

Congratulations! You have made an excellent choice of this quality product. Our commitment to quality also includes our service. Should you, contrary to expectations, experience defects due to manufacturing faults, RVSS will provide you with a warranty against defects as follows.

Warranty

The workmanship warranty (wiring and accessories) and solar controller warranty is 1 year from the date of purchase. Solar cells are guaranteed to generate power for more than 20 years at 80% of rated output. The warranty does not cover a fuse.

Proof of Purchase – this warranty is valid for the original purchase and is not transferrable. Please keep your purchase docket, tax invoice or receipt as the best proof of purchase, and as proof of date on which the purchase was made.

Extent of Warranty – this warranty is limited to defects in workmanship or parts. All defective products or parts will be repaired or replaced. This warranty does not cover batteries or any other consumable items.

Normal Wear & Tear – this warranty does not cover normal wear and tear to the products or parts.

Exclusions – this warranty does not cover:

- Any defects caused by an accident, misuse, abuse, improper installation or operation, lack of reasonable care, unauthorized modification, loss of parts, tampering or attempted repair by a person not authorized by the distributor.
- Any product that has not been installed, operated or maintained in accordance with the manufacturers operating instructions provided with this product.
- Any product that has been used for purposes other than domestic use
- Any damage caused by hail, improper power input or improper cable connection.

To Make a Claim – this warranty against defects is provided by RV Solar Supplies, 4/57 Neumann Rd, Capalaba, Queensland 4157. Phone (07) 3390 3700. If a defect in the goods appears within 12 months, you are entitled to claim a warranty. Please contact or send all warranty claims to RV Solar Supplies.



Warranty Certificate

Product Name **120W Folding Solar Panel**

Brand Name **RV Solar Supplies**

Model **120WP3**

Date of Purchase _____

Purchased from _____

Name _____

Address _____

We recommend that you attach a photocopy of your receipt showing the date of purchase to this warranty certificate and keep for your reference. In the events of a fault please call RVSS on (07) 3390 3700.

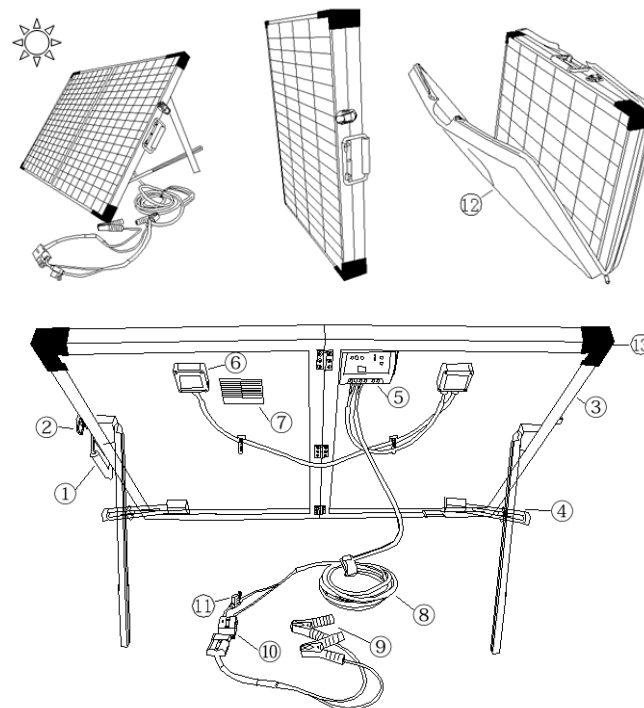


RV Solar Supplies
POWERING FREEDOM

120W (2 x 60W) 12V

FOLDING SOLAR CHARGING KIT

USER MANUAL



- | | | |
|----------------------------|--------------------|---------------------|
| 1. Handle | 6. Junction box | 11. Fuse |
| 2. Latches | 7. Label | 12. Protective case |
| 3. Aluminium frame | 8. Cable | |
| 4. Aluminium stand | 9. Alligator clips | |
| 5. Solar charge controller | 10. Anderson plugs | |

Installation

1. Unzip the protective case and remove the folded solar panel. Unclip the two latches on the side of the unit and unfold the two panels outward. Extend the support legs and lock in place using the wing nut. Pull the controller swivel bracket from the back of the panel (it is connected by Velcro) and allow it to move freely (this keep heat away from the back of the panel).
2. Fully extend battery leads and connect the battery clips to the + positive (red) & - negative (black) battery terminals on a 12v battery. Ensure that the connections are secure.

Note: The kit should be connected to a battery generating at least 6V to start the solar controller. If your 12V battery is fully discharged, charge it for a short period of time by other means to reach 6V.

3. When you connect the kit to the battery, the LCD display on the solar controller will turn on automatically.
4. To select the battery type: Press the menu button and scroll through using the Up and Down buttons to sub menu 5. Rated Value. Keep pressing the Enter button to scroll down to 'Type'. Use the Up and Down button to change the battery type **seal, gel, flooded** (note if it asks for a password keeping pressing Enter). Once you have selected battery type, press Enter again. It will prompt you to SAVE the parameters. Press Enter again to save. The Menu button will take you back to the main menu. To receive more detailed instructions on how to select battery type email us at info@rvsolarsupplies.com.
5. Find a clear sunlit area free from over hanging branches, obstructions or shading.
6. Place the solar kit into that area facing the sun (the top left LED on the controller should be green).

Tips:

- Refer to the included solar controller manual for details about the use of the controller.
- To maximise the output, move the kit regularly to track the suns position throughout the day.
- At the main menu use the Up and Down buttons to scroll through the different screens. The "PV" screen indicates the panels output (volts/amps), the "BATT" screen indicates the battery's status.
- The controller can be bypassed (taken out of circuit) using the Anderson plugs provided IF the RV has its own voltage regulator built in. Refer to **Caution** label on the panel. Putting unregulated solar power (~18V) directly into a 12V lead acid battery will overcharge it leading to gassing and eventual destruction.

FREQUENTLY ASKED QUESTIONS

Q. What type of batteries can be used with this kit?

A. Any sealed lead acid, gel or flooded 12V battery (typically used in caravans, motorhomes, boats etc.)

Q. Can this kit charge a 24V battery?

A. No, this kit is designed to charge a 12V battery. Technically it's possible to change solar panel connections to enable the kit to work in 24V mode but this should only be done by an appropriately qualified person

Note: unauthorised modification to 24V will void the warranty.

Q. Can the kit charge two or more 12V batteries connected in parallel ("+" to "+", "-" to "-")?

A. Yes, it's possible if the batteries have the same type and capacity and are always used together wired in parallel as a single 12V battery bank.

Q. Is there any risk that the solar kit will over charge my battery?

A. One of the functions of the solar charge controller is to ensure that your battery is not over charged.

Q. Can I extend the battery leads?

A. Yes, it's possible – please choose the same size of cable for extension and no more than 5 meters.

Q. Do I need to clean the solar panels?

A. Yes, it is recommended for better performance. Dust & dirt should firstly be swept off the panel surface using a soft brush and then use a wet cloth to wipe the panel surface to remove remaining dirt & grime.

Q. Can rain damage the solar kit?

A. The solar panels are fully waterproof (IP66 class), but the controller is not. We recommend protecting the kit from rain whenever possible, because regular contact with water might lead to rust on some of the fittings.

Troubleshooting

- Check all connections to ensure they are secure and clean
- Check polarity of the battery connection and make sure the battery generates at least 6V
- Ensure the solar panels are exposed to sufficient light – ideally position them to face the sun directly
- For more information refer to the Troubleshooting section of the solar controller manual (skip anything which relates to load work in the controller manual as the load terminals of the controller are not used)

Security

Leaving the solar panel unattended may result in theft. Consider attaching a padlocked chain to the panel frame and securing the other end to a permanent structure for security.

Specifications

Model	Cells type	Folded size	Net weight	Specifications				
				Max. power	Max. power voltage	Max. power current	Open circuit voltage	short circuit current
		mm	Kg	W	V	A	V	A
120WP3	mono	505*770*60	16	120	17.5	6.86	21.6	7.40

Specifications under standard test conditions (STC): 1000W/m², AM 1.5, 25 °C. Specifications are stated for the solar panels only without the effect of the charge controller.