WILDTRAK

WPS
WILDTRAK POWER SYSTEMS

300W MONOCRYSTALLINE FOLDING SOLAR BLANKET

USER MANUAL



CA7068

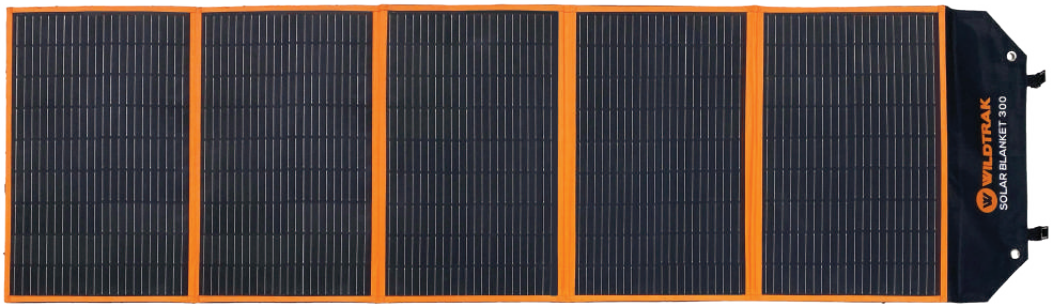
PLEASE READ AND UNDERSTAND THIS MANUAL COMPLETELY BEFORE USING THIS PRODUCT.

www.wildtrak.com.au

WARNING & SAFETY INFORMATION

- Keep the solar panel MPPT controller and battery away from liquids at all times.
- Keep the solar panel and MPPT controller clean at all times. Always check connectors for debris before connecting.
- Lead acid batteries produce harmful explosive gases. The battery should be mounted in a well-ventilated area, away from possible ignition sources.
- Take precautions when manoeuvring and setting up the solar blanket as to not damage the unit.
- The MPPT controller is only suitable for regulating solar modules.
- The MPPT controller is only suitable for LiFePO4 batteries and lead-acid batteries: LEAD, AGM and GEL. The solar blanket and MPPT controller should not be used with nickel metal hybrid batteries.
- Never connect more than 1 charging source to the controller.
- The controller cannot be used to activate over-discharged lithium-ion batteries.
- Once the load terminal is shortened, it will be irretrievably damaged.
- Remove anything covering the MPPT controller to ensure good heat dissipation.
- If the controller heats up, it will lower the power and may automatically shut off.

INCLUDED IN THE KIT



1x Monocrystalline Folding Solar Blanket



1x MPPT Controller



1x 4.5m extension lead



1x Battery Clips



1x Protective Carry Bag

Anderson cable extension lead 4.5m + Alligator cable 0.5m = 5m total length

INSTRUCTIONS

UNPACKING YOUR SOLAR BLANKET

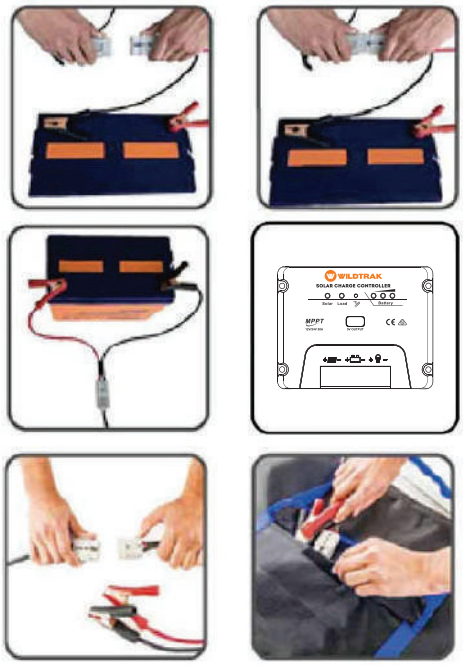
- Find a suitable location to unfold the SOLAR BLANKET, away from sharp objects, liquids and other hazards that could damage your SOLAR BLANKET. Ensure there is sufficient space for the SOLAR BLANKET to be spread out fully.
- Whilst unfolding, take care of the panels by making sure they do not bend.

CONNECTING YOUR SOLAR PANEL

- Now that the panel is setup facing directly towards the sun. Connect the positive and negative clips to your battery.
- Always connect the battery clips to the battery first, before connecting to the solar panel. The solar controller will then light up.

DISCONNECTING & STORING YOUR SOLAR PANEL

- Disconnect the solar panel off the battery before removing the battery clips off the battery.
- Roll the wire neatly into the space behind the solar panel, make sure not to twist or kink the wiring in an unnatural way.
- Place the battery wire separately in the front pocket of the carry bag.

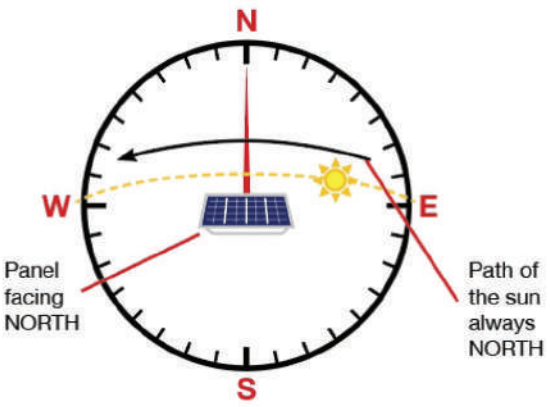


Note: Never store your solar panel with the battery wire connected to the panel.

TIP

For optimal performance through-out the day, set the panel to approximately 30° from the ground. The range between 10° and 40° will gain the best power absorption across the course of the day.





SPECIFICATIONS	
Maximum Power at STC (Pmax)	300W
Open Circuit Voltage (VOC)	25.5V
Short Circuit Current (ISC)	14.58A
Maximum Power Voltage (VMP)	21.75V
Maximum Power Current (IMP)	13.80A
Tolerance	± 5%
Operating Temperature	-40 to 85°C
Net Weight	11.95kg (Blanket Only)
Unfolded Size	296.5 x 58.5 x 0.5cm
Folded Size	56.6 x 58.5 x 4cm
Cell Type	Mono crystalline
Efficiency %	22%
Connector	Anderson Plug
Output Cables	2.5mm^2

OPERATING THE MPPT CONTROLLER

Please note: not following these instructions may cause damage to the MPPT controller.

Ensure that you attach the positive (+) and negative (-) wires to the appropriate terminals.

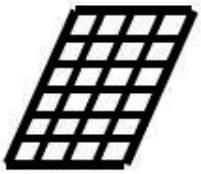
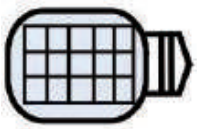
1. Connect the positive and negative wires from the battery into the terminals with the battery icon ensuring polarity is correct.

2. Connect positive and negative solar input into the two terminals with the solar icon, ensuring polarity is correct. Then the solar indicator light will turn on if the voltage is normal.

3. The controller is now ready to use.

4. For additional load circuit, connect positive and negative wires to the terminals with the lightbulb icon on the controller.

NOTE: Ensure a fuse is used on battery positive wiring to prevent short circuits and potential damage to the unit or your vehicle

INDICATOR	INDICATED ITEM	STATUS	MEANING
	**Solar Panel**	Steady ON	Controller is charing
		OFF	Solar panel voltage is less than the light control voltage
	**Battery**	Any status	Indicate battery energy left is low,right is high
		Right indicator blinking	Charging
	**Load**	Steady ON	Load receiving power
		OFF	Battery voltage is abnormal.

BATTERY INDICATOR	● ● ●	⩾14.0V	⩾28V
	● ●	12.6V⩽B+<14.0V	25.2V⩽B+<28.0V
	●	11.6V⩽B+<12.6V	23.2V⩽B+<25.2V
	○	<11.6V	<23.2V

MPPT CONTROLLER SPECIFICATIONS

MODEL	CA7068
Product Dimension	131*99.5*29.5mm
Product Weight	300g
Rated Charge Current	20A
Rated Discharge Current	20A
Rated Voltage	12V/24V auto work
MPPT Efficiency	Max. 99%
Max. PV Input Voltage	49V
Max. DC Input Voltage	29.6V
Over Load, Short Circuit Protection	⩾1.5 rated current
No Load Current	<10mA
Over Voltage Protection	14.8V; x2/24V
Charging Voltage Cut-Off	14.4V; x2/24V
Discharge Recovery Voltage	12.0V; x2/24V
Overdischarge Voltage Cut-Off	10.8V; x2/24V
USB Output	5V 1A
Operating Temperature	-10°C~45°C
Humidity	≤90%

TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Charging symbol not displaying even when the solar panel is in the sun	Solar has been improperly connected to the MPPT controller	Reconnect the solar panel ensuring that the positive and negative terminals are appropriately connected
Load icon is off	Battery is low, the load will start when the battery voltage is higher than 12.0V	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

12 MONTH LIMITED WARRANTY

WARRANTY PERIOD:

12 month warranty from date of purchase.

THIS LIMITED WARRANTY COVERS:

- Any defect in the manufacture or design of the items which results in their failure to perform as advertised.
- If item damage is found to have been caused by a design or manufacturing defect, we will replace or repair the item at our discretion.

Our products include guarantees that cannot be excluded under the Australian Consumer Law. Consumers are entitled to the following:

- Replacement or refund for item failure
- Compensation for reasonably foreseeable loss or damage
- Item replacement or repair if it fails to be of acceptable quality even if it does not amount to a major failure

These benefits provided to you as a consumer are in addition to other rights available under the law.

THIS LIMITED WARRANTY DOES NOT COVER:

- Damage from improper use or tampering
- Cost of removal and reinstallation of the product
- Wrong installation or modifications made while installing
- Travel and/or other expenses due to consumer's secluded location
- Transport charges and any damage during transportation. It is the consumer's responsiblity to deliver and pick up their product, this includes all costs that comes with the postage of the repair or replacement of their product. If consumer decides to freight their product, it is advised to insure it against loss or damage.
- Damages caused by insects, animals, mould, bad weather, accidents and fair wear and tear
- Any loss directly or indirectly resulting to product failing to operate

WILDTRAK

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