

MONOCRYSTALLINE FOLDING SOLAR BLANKET USER MANUAL



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.
- Only use the solar panel to charge 12V rechargeable batteries.
- 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

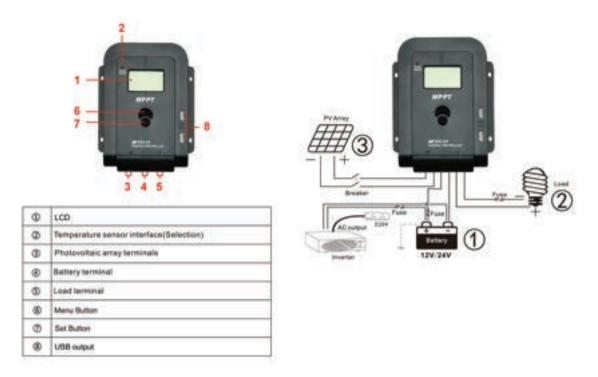
Anderson cable extension lead 4.5m + Alligator cable 0.5m = 5m total length

MPPT SOLAR BLANKET CONTROLLER

CONNECTING TO A LOAD

Connect the solar panels (+) positive and (-) negative terminals to a load's corresponding terminals. If the Load is receiving electricity, the Load Indicator Light will turn on. The power button will control the 2 x 12V DC socket only.

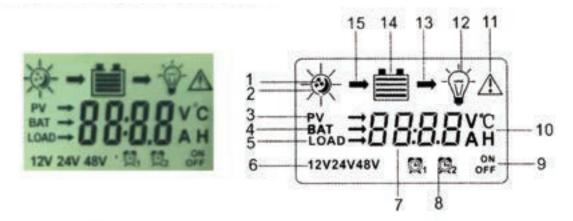
Note: Make sure the load does not exceed the controller's rated output.



USAGE RECOMMENDATIONS

- As the MPPT controller generated heat during operation, install in an environment with good ventilation and ample clearance.
- The MPPT controller measures the ambient temperature and adjusts battery charging accordingly. For this reason, place the controller and battery close to each other.
- Always use cables that are rated to or higher than the current output of the controller/ Overloading wires can result in fires and damage to equipment.
- The controller has a common positive pole inside. If grounding is required, ground the positive pole.

MPPT LCD DISPLAY



1. The default night display of controller:

When the solar panel input voltage have been detected by controller less than sensor identification point voltage, this graphic symbol will light up.

2. The default daytime display of controller:

When the solar panel input voltage have been detected by controller more than sensor identification point voltage, this graphic symbol will light up.

3. The indicator of PV array parameter:

When the solar panels data was displaying, this graphic symbol will light up, for example the voltage of solar panel.

4. The indicator of battery parameter:

When the battery parameter was displaying, this graphic symbol will light up, for example the voltage of battery, temperature of battery

5. The indicator of load parameter:

When the load parameter was displaying, this graphic symbol will light up.

6. System voltage:

When the LCD shows different system voltage, controller will adjust the technical data automatically.

- 7. Numerical display area
- 8. Timer setting function
- 9. Switch graphic symbol
- 10. Unit symbol value
- 11. Warning:

When there is fault, this graphic symbol will be light.

- 12. The indicator of load status: Load on, Load off.
- 13. The indicator of output power:

When the load terminal have output, this graphic symbol will light up.

14. The indicator of capacity of battery:

This will indicate the capacity level of the battery.

15. The indicator of charge status:

When the controller is charging, the symbol will light up.

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

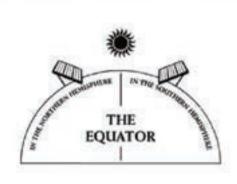
- Disconnect the solar panel off the battery before removing the battery clips off the battery.
- Roll the wire neatly into the space behind the solar panel, make sure not to twist or kink the wiring in an unnatural way.
- Place the battery wire separately in the front pocket of the carry bag.

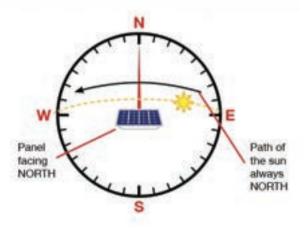
Note: Never store your solar panel with the battery wire connected to the panel.

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.







COMMON FAULTS

CAUSE	CORRECTION
Solar panel is disconnected	Check if connection of solar input is right and contact is reliable.
Battery voltage is less than 8V Voltage of solar panel is less than battery voltage	Check battery voltage. Controller will start only when battery voltage is more than 8V Voltage of solar panel must be more than battery voltage.
Battery over-discharge	Load output is turned off automatically and recovers when battery electricity is enough.
Overload	Reduce load or check load connection
Overheat	Let the controller cool down and restart charging automatically
Charging current of solar panel is too large	Check power of solar panel and reduce quantities of solar panel in parallel; Restart after 2 minutes
The Controller display LVD	The battery is over discharged. Check the system design is reasonable or not. If there is discharging capacity more than charging capacity
The Controller display HVD	The voltage of battery is high, cut off the solar panel and see if the voltage get down normal. If the fault is still there, cut off the battery and reconnect again.
The controller display OCP Over current protection	The load is short circuit or overload or high surge power check the load cables have short circuit, the power of the load over rated design, the surge power of load too high



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 responsibility 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



Email claim along with proof of purchase to info@wildtrak.com.au