

30-WATT FOLDABLE SOLAR PANELS

Model SJ1440SP-RM

THANKS FOR YOUR PURCHASE OF A REMANUFACTURED PRODUCT.

To make sure you get the most out of your product, be sure to register online at

sunjoe.com

to enjoy full product support.

PASTE UPC LABEL HERE

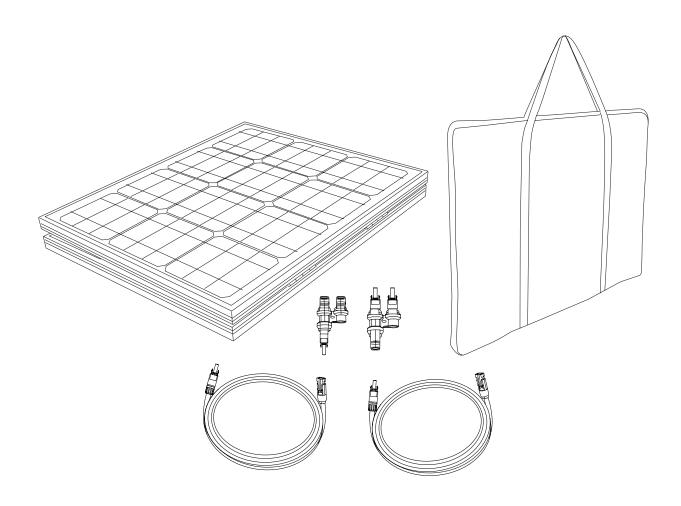
If you have any questions or comments, please call the Snow Joe® + Sun Joe® customer service department at:

1-866-SNOWJOE (1-866-766-9563)



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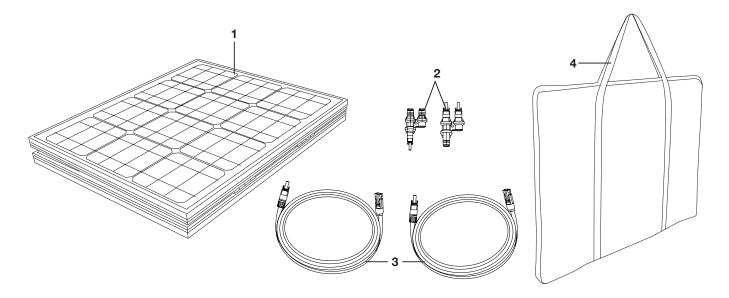


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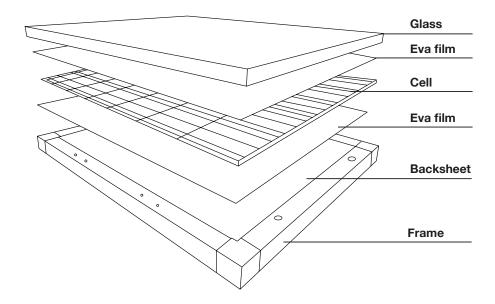
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Know Your Foldable Solar Panels

- 1. Foldable solar panels
- 2. Branch connector (2)
- 3. Solar connector cables (2)
- 4. Carry bag



Components



IMPORTANT!

Safety Instructions

All Operators Must Read These Instructions Before Use

CAUTION! The solar panels are tested and approved to be used with the Sun Joe® SJ1440SG portable generator. Do not use the solar panels with any other appliance.

WARNING! When using the solar panels with the generator, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury. These include:

- Do not use the solar panels with any other products that haven't been approved by Snow Joe® + Sun Joe®.
- Do not attempt to disassemble, service, or repair the solar panels.
- If the solar panels require service or maintenance, please call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

Technical Data

Electrical Properties

Max Power (P _m) 60 W (2 x 30 W)
Max Power Voltage (V _{mp}) 18.6 V
Max Power Current (I _{mp})
Open Circuit Voltage (V _{oc})
Short Circuit Current (I _{sc})
Module Efficiency16.9%
Cell Efficiency
Operating Temperature40°F – 185°F (-40°C – 85°C)
Maximum System Voltage (V) 600 V
Maximum Series Fuse Rating 10 A
Power Tolerance (%)0 + 5%

