



BatteryStuff Panels

BatteryStuff.com Solar Panel Instructions

BatteryStuff Solar Panels use high quality Poly-Crystalline solar cells. Diodes contained within the junction box insure reliable operation and no drain during low light conditions. Anodized aluminum frames add strength and durability to the modules. Includes pre-drilled mounting holes. The modules have a 20-year, 80% power output warranty.

Your solar panel will have a long black cable extending from the panel, holding both the positive and negative cables. This cable can be spliced and separated as needed by your application. The **black** cable is negative, and the white cable is positive. In the cases where there is a **black** and **red** cable, the **black** is still negative and the **red** is positive.

The positive and negative cables can be connected directly to your application, battery, or charge controller. We *highly recommend* the use of a charge controller, especially when installing large panels. This will ensure longer battery life.

Solar Panel Installation Tips:

- Solar Panels are most efficient when they are mounted in a location where they can receive the most sunlight. Typically, they are mounted on roof tops, poles, or stand alone structures.
- Any angle or position is acceptable, but try to find a location where the panel will receive the most sunlight all year around.
- In the Northern Hemisphere, Solar Panel should face south, and in the Southern Hemisphere, Solar Panel should face north. For angle, the simplest method is to have your panel face the sun directly at Noon.
- You can mount your solar panel to nearly any surface, leaving approximately a 1" gap behind the panel for air circulation.
- Avoid shaded areas and trees, which will reduce efficiency and shorten panel life. Even partial shade will greatly reduce your panels effectiveness
- If mounting on land, avoid corrosive salt and sulfurous areas.
- Solar panels will not properly produce power under fluorescent lights. It may be able to produce some voltage, but not enough current to power or charge anything.
- Modules connected in series should be installed at same orientation and angle.
- Do not install panel near any open flames, or flammable materials.

For more information, check out our Solar Tutorials at www.batterystuff.com

Or call **541-474-4421** for Tech Help.