



Selection & Installation Guide

1. Check which size **Panels** will fit the best.

This can be done by looking at the specifications of the panels you are interested in, add the **brackets** to the panel size and cut out a piece of cardboard to this size.

Then you can move the template around on your roof to see which panel or combination of will fit the best (keep in mind where the wires are going to be installed).

Selecting a wiring position can be tricky. Try installing wires through the roof inside a internal cupboard that goes from the ceiling to the floor.

The wires then can be installed through the roof, through the floor up into the front boot or where your battery/batteries are located. Also think of where you will be installing your **regulator**. The regulator can be installed anywhere between the solar panels and the batteries. Usually if installed like the example just given, it would be installed in the front boot or inside near your battery location.

Installation of your solar system can be done inside or outside depending on the weather.

Make sure to cover the solar panels with either the box they come in or the template you used to select your solar panels. This will stop them producing power while you are working/wiring them.

2. After selecting the correct size panel/panels to suit your requirements simply place an order.
3. When you receive your panels place them along with your brackets on your roof prior to fitting anything.

When you have selected a position make sure all brackets are sitting reasonably flat.

Avoid installing the brackets over any silicone/silicone joints on the roof if possible. It is very hard to get any product to stick well to silicone.

Mark the roof where the panels will be installed.

Mark the solar panel where the side brackets are to be attached to your solar panel.

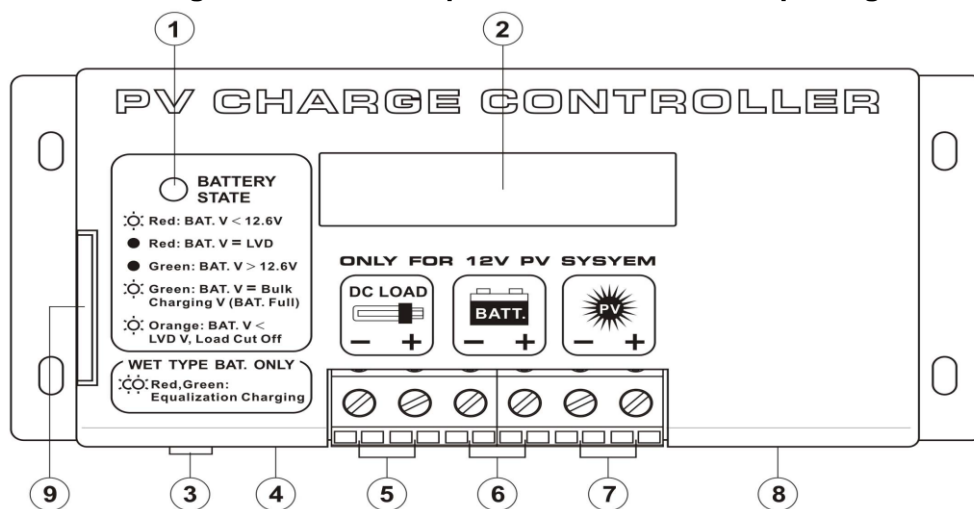
Sometimes perfectly centre is not the best. They may need to be moved along the side of the panel to help all brackets sit well on your roof.

Remove the panels and brackets from your roof and place in an area on the ground where you can work on attaching the brackets to the panels

4. When drilling the holes in the solar panel to attach the bracket try and drill the hole more towards the centre of the panel frame or well below the glass and the solar cells on the solar panel.
5. Attach the brackets to the solar panel using a self taper stainless screw or gal text screws.

6. Follow the [sikaflex-252 installation instructions](#) and clean the brackets and roof **thoroughly** where the brackets will be attached prior to applying the Sikaflex-252.
7. After applying the sikaflex-252 to your brackets (on one solar panel at a time). Install them to your pre marked position on your roof. Keeping the wires from the back of the solar to the side you are going to connect them. Lightly press down over the top of each bracket to ensure the Sikaflex-252 makes a good contact with all surfaces. A safety feature would be to install a screw or two in each bracket.
8. Give a couple of hours for the Sikaflex-252 to dry before attaching your wires. To help reduce the wires flapping on the roof while you are travelling put some silicone on the wires in various places and silicone them to the roof at the end of the installation.
9. While you are waiting for the sikaflex-252 to dry a little, Install your regulator in the permanent position you have previously chosen.