Mechanical Properties

Cells	2 x 36
Cell Type	Polycrystalline
Cell Dimensions	6 in. x 1.2 in. (156 mm x 31.2 mm)
# of Busbar	4BB
Connector Type	MC4 Compatible
Junction Box	IP-65
Glass	High transmission tempered glass
Frame	Anodized aluminum

Solar Panel Cables Length32 in.	(81.3 cm)
Solar Connector Cables Length 25 ft (7	7.6 m)
Solar Panel Dimensions (Folded) 20.2 ir (51.3 c	n. x 17.7 in. x 2.2 in. cm x 45 cm x 5.6 cm)
Solar Panel Dimensions (Open) 35.4 ir (90 cm	n. x 20 in. x 0.98 in. n x 51 cm x 2.5 cm)
Weight12.5 lb	os (5.7 kg)
Temperature Coefficient	
Temperature Coefficient NOCT	118.4°F ± 35.6°F
•	
NOCT	(48°C ± 2°C)
NOCT(Nominal Operating Cell Temperature)	(48°C ± 2°C) 0.42 ± 0.02%/°C
NOCT(Nominal Operating Cell Temperature) Power Temp Coefficient (Pmpp)	(48°C ± 2°C) 0.42 ± 0.02%/°C
NOCT(Nominal Operating Cell Temperature) Power Temp Coefficient (Pmpp) Temp Coefficient Open Circuit Voltage (Voc	(48°C ± 2°C) 0.42 ± 0.02%/°C) 0.34 ± 0.03%/°C

Unpacking

Carton Contents

- · Foldable solar panels
- · Solar panel cables (pre-assembled) (2)
- · Solar connector cables (2)
- · Branch connector (2)
- · Carry bag
- · Manuals with registration card
- Carefully remove the solar panels and check to see that all of the above items are supplied.
- Inspect the product carefully to make sure no breakage or damage occurred during shipping. If you find damaged or missing parts, DO NOT return the unit to the store. Please call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

NOTE: Do not discard the shipping carton and packaging material until you are ready to use your new foldable solar panels. The packaging is made of recyclable materials. Properly dispose of these materials in accordance with local regulations.

IMPORTANT! The equipment and packaging material are not toys. Do not let children play with plastic bags, foils, or small parts. These items can be swallowed and pose a suffocation risk!

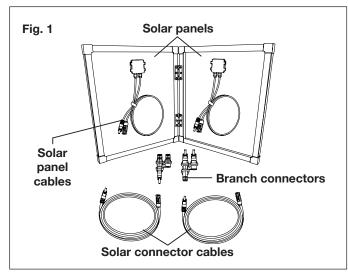
Operation

Charging with Sun Joe® Portable Generator (Sold Separately)

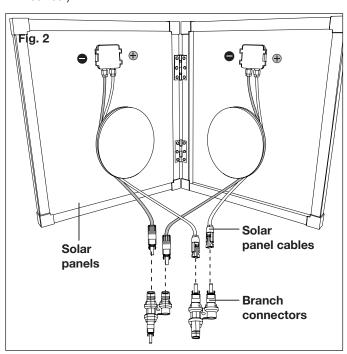
The Sun Joe® portable generator is equipped with a solar charging input and can be charged by 12 V DC solar panels rated to produce a maximum of 20 A current, such as Sun Joe® Foldable Solar Panels (SJ1440SP-RM).

To charge the generator by using Sun Joe® foldable solar panels, follow these steps:

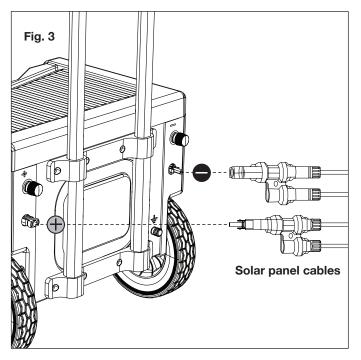
1. Unfold the solar panels (Fig. 1). There are 2 x 25 ft (2 x 7.6 m) solar connector cables inside the package (Fig. 1).



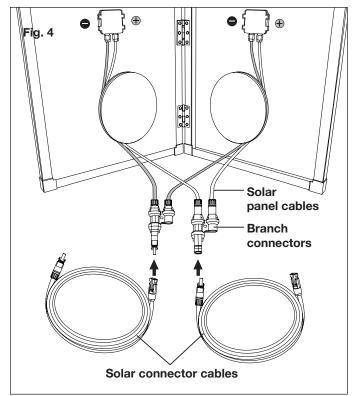
2. Plug the branch connectors into the solar panel cables (Fig. 2). (One-way connectors ensure the polarity is correct).

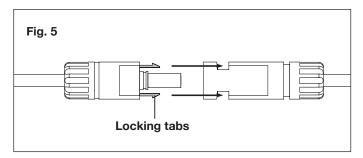


3. Connect the solar panel cables to the solar charging inputs (Fig. 3).

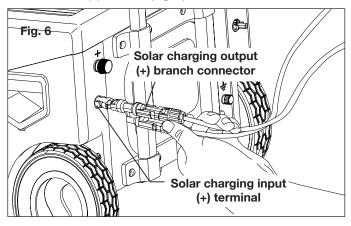


- **4.** Use 2 x 25 ft (2 x 7.6 m) solar connector cables if necessary.
- **5.** Align the branch connectors with solar connector cables, insert male end and press firmly until the locking tabs 'click' together securely (Figs. 4 & 5).

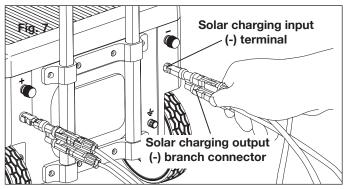




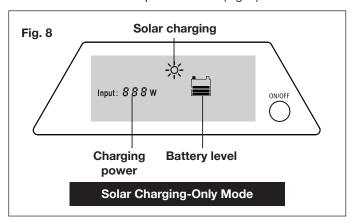
6. Plug the other end of the solar charging output of the solar panels. Positive branch connector to solar charging input POSITIVE (+) terminal (Fig. 6).



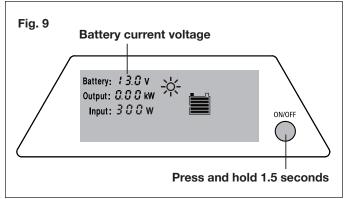
7. Plug the negative branch connector to solar charging input NEGATIVE (-) terminal (Fig. 7).



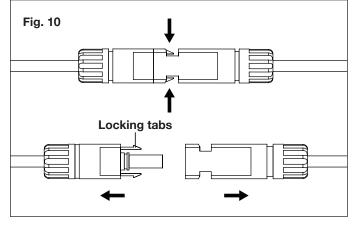
8. While the system is charging, the solar charging indicator will be illuminated, the backlight will be illuminated for 5 seconds and the beeper will sound (Fig. 8).



- **9.** While in charging-only mode, no output loads/devices are connected, only input power, battery level and solar charging indicators will be displayed (Fig. 8).
- 10. To read the battery current voltage, turn the unit on. Push and hold the ON/OFF button for approximately 1.5 seconds and release the button when the unit beeps (Fig. 9).



- 11. With direct sunlight, a typical 60 W solar panel may take up to 60 hours to fully recharge the generator depending on the intensity of the sunlight on the solar panel.
- **12.** The battery indicator will display the battery level during the charging stage.
- **13.** To turn the unit off, press and hold the ON/OFF power button for approximately 1.5 seconds, release when the unit beeps. LCD display indicators will turn back to charging-only mode.
- **14.** To disconnect solar panels, depress locking tabs while pulling connectors apart (Fig. 10).

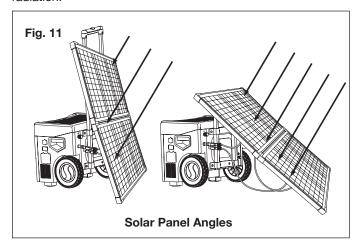


Solar Panel Angle (Fig. 11)

Solar panels must be pointed at the sun for maximum power and it is best to move the panel from time to time during the day to track the sun.

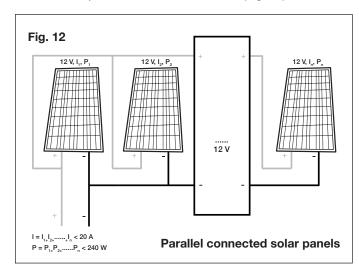
To get the most from solar panels, you need to point them in the direction that captures the most sun

The energy from direct radiation collected by a solar panel decreases with increasing angle of incidence, as indicated by the width of the shaded areas. A panel tilted 90 degrees from the direction of the sunlight cannot collect any of the direct radiation.



Adding More Sun Joe® Foldable Solar Panels (Optional - Sold Separately)

Connecting solar panels in parallel up to 240 W for a 12 V DC system is recommended to shorten the charging time. The maximum output current is limited to 20 A (Fig. 12).



NOTE: Solar input exceeding 20 A will trip the generator's solar charging fuse.

Care + Maintenance

Make certain that the solar panels are kept clean and stored properly. DO NOT expose the unit to extreme conditions, excessive dust, dirt, moisture or corrosive vapors.

CAUTION! DO NOT use a garden hose to clean the solar panels.

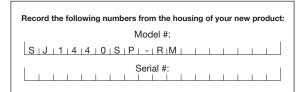
- Always check to ensure that the product is clean and in good working condition with no visible defects or damage.
- Dirt and dust on the surface of the panel can reduce the power output. The surface of the panel can be cleaned with a damp cloth.
- Make sure that all solar panel cables and connector cables are undamaged and in good working order.
- Make sure all connectors are clean and free of dust, debris and/or rust.
- Ensure that the environment where the solar panels are going to be placed has adequate ventilation.
- Take care not to drop the panels or submit them to large impacts.
- Batteries can produce flammable gasses when being charged. Avoid making sparks and make sure that the area around the battery is well ventilated.

Service + Support

- Solar panel service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel may result in a risk of injury.
- When servicing solar panels, use only identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of shock or injury.
- If your Sun Joe® foldable solar panels require service or maintenance, please call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

Model + Serial Numbers

When contacting the company or reordering parts, you will need to provide the model and serial numbers of your product. These are found on the decal affixed to the housing of your solar panels. Copy these numbers into the space provided below.



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SNOW JOE® + SUN JOE® REFURBISHED GOODS WARRANTY

GENERAL CONDITIONS:

Snow Joe® + Sun Joe® operating under Snow Joe®, LLC warrants this refurbished product to the original purchaser for 90 days against defects in material or workmanship when used for normal residential purposes. If a replacement part or product is needed, it will be sent free of charge to the original purchaser except as noted below.

The duration of this warranty applies only if the product is put to personal use around the household. It is the owner's responsibility to correctly perform all maintenance and minor adjustments explained in the owner's manual.

HOW TO OBTAIN YOUR REPLACEMENT PART OR PRODUCT:

To obtain a replacement part or product, please visit snowjoe.com/help or email us at help@snowjoe.com for instructions. Please be sure to register your unit beforehand to speed up this process. Certain products may require a serial number, typically found on the decal affixed to the housing or guard of your product. All products require a valid proof of purchase.

EXCLUSIONS:

- Wearing parts like belts, augers, chains and tines are not covered under this warranty. Wearing parts can be purchased at snowjoe.com or by calling 1-866-SNOWJOE (1-866-766-9563).
- Batteries are covered in full for 90-days from the date of purchase.

Snow Joe® + Sun Joe® may from time to time change the design of its products. Nothing contained in this warranty shall be construed as obligating Snow Joe® + Sun Joe® to incorporate such design changes into previously manufactured products, nor shall such changes be construed as an admission that previous designs were defective.

This warranty is intended to cover product defects only. