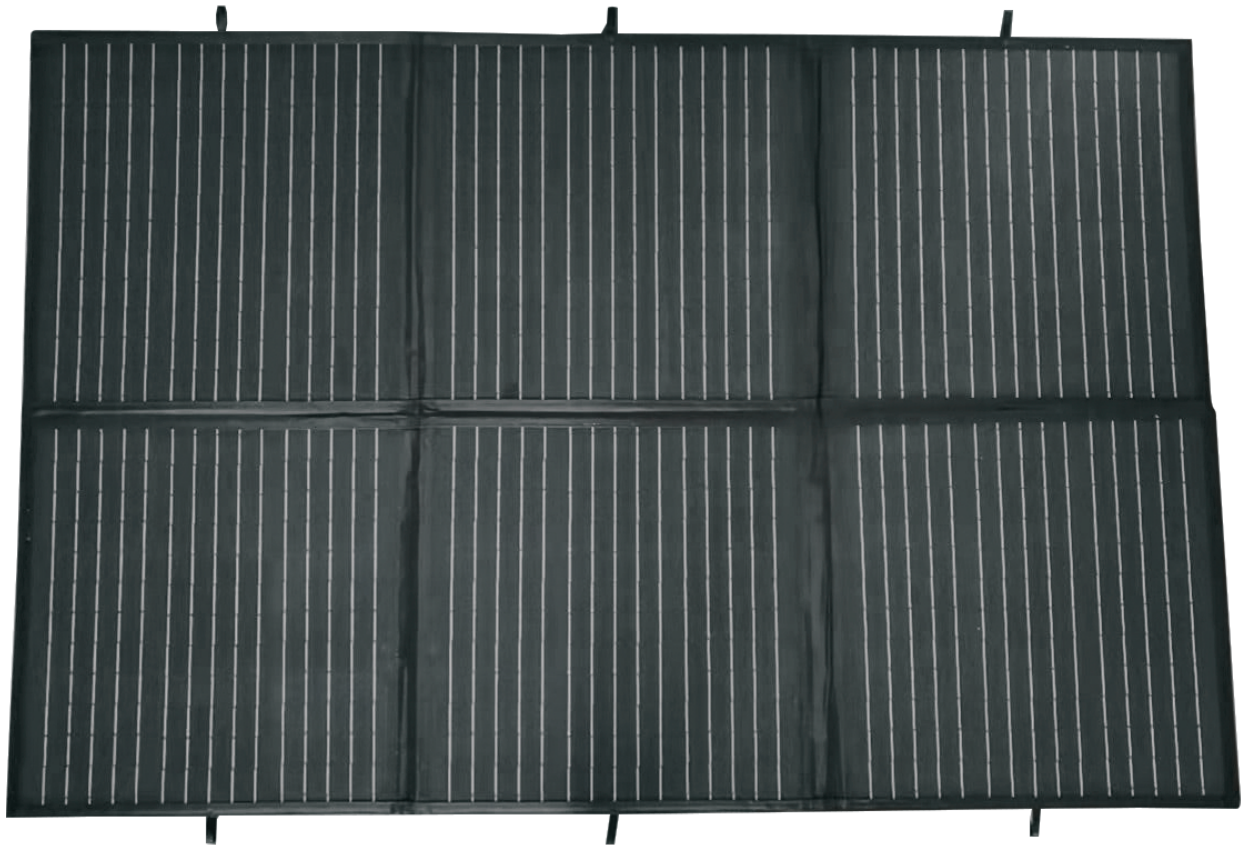




300W Solar Blanket

SPSPA300W

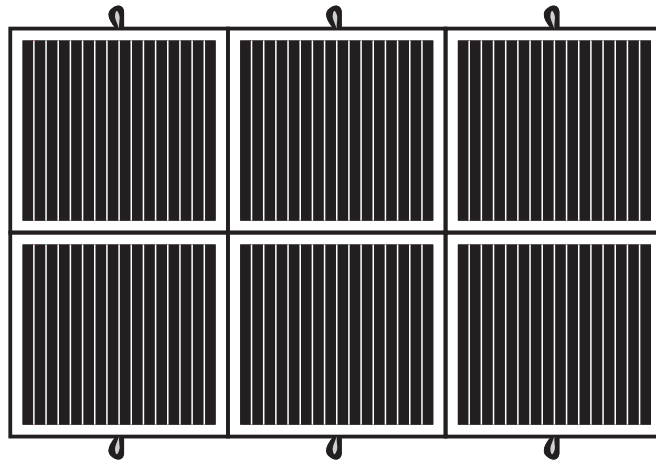
USER MANUAL



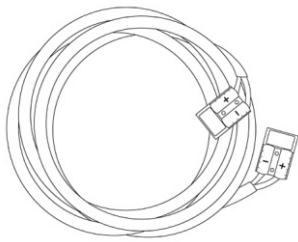
WARNINGS & SAFETY INFORMATION

- Please bear in mind that the solar panel, MPPT controller and battery should be kept away from liquids and chemical solvents.
- Keep the solar blanket and controller clean and check whether the connectors are clean before use.
- Children, adults with reduced physical or mental abilities, or those who are under the influence of drugs or alcohol are not allowed to use this product.
- This solar blanket is not intended to charge non-rechargeable batteries, which may cause injuries to the user or damage the blanket and the controller.
- Battery should be mounted in well-ventilated area without potential ignition sources, because lead acid batteries might produce harmful and explosive gases. No naked flames or smoking near a battery that is charging.
- Any modifications to the product will void the warranty.
- Please store the solar blanket in a cool and dry place.
- Please keep the solar blanket away from sharp or heavy objects, which might cause damages to the blanket during transportation.
- This solar blanket is intended to charge 12v rechargeable batteries.
- The MPPT controller is only suitable for LiFePO4 batteries and lead-acid batteries: calcium, AGM & GEL. The controller should not be used with nickel metal hydride batteries.
- The MPPT controller is engineered to charge one battery only.
- The MPPT controller is NOT weather proof.
- Good ventilation is important for the controller, as it will generate much heat during operation.

