts included with the Solar Power Kit fit poles from 3/4" to 1 1/4" (19mm to 31mm) in diameter.

1. While holding the shelter against the pole, place a U-bolt around the pole and through the two holes at the top of the shelter.
2. Place a flat washer, a lock washer and a hex nut on each of the bolt ends.
3. Tighten the nuts using an adjustable wrench or 7/16" wrench.
4. Place the second U-bolt around the pole and through the two holes at the bottom of the shelter.

Put a flat washer, a lock washer, and a hex nut on each bolt end, and tighten the hex nuts.

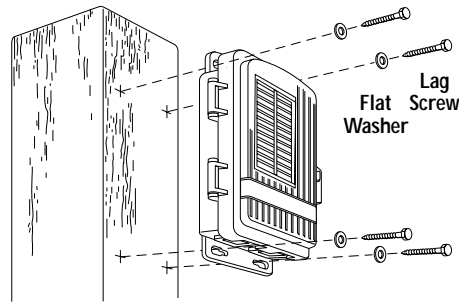


Mounting Solar Power Kit on a Pole

---

## Mounting the Solar Power Kit on a Post

1. With a 3/16" (5 mm) drill bit, drill two holes approximately 2" (50 mm) apart. Use a carpenter's level to ensure the holes will be level.
2. Drill two more holes 7-1/32" below the upper holes.
3. Insert the 1/4" x 1-1/2" lag screws through the flat washers, and through the holes at the top of the shelter into the post.  
Using an adjustable wrench or 7/16" wrench, tighten the lag screws.



Mounting Solar Power Kit on a Post

4. Insert the 1/4" x 1-1/2" lag screws through the flat washers, and through the holes at the bottom of the shelter into the post.  
Using an adjustable wrench or 7/16" wrench, tighten the lag screws.

## Connecting Power to the Vantage Pro Console

1. The Solar Power Kit's connector plugs directly into the power jack located on the bottom of the Vantage Pro Console. See your Vantage Pro Console Manual for details.
2. Secure the power cable run using the included 8" cable ties.

## Troubleshooting

While the Solar Power Kit is designed to provide years of trouble-free operation, occasional problems may arise. If you experience a problem, please check the troubleshooting tips below before calling technical support.

- ◆ Solar panel fails to power station and battery is over 5 years old  
As the battery ages, it will lose capacity and may completely discharge. If this is the case, simply replace the battery.

---

**CAUTION:** Do not incinerate the used battery; it may burst. Arrange for proper recycling in your locality.

---

- ◆ Solar panel fails to power station and battery is less than 5 years old  
If the solar kit fails to power the station, try the following:
  1. Make sure the panel is not being shaded from the sun.
  2. Open the solar panel shelter and check that the wire connections are secure and that battery is free from corrosion and excessive deposits on the terminal.

- 
3. Clean the solar panel using a water spray, or a soft cloth and soapy water followed by a clean water rinse.
  4. Check the battery's voltage with a voltmeter; the battery must have at least 5.5 V to power the station. More than 6 V indicates an adequately-charged battery.
  5. Try exposing the kit (with console unplugged) to ample sunlight for a week, or, use a charger designed to recharge a 6 V gel cell battery. If you are unable to charge the battery above 6 V, replace the battery.

If, after checking this troubleshooting guide you are unable to solve the problem, please call our technical support team at (510) 732-7814 for assistance (M-F, 7 am–5:30 pm PST).

---

**Note:** Please do not return your unit for repair without prior authorization.

---

## Specifications

Operating Temperature . . . . .	–4° to 120° F (–20° to 50° C)
Non-operating Temperature . . . . .	–50° to 158° F (–45° to 70° C)
Battery . . . . .	6 Volt 1.3 Amp Hour Lead-Acid (Powersonic PS-612 or equivalent)
Solar Panel . . . . .	0.5 watts
Power Cable Length . . . . .	20' (6 m)
Dimensions . . . . .	6.25" x 2.25" x 7.88" (158 x 57 x 200 mm)
Weight . . . . .	1 lb. 13.50 oz. (.836 kg)

---

Product Numbers: 6610  
Davis Instruments Part Number: 7395.306  
Solar Power Kit for Wireless Vantage Pro  
Rev A. Manual (7/27/01)

This product complies with the essential protection requirements of the EC EMC Directive 89/336/EC.  
Copyright © 2001 Davis Instruments Corp. All rights reserved.



3465 Diablo Avenue, Hayward, CA 94545-2778  
510-732-9229 • Fax: 510-732-9188  
E-mail: [info@davisnet.com](mailto:info@davisnet.com) • [www.davisnet.com](http://www.davisnet.com)