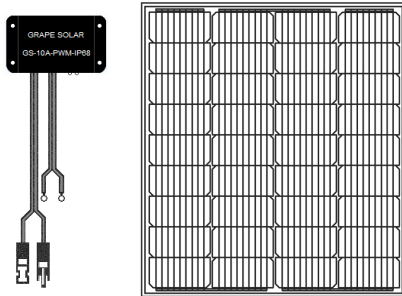




100 Watt Waterproof Charging Kit (GS-100-KIT-IP68) Quick Connect Guide



[diagrams not to scale]

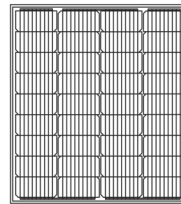
IMPORTANT: Please read GS-10A-PWM-IP68 PWM charge controller owner's manual and GS-STAR-100W connection guide (both included with products) before assembling kit.

For additional information about Grape Solar products:
email Support@GrapeSolar.com, or
call **1-877-264-1014** for live telephone support.

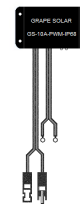
1 Check your order to make sure that all parts are included:

- ❶ GS- STAR-100W Solar Panel
- ❷ GS-PWM-10A-IP68

*The GS-PWM-10A-IP68 is designed to charge 12 volt lead-acid battery ONLY, including AGM, flooded, sealed battery types.



❶



❷

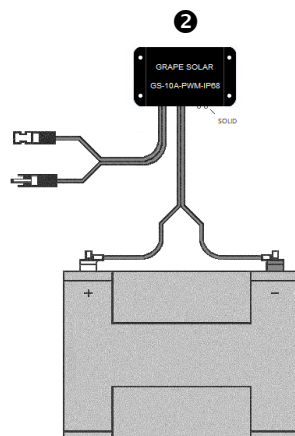
[diagrams not to scale]

Additional tools and equipment you will need:

- 12-Volt Deep-Cycle Battery Bank
- Voltmeter (for Troubleshooting)

2 Mount the 100-watt solar panel ❶ so that it is facing due South at approximately the same angle as your latitude. The ideal area has full sun and no shading. If the following connections are made during daylight, cover the panel with cardboard, cloth, or a similar opaque material so that the panel does not output power.

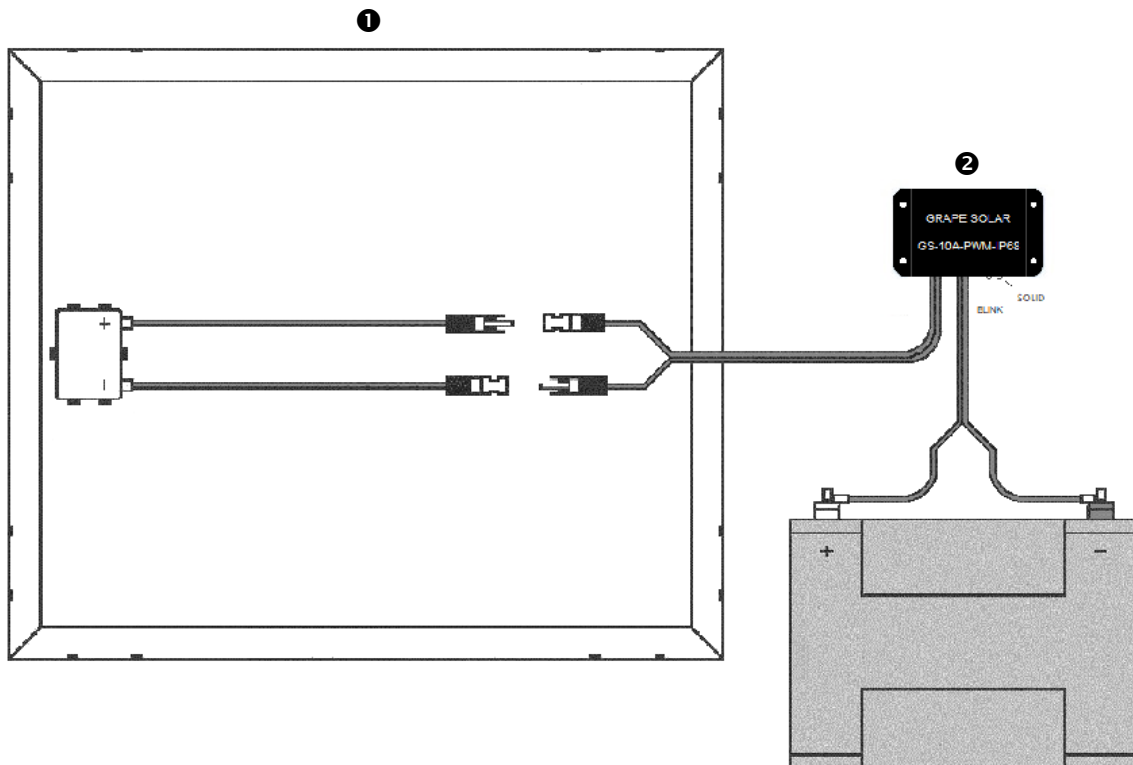
3 Connect the ring lug ends of GS-PWM-10A-IP68 ❷ to the positive and negative terminals of a 12V deep cycle battery (not included in kit). If your battery has sufficient charge, the LED light on the far side of the charge controller should light up.



*12V deep cycle battery not included with kit
[diagrams not to scale]



- 4** Connect the positive and negative MC4 style connectors on the GS-STAR-100W ❶ solar panel to the positive and negative MC4 style receptacles on the GS-PWM-10A-IP68 ❷. Uncover your panel during daylight, when the solar panel is producing power, the LED light on the inside of the charge controller should light up and blink. A 100-watt solar panel will put out an average power output of 300 watt-hours per day based on continuous US solar irradiation average level.



*12V deep cycle battery not included with kit

[diagrams not to scale]

DISCLAIMER:

Installations of this kit could be subject to national and local building and electrical codes. Installers should have adequate knowledge of national and local code to ensure the installation passes inspection by the local electric authority.

Proper fuses or breakers should be used to comply with all local and national codes. Contact Grape Solar for specific recommendations.

All batteries used for this system should be identical. Do not mix battery types or sizes. Do not mix old batteries with new batteries. Performance and charging anomalies can occur if types, sizes, or age of batteries are not identical.

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