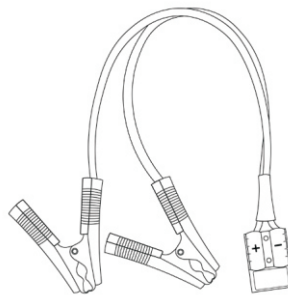
PACKAGE LIST



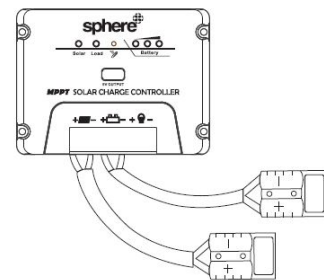
300W Solar Blanket



Extension Cable

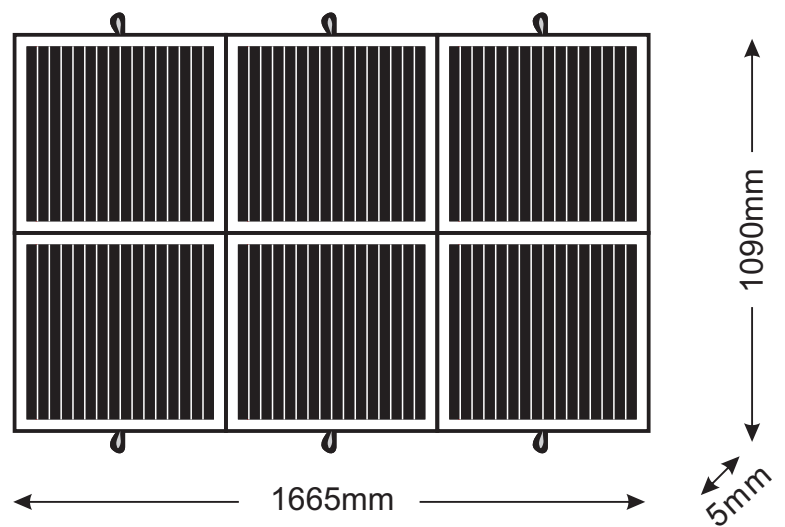


Alligator Clips



MPPT Controller

DIMENSIONS



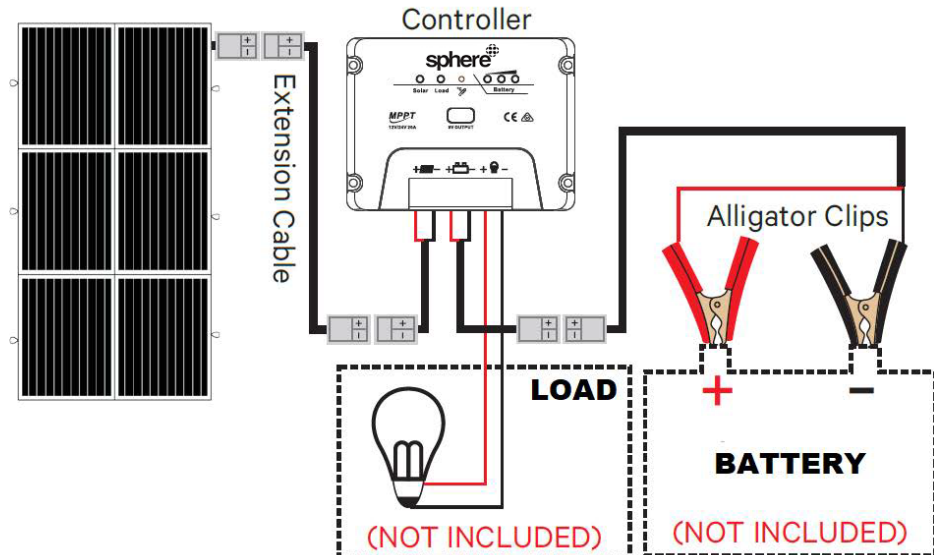
CONNECTING YOUR SOLAR PANEL

- Connect the Alligator Clips to the battery.
- Connect the controller to the battery with Anderson plugs. Use the extension cable if needed.
- Connect the solar blanket to the controller with Anderson plugs.

