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INSTALLATION INSTRUCTIONS



Installing Your Solar Panels

Do Not plug in at this time!

Note, Panels are always making power in the sun whether hooked up or not.

Important considerations when choosing a location

- Choose a location that's flat and free from obstruction. Any shadows cast on the array will adversely affect performance. The panels are 3mm thick and weigh only 4lbs so they can be easily installed on a hardtop or bimini top.
- The panels are semi flexible, however the degree of flex is limited to 20-30 degrees max. Do not bend or hold the panels by the edges, this will fracture the solar cells causing permanent damage to the panels.
- DO NOT install the panels over metal bimini supports, this will cause a severe bend when the panel is exposed to sunlight. They must be installed on a flat surface or a surface with a slight curve not exceeding 30 degrees.

Three Panels Wired in Series





- Run your PV cable starting at the panels down towards the battery bank. Do not hook up the solar array to the harness leading to controller at this point.
- Locate and test fit a location for your Solar Controller as close to batteries as possible. (We recommend 5 feet or less). Connect all wiring to controller prior to mounting to ensure connections are neat and tight. Strip back 1/4" of insulation off PV wire, insert fully into terminal and tighten screw.
- Connect Wires from Solar Array Harness into controller.

Battery Connections

- Connect Battery Negative to Negative Terminal on Controller
- Connect Battery Positive to Controller through 30 amp breaker/fuse. Leave breaker off at this point. (Note, make sure battery connections are connected **ACROSS** the battery bank. Example, Hook Positive wire to 1st Battery in battery bank, and Negative wire to last battery in bank. This will ensure the solar panels are charging **ALL** the batteries in the bank.)
- Locate and Mount the optional Remote Display and hook up with the supplied data cable.
- With all connections completed at controller, mount in secure, dry location previously located
- Plug in the Solar Array to the wiring harness leading to the controller.
- Turn 30 amp breaker to ON Position, and check operation.

There are **Plus** and **Minus** labels on the Solar Panels, that indicate where they plug into on the Controller. This is not to be confused with the smaller + and - indicators on the MC4 connectors pictured below. The + and - on the MC4 indicate the Male and Female ends of the connector.



Troubleshooting

- If the panels are in the sun, and not charging, or you see the Moon symbol on the display, the polarity has been reversed, To Correct, switch OFF Circuit Breaker, change the positive and negative cables from the solar array at Controller, and Switch Back On.

