

Solar Power Package

PRODUCT MANUAL

Item 3999WD



Spectrum[®]
Technologies, Inc.

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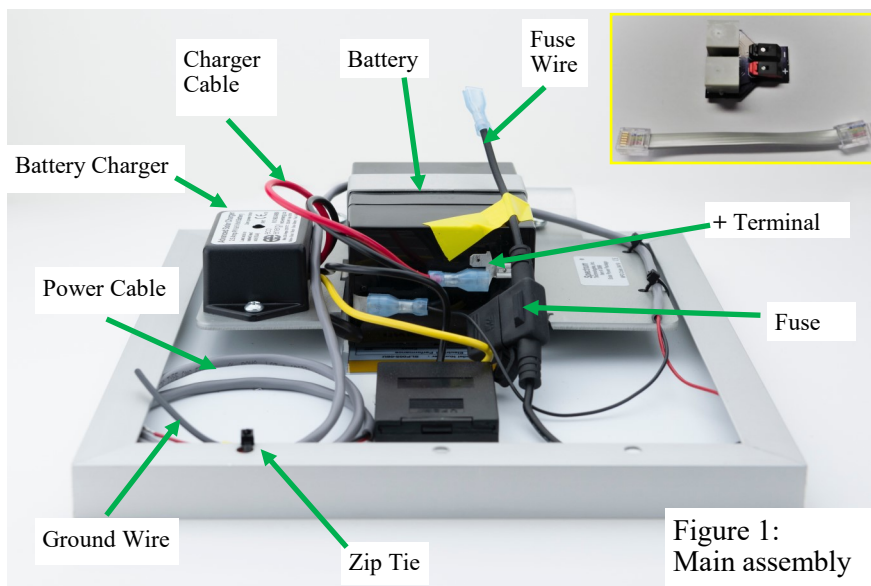
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This manual will familiarize you with the features and operation of your Solar Power Package. Please read this manual thoroughly before using your instrument. For customer support, or to place an order, call Spectrum Technologies, Inc. at 800-248-8873 or 815-436-4440 between 7:30 am and 5:30 p.m. CST, FAX at 815-436-4460, or E-Mail at info@specmeters.com.
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- a. Solar panel/charger/battery assembly (fig. 1)
- b. Terminal Block adapter and connector cable (inset figure 1)
- c. U-bolt



MOUNTING SOLAR PANEL



The solar panel bracket attaches to a post or pipe using the U-bolt (fig. 2). The U-bolt can accommodate a post diameter of 1.37 inches (3.5 cm) or less.

Figure 2: Solar panel connected to post

CONNECTING SOLAR POWER PACKAGE TO A STATION

THE WEATHER STATION CANNOT HAVE BATTERIES INSTALLED WHILE CONNECTED TO THE SOLAR PANEL. BE SURE TO REMOVE THEM BEFORE BEGINNING THE SOLAR PANEL INSTALLATION.

DO NOT attach the charge cable to the battery's positive terminal until the weather station is completely connected. To avoid possible damage to the Solar Power Package, or your weather station, the Solar Power Package is shipped with the charger cable disconnected from the positive terminal of the battery (fig. 1). The fuse connected to the Watch-Dog Power Cable protects the system if the red and black wires touch while connected to the battery.

1. Remove the cap from the weather station gland through which the cable is to pass.
2. Clip the zip tie that attaches the power cable to the frame. Pull the protective heat shrink off the ground wire (fig.1).

3. Feed the red and black wires through the cap, then through the gland (fig. 3). In general, it is a good practice to fold one of the wires down so they don't touch as they pass through the gland. This is only critical if the battery is fully connected (see step 6).



Figure 3:
Power cable
through gland



Figure 4: Adapter
attached to AUX port

4. Attach the wires to the adapter by pressing down the lever, inserting the bare wire, and releasing the lever.
5. Use the short cable to attach the Terminal Block adapter to the weather station's AUX port (fig. 4).

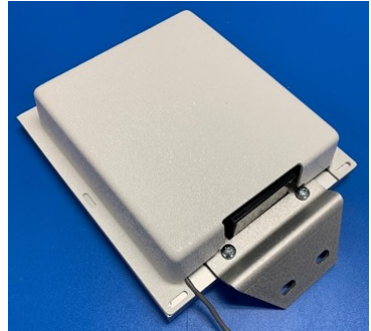
6. Apply power by connecting the red wire from the fuse to the positive (open) battery terminal (fig. 1).

Dielectric grease on the connector protects it from corrosion and should not be wiped off. When replacing the battery, it is recommended to apply grease to the terminals

Note: When disconnecting the Solar Power Package from your weather station, follow the above steps in reverse order.

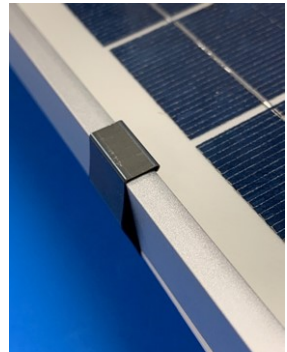
INSTALLING BACK COVER

To install the back cover, place it on the back of the solar panel as shown in the image to the right. Ensure the gray cable is fed through the opening at the top edge of the cover.



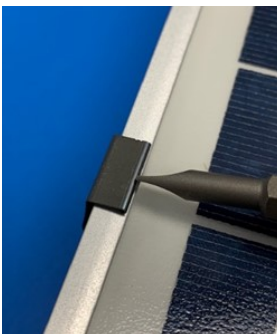
Attaching the clips

Note the five openings along the edge of the cover. The retaining clips are to be installed at these locations by securing the arrow end of the clip onto the cover and pressing down to snap into place. See the images below.



Removing the clips

Use a flathead screwdriver. Insert the screwdriver under the edge of the clip on the front of the solar panel and twist. The clip will release and can be slid back and removed.



SPECIFICATIONS

Voltage Range	5.25 V to 6.75 V
Capacity	5W solar panel with rechargeable battery pack, (6V, 4.5 Ah)
Operating Temperature	-4 to 122 °F (-20 to 50 °C)
Dimensions (Panel alone)	9.75 x 8.75 x 0.75 inches 27.77 x 22.23 x 1.91 cm
Dimensions (Panel plus battery and bracket)	11.86 x 8.75 x 2.63 inches 30.12 x 22.23 x 6.93 cm
Weight	4.0 lbs (1.80 kg)
Fuse	Automotive Mini Blade Fuse, 3A, 32VDC, fast

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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