

3. Trouble Shooting (Unit not charging)

- Unit not connected incorrectly (reverse polarity) – change the wires to the correct terminals.
- Bad connection – clean and tighten all connections especially Megapulse SolarMate unit.

4. Attention

- Megapulse SolarMate is supplied with wires 3m in length. Extending the wires further will introduce some voltage and current losses.

5. Important

- Megapulse SolarMate can be used on large batteries to maintain the state of charge.
- Megapulse SolarMate can be connected directly to appliances to run or charge.
- Ensure unit is fixed clear of any moving parts and wires are protected to avoid damage.
- Use only soapy water to clean the unit. Do not use solvents.

6. Warranty

Megapulse warranty covers any defect in workmanship and materials for a period of 7 years from original purchase date. The warranty is not transferable and does not restart if and when a faulty unit is replaced. The warranty does not cover misuse, neglect, accident, alteration or abnormal condition of operation or handling. No warranty exists for usage outside specifications. To obtain warranty replacement, the faulty unit must be returned to any Megapulse reseller with proof of purchase.

7. Using SolarMate 8w with 24v, 36v and 48v Systems

When using SolarMate with systems above 12v, multiple panels must be used, and each panel must be installed on 1x12v cells. For example a 24v system would use 2 x SolarMate installed 1 on each 12v battery. For a 36v system 3 x SolarMate would be used and for a 48v system 4 x SolarMate would be used.

Megapulse

SolarMate 8 watt



SOLARMATE 8 WATT SPECIFICATIONS

(VOC)	Open Circuit Voltage	16.2v
(VMP)	Max. Working Voltage	13.8v
(ISC)	Short Circuit Current	940mA
(IMP)	Max. Working Current	620mA
(Tmp)	Operating Temperature	-45c to +85c

Megapulse

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Installation and User Guide

Congratulations for purchasing Megapulse SolarMate 8w, You now have an extremely durable Solar Charger designed to charge small batteries, to connect directly to iPhones and mobile phones or to maintain large batteries in a charged state when idle for extended periods.

SolarMate is quick and easy to connect to your iPhone, iPod or Mobile phone via the supplied female 12 volt power socket (requires dedicated car charger)

How do I install my new SolarMate 8w unit?

Install SolarMate directly to the positive and negative terminals of the 12v battery. When using with 24v, 36v or 48v systems, multiple panels are required installed 1 per every 12v cell making up the system. Please Note SolarMate can be connected directly to appliances such as iphones, ipods and mobile phones to charge or run the appliance by using the supplied female 12v power socket. (Dedicated car charger is required). (Car charger not supplied)

What can I expect after installing SolarMate 8w?

SolarMate 8w will begin to output as soon as it is exposed to sunlight. Power output will vary dependent on weather conditions, maximum power will only be generated in full sunlight.

Do I need to use a regulator with the panel?

No, the new SolarMate 8w is regulated to a maximum voltage of 13.7v and it is therefore safe to use with your batteries and appliances. Batteries will not be overcharged and appliances will work just as if they were connected to a vehicle's 12 volt power socket.

Can I use SolarMate 8w to charge my large Auxiliary battery?

SolarMate 8w is capable of charging small batteries up to 7Ah, for larger batteries the output of SolarMate will be insufficient and result in prolonged recharge times. SolarMate is however capable of maintaining large batteries in a charged state which are left idle for long periods and not connected to loads.

Are there problems with solar panels and how can I prevent them?

Solar panel failure is usually caused by damage to the panel or connections.

What type of maintenance is required on solar panels?

There is no maintenance usually necessary on solar panels other than to keep the face clean to achieve maximum output efficiency.

How well do solar panels work in winter?

Solar panels work on light not heat. With shorter daylight hours in winter, solar panels will produce less power. If the panel becomes covered with dirt or snow it will slow down or stop producing power.

How well do solar panels work in cloudy conditions?

A cloudy day provides sufficient diffuse light by which the panel will produce some electricity. As with all solar panels, optimum output occurs only in full sunlight. Under an overcast sky the panel will produce reduce output.

Do solar cells store energy?

No. Solar cells simply convert sunlight into an electric voltage and current that can be used immediately or which can be stored in batteries for later use.

What is a blocking diode?

A blocking diode connects to the cable and prevents the solar panel from discharging the battery in the absence of sunlight. SolarMate is equipped with a built-in blocking diode to stop this from taking place.

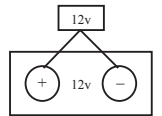
What is PV

PV is short for photovoltaics (photo = light, voltaics = electricity). PV is a semiconductor-based technology used to convert light energy into direct current (dc) electricity, using no moving parts, consuming no conventional fuels and creating no pollution.

SolarMate 8 Watt Installation Instructions

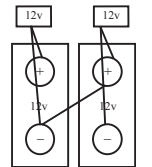
Single 12 volt battery

Install 1 x SolarMate making sure the Positive (red) wire of solarMate is attached to the Positive terminal of the battery and the Negative (black) wire is attached to the Negative terminal of the battery.



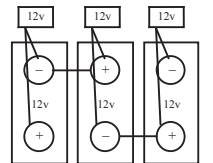
Two 12 volt batteries in series = 24 volt

Install 2 x SolarMates, one per 12v battery as per instructions above.



Three 12 volt batteries in series = 36 volt

Install 3 x SolarMates, one per 12v battery as per instructions outlined above.



Four 12 volt batteries in series = 48 volt

Install 4 x SolarMates, one per 12v battery as per instructions outlined above.

