

Foldable Solar Panel Dual Kit Supplement

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Introduction

The dual systems consist of 2 identical foldable sets. Each set can be used separately or together to achieve the total combined power output of both sets. This supplementary document should be read in conjunction with the standard included user manual for each set.

Safety

PV modules produce current and voltage when exposed to light of any intensity. Electrical current increases with higher light intensity. DC voltage of 30 Volts or higher is potentially lethal. Use insulated tools and do not wear metallic jewellery while working with PV modules. In order to avoid arcing and electrical shock, do not disconnect electrical connections under load. Faulty connections can also result in arcing and electrical shock. Keep connectors dry and clean, and ensure that they are in proper working condition. Never insert metallic objects into the connectors, or modify them in any way in order to secure an electrical connection.

Installation

PV modules should ideally be tilted at an angle of 30 degrees - facing North. Positioning the collapsible stand fitted to each foldable set at a 90 degree angle with the ground surface will achieve a 30 degree tilt angle. Partial or complete shading of PV modules can significantly reduce system performance. High system voltages could be induced in the event of an indirect lightning strike, which could cause damage to PV system components.

Electrical Connection

Each set can be used separately by connecting the panel directly to the controller without the combiner cable (Junction Cable). If the combined sets are used - the 2 sets must be connected to each other using the combiner cable. The standard included panel cable will connect from the combiner cable to the controller.

Important:

Always first connect the battery to the solar controller/regulator and then connect the solar panel and any loads (lights/fridges etc.)

Electrical Considerations

The short-circuit current (ISC) and the open-circuit voltage (VOC) should be multiplied by a factor of 1.25 when determining component voltage ratings, conductor current ratings, fuse sizes, and size of controls connected to the PV output. When using both sets combined - one need to take into account that the current (Amps) will be double of that specified for each single set.

Specifications

The specifications of the combined set will be as follows: Unless specific custom configurations were used - the voltage of the combined set will remain as per each set specifications. The current (Amps) and power (Watts) will be double of stated values for each individual set.

Please contact us by email for any assistance is configuration and integration.
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