This Regulator is an example and is sold with our packages



1. Battery LED Indicator
2. LCD Display
3. Reset button
4. Temperature Sensor (Optional)
5. 12V DC Load terminal with Low Voltage Disconnect/NIGHT-LIGHT mode
6. 12V Battery connection terminal
7. PV Panel connection terminal
8. Remote Signal Terminal (Optional)
9. Side Door (open to access switches for setting)

It is recommended that the PV Charge Controller should be installed in a dry, sheltered location away from sources of high temperature and moisture.



Run your wire through a **roof top wiring block**, through the roof to your regulator. Face the wires towards the rear of your van or motor home. This will help ensure no dust or moisture gets in while travelling. Install the wiring block using a good grade silicone. This way it will be easier to remove if needed for any reason in the future.



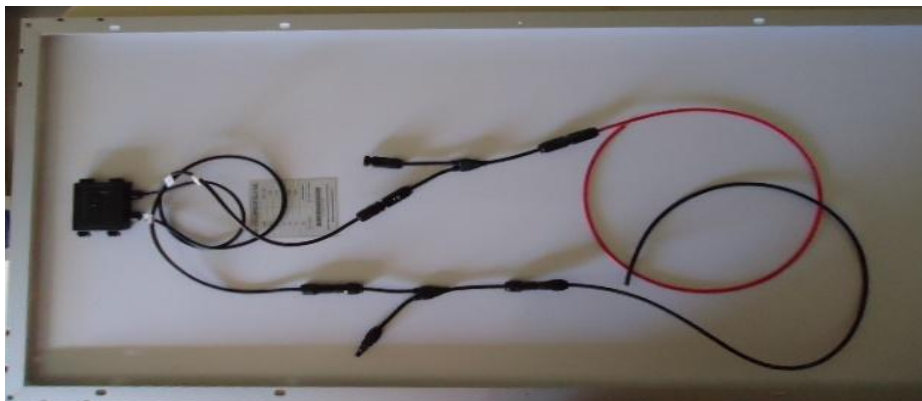
We now supply the positive wire in Red sheath and negative in Black.

10. If hooking two solar panels together a **'Y' connector** is a simple way to do it. Simply press the solar panel wires into the 'Y' connector. One 'Y' connector is to hook up the positive from both panels the other you will hook the two negative wires (one from each panel).

Cover the solar panels so no power is being created.

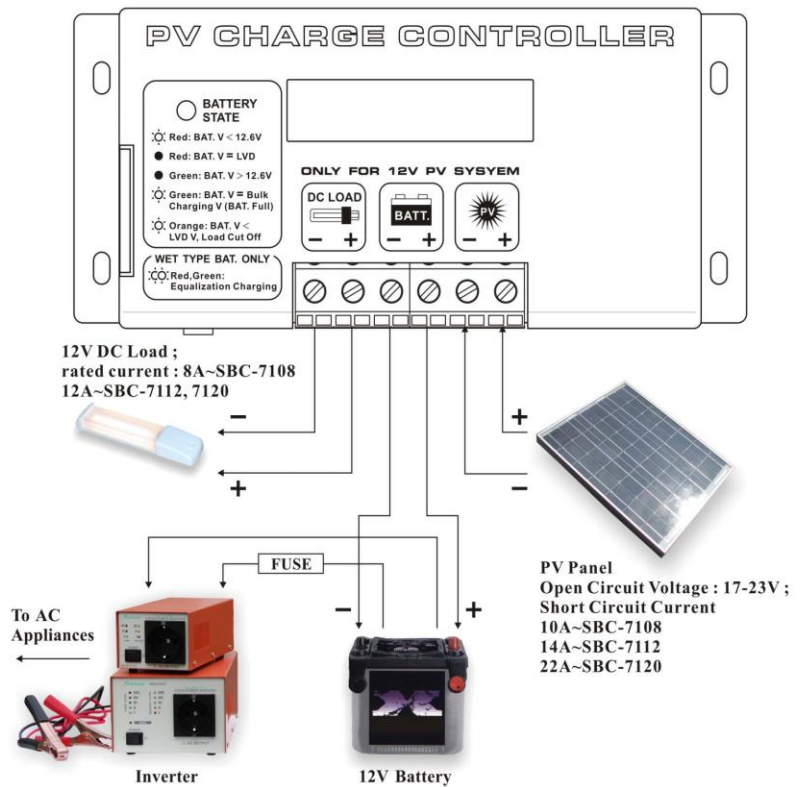
11. The 'Y' Connector will then connect to the positive or negative wire coming out of the wiring block.

Example of how a solar panel looks when one panel is hooked to a 'Y' Connector and positive and negative wire which will go to the regulator. The two plugs not being used in this photo is where the second panel is plugged in.



12. Hook up your regulator to the solar panels. Before you hook your regulator to your battery hook up the solar panels and load (if required).
13. Hook up the wires from your regulator to your battery/batteries.
14. Remove the cover you placed over your solar panels during the installation.
15. A **fuse** can be installed between the regulator and the battery on the positive wire.

Your solar system now will be charging your battery/batteries when in the sun.



Notes

Other regulators can be installed in the same way. Refer to their user manual.

If the load facility is to be used it is a good idea to put a switch inline so that all power can be turned off to all appliances easily.

This installation is for solar panels with MC4 connectors pre installed on the solar panel.

If no MC4 or wire is installed on your panel it can be done or a single panel can be wired direct to the regulator with no MC4 connectors required.

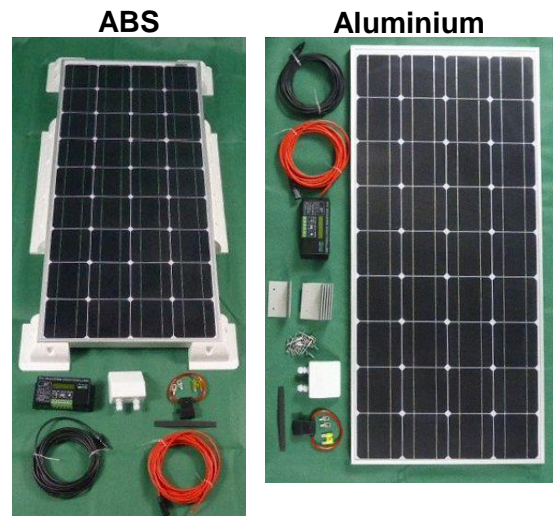


Solar Panel Packages

We sell Aluminium and ABS Solar Panel Packages available with one or two solar panels.

Our single solar panel packages include:

- 1 x Solar Panel (95W, 120W, 125W, 160W or 200W available)
- 1 x set of Mounting Brackets (Aluminium or ABS available)
- 1 x 20Amp LCD display Solar Regulator
- 1 x Roof Top Wire Mounting Box (White)
- 2 x 7m of Solar Panel Wire with MC4 attached (1 x 7m Positive & 1 x 7m Negative Wire)
- 1 x 20Amp Maxi Fuse
- 1 x Maxi Fuse Holder
- 2 x Battery Eyelets
- 1 x 10cm of Heat Shrink



Our two solar panel packages include:

- 2 x Solar Panels (95W, 120W, 125W, 160W or 200W available)
- 2 x sets of Mounting Brackets (Aluminium or ABS available)
- 1 x 20Amp/30Amp/40Amp LCD display Solar Regulator (Depends on package selected)
- 1 x Roof Top Wire Mounting Box (White)
- 1 x set (Positive & Negative) Double Panel Connectors
- 2 x 7m of Solar Panel Wire with MC4 attached (1 x 7m Positive & 1 x 7m Negative Wire)
- 1 x 20Amp/30Amp/40Amp Maxi Fuse (Depends on package selected)
- 1 x Maxi Fuse Holder
- 2 x Battery Eyelets
- 1 x 10cm of Heat Shrink

