

Semi-Flexible Solar Panel Installation

Connecting to the regulator and battery

Site Selection

- Solar panels should be installed in a location free of frequent shade.
- In the northern hemisphere, panels should ideally face south, and in the southern hemisphere, panels should ideally face north.
- In applications where the panels are installed in areas that have heavy snow, extreme cold or strong winds, take proper steps to maintain reliability and safety.
- Avoid prolonged direct exposure to saltwater. Do not submerge in salt or fresh water.
- When installing on a boat try to choose a location that will have sunlight regularly between 10:00 AM and 3:00 PM.

Wiring

To ensure proper system operation and to maintain the warranty, be careful to observe the correct cable connection polarity when connecting the panels to a battery, controller (regulator) or to other solar panels. Recommended cable size is 1.0-4.0mm² according different solar panels. Generally, Red wire of output cable is positive, black wire of output cable is negative.

Mounting the solar panel

***This product can be installed in various different locations, the mounting process may differ by application.**

***Do not install near obstructions or heavy traffic areas**

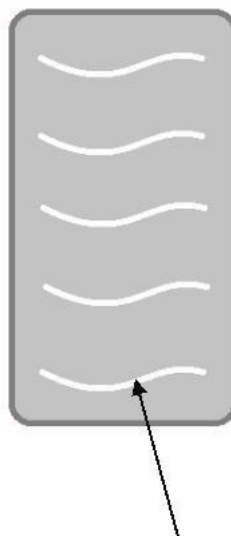
***Hardware used must be compatible with the mounting material used in this panel to avoid galvanic corrosion.**

Mounting with glue

Tools Required –

Adhesive Glue (recommended is Sikaflex)
Caulking Gun
Putty Knife

- Apply the glue in horizontal or vertical lines as show on the image to the right on the rear of the panel.
- Leave a 5cm space between the glue and the edges of the panel.
- Try not to break the line of glue
- Once the glue is applied, place the panel on the mounting surface and apply even downwards pressure to the entire surface of the panel.
- If glue comes out of the side of the panel, use a putty knife to remove it, **Do not use chemicals.**
- Do not move the panel once it has been glued as this will result in a loss of adhesion.
- Allow the glue to harden for approximately 6 hours before continuing with electrical connection.



Glue

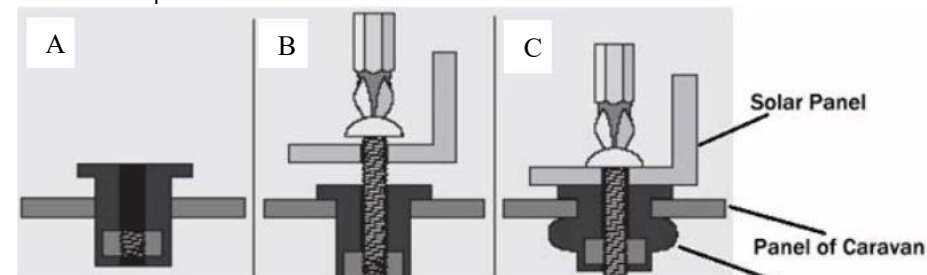
Mounting Using the panel screw holes

Tools Required –

Screwdriver

Drill with suitable drill bit

4 x Well nuts (not provided) are required for mounting the solar panel using the eyelet holes on the panel.



1. Place the well nut all the way into the pre drilled hole until the flange is firmly against the mounting surface (Pic.A).
2. Push the screw all the way through the panel (Pic.B).
3. Tighten the screw (Pic.C).

Alternatively the installer can choose not to use well nuts and instead use M6 bolts (not provided) depending on the mounting requirements.

Mounting Using the double-sided tape

Tools Required –

Recommended: 3MVHB series 4991 thickness 2.3mm



Double-sided tape

Connecting to the regulator and battery

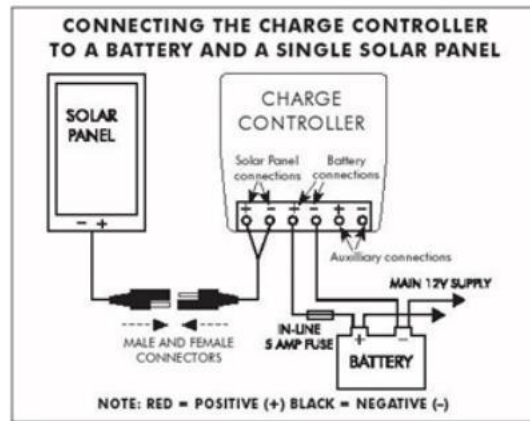
It is strongly recommended that your solar panel is connected to a suitable solar regulator to charge the Battery.

1. Install the regulator close to the battery.

2. If necessary extend the panel output lead with a solar-cable (2x2.5 mm²). Now connect the output lead to the regulator as shown on the picture (right).

3. ATTENTION: Never mix up POS (red) and NEG (black) from the cable!

4. The regulator should be connected with a solar cable on a direct way to the battery. (Right picture)



NOTE: To prevent a short circuit, the cables to the battery should always be connected as the last ones, or removed as the first ones, during any work on the module.