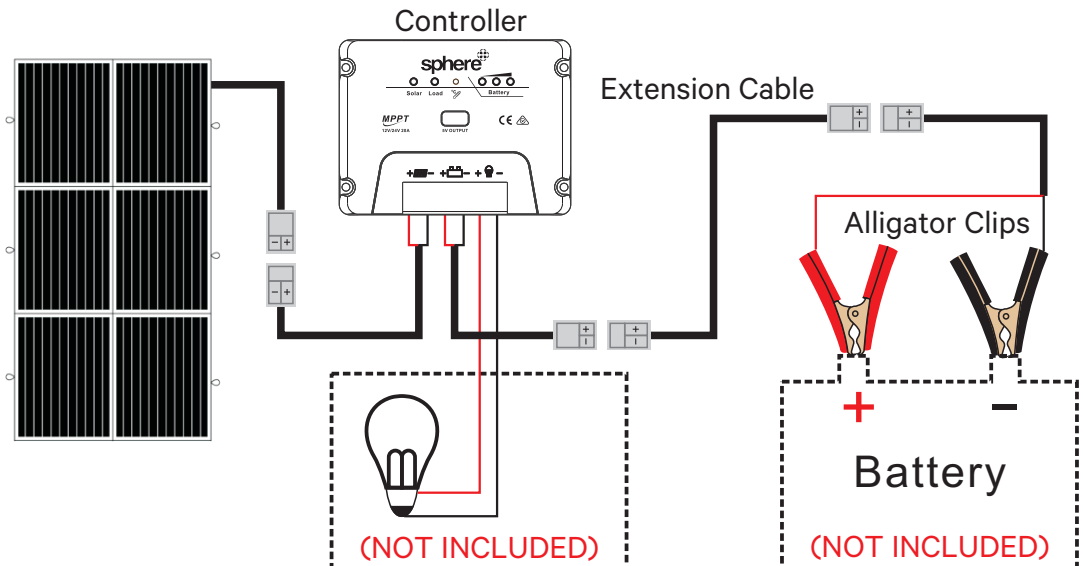
Note: When uninstalling, you are required to repeat the steps from last to first.

Option (A)

To minimise voltage drop for maximum performance, using option (A) connection method

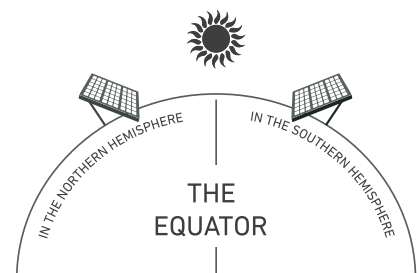


Option (B)



TIP

Solar panels should be installed in a location where there is no constant shading. In the northern hemisphere, panels should ideally face south, and in the southern hemisphere, panels should ideally face north.



SOLAR BLANKET SPECIFICATIONS

Voltage at Pmax (Vmp)	18.2V
Current at Pmax (IMP)	16.5A
Open-Circuit Voltage (Voc)	22.4V
Short-Circuit Current (Isc)	17.7A
Panel Weight	10KG
Dimensions (Closed)	550*550*40 mm
Dimensions (Open)	1665*1090*5 mm

CONTROLLER SPECIFICATIONS

Model	MPPT20A	
Rated Charge Current	20A	
Rated Discharge Current	20A	
Rated Voltage	12V/24V	
MPPT Efficiency	Max:99%	
Over Load, Short Circuit Protection	≥ 1.5 rated current	
No Load Current	$< 10\text{mA}$	
USB Output	5V 1A	
Working Temperature	$-35^{\circ}\text{C} \sim +55^{\circ}\text{C}$	
Dimension of Controller	131 x 99.5 x 29.5(mm) (LxWxH)	
Weight	300g	
	12V	24V
Over Voltage Protection	16V	32V
Voltage of Stop Charging	14.7V	29.4V
Discharge Recovery Voltage	12.0V	24.0V
Over Discharge Voltage	10.8V	21.6V

INDICATOR	STATUS	MEANING
SOLAR	Steady ON	Solar panel voltage is higher than the light control voltage
	OFF	Solar panel voltage is less than the light control voltage
BATTERY	Any status	Number of indicators steady on indicates battery power
	The left indicator is flashing	Battery is nearly or already empty.
LOAD	Steady ON	Load receiving power
	OFF	Battery voltage is abnormal.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Load icon is off	Battery is low, the load will start when the battery voltage is higher than 11.5V	Charge the battery
The MPPT controller will not turn on	Battery is insufficiently charged	Charge the battery
	Battery has been connected improperly	Check, and if necessary alter the battery's connection to the MPPT controller
	Battery fault	Change the battery
Solar panel doesn't work despite sufficient sunlight	Reverse polarity	Reconnect
	Loose connection	Reconnect
	Bad soldering of wires inside the junction box	Contact us
	Solar panel malfunction	Contact us
Low power output	Loose connection	Reconnect
	Wrong tilt angle	Adjust the angle to capture direct sunlight
	Shadow	Remove any shadow covering the panel
	Accumulation of dust	Clean, best on a regular basis
	High operating temperature	Ensure sufficient air circulation beneath the panels; add more panels in series to increase the string voltage



Coast RV Pty Ltd
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Web: www.coastrv.co.nz

Warranty Against Defects

1 WHAT THIS WARRANTY RELATES TO

- 1.1 This warranty covers goods supplied by Coast RV Pty Ltd T/A Coast to Coast RV Services ("Supplier") to the Client ("Goods") and relates to any defects in materials and workmanship under normal use and maintenance ("Defect").

2 WHAT THE SUPPLIER WILL DO TO HONOUR THE WARRANTY

- 2.1 The Supplier will:
- (i) replace or repair the Goods or the defective part of the Goods free of charge;
 - (ii) arrange for the Goods or the defective part of the Goods to be repaired or replaced by a qualified repairer free of charge.
- 2.2 The Supplier reserves the right to replace defective parts of the Goods with parts and components of similar quality, grade or composition where an identical part or component is not available.
- 2.3 Goods presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the goods.

3 WHAT THE CLIENT MUST DO TO CLAIM THE WARRANTY

- 3.1 To claim the benefit of the warranty, the Client will need to (sequentially):
- (i) first contact the Supplier; and
 - (ii) present the defective Goods to the Supplier for inspection, including inspection for defective workmanship, or otherwise provide evidence of the claimed Defect, accompanied by evidence of proof of purchase and date of delivery, and if applicable, evidence of maintenance performed in accordance with the relevant maintenance schedules.
- 3.2 The claim listed in clause 3.1 may be made in person, or the claim may be sent to the address listed on this form, including the particulars required under clauses 3.1(i) and 3.1(ii).
- 3.3 The appropriate form for making a claim for warranty is as attached.

4 DURATION OF WARRANTY

- 4.1 This warranty will cease:
- (i) where the Goods are purchased already fitted in or as a component of a vehicle or RV: from the date that is twelve (12) months after the Client takes delivery of the vehicle or RV; and
 - (ii) where the Goods are purchased separately or as an after-market item: from the date that is twelve (12) months from the date of purchase..
- 4.2 If a Defect does not materialise in the Goods prior to the date provided in clause 4.1, the Supplier will have no liability to the Client under this warranty.

5 RESPONSIBILITY FOR COSTS OF CLAIM UNDER THIS WARRANTY

- 5.1 The Supplier is responsible for the costs directly associated with repairing or replacing the Goods in accordance with clause 2.1 only.
- 5.2 Any works required to be completed in addition to fixing the Defect are the responsibility of the Client. Additional works includes any costs associated with any testing or repair of the Goods or any goods to which they are fitted, undertaken by a third party in relation to any defect without prior authorisation from the Supplier.
- 5.3 Where it is determined that the Goods do not have a Defect, the Client will be charged a GST exclusive inspection fee of forty-five dollars (\$45.00AUD in Australia or \$45.00NZD in New Zealand) plus freight costs for the return of the Goods, this is subject to change without notice.
- 5.4 The cost of delivery and insurance of the Goods to and from the Supplier, travel costs to and from the Supplier, and the cost of inspecting and testing the Goods are the sole responsibility of the Client.

6 WARRANTY LIMITATIONS

- 6.1 The Supplier makes no warranties or representations other than those set out in this warranty document except as is required by law.
- 6.2 The Supplier will not be liable under this warranty:-
- (i) to the Client or any other person for any consequential, direct or indirect loss, damage or costs incurred or suffered by the Client or any other person, including but not limited to damage to persons, other property, loss of turnover, loss of profits, loss of business or goodwill;
 - (ii) to the Client for transportation or travel costs which are the Client's responsibility;
 - (iii) for damage or defects in any Goods caused by improper transportation, storage or any other misuse, neglect or accident.
 - (iv) for the installation of the Goods. Any fault or defect due to installation should be referred to the installer. The Goods must be installed in accordance with the Manufacturer's instructions and any relevant legislation or code.
- 6.3 This warranty covers the Client only and it is not transferrable if the Goods are sold by the Client during the warranty period.

7 WARRANTY EXCLUSIONS

- 7.1 This warranty will not apply where:
- (i) the Goods have been improperly modified or repaired or the Good's defect has arisen due to the Client's failure to properly install, fit, maintain, service or use the Goods in accordance with the specifications and instructions provided by the Manufacturer, including a failure to comply with the relevant maintenance schedule (where applicable);
 - (ii) the Supplier cannot establish any Defect in the Goods after testing;
 - (iii) the Goods have been used other than for the purpose for which they were designed;
 - (iv) the Goods have been subject to abnormal conditions, including but not limited to temperature, pressure, stress, load or similar;
 - (v) the Client or installer have used or fitted non-genuine or non-approved parts and accessories to the Goods or have failed to use recommended parts and accessories;
 - (vi) the Good's defect has arisen due to abuse, misuse, neglect or accident;
 - (vii) the Goods have not been installed in accordance with the relevant instructions;
 - (viii) the Good's defect is caused by use or fair wear and tear of the Goods (or expendable parts).

8 RIGHTS AT LAW

- 8.1 The benefits given to the Client under this warranty are in addition to other rights and remedies of the Client at law in relation to the Goods.
- 8.2 In Australia our Goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the Goods repaired or replaced if the Goods fail to be of acceptable quality and the failure does not amount to a major failure.

WARRANTY CLAIM FORM

Warranty Providers Name: Coast RV Pty Ltd trading as Coast to Coast RV Services
ABN 49 097 104 492 - ACN 101 461 330

Warranty Providers Address: PO Box 6287, Silverwater NSW 1811 Australia OR;
PO Box 58-054 Botany AUCKLAND 2163 New Zealand

Client:
Contact No.
Description of Goods provided:

Receipt enclosed: *(tick box)* ☐ Yes ☐ No

Receipt No:
Description of defects (Give as much detail as possible. Use a separate page if required):

Date of purchase/services provided:

I hereby declare that the information provided above is true and correct and to the best of my knowledge and belief and I have complied with all the conditions of the warranty.

Signed:.....

Name:
(please print)

Dated:

[Please note, the issue or completion of this form by the Client does not constitute an admission of liability by the Supplier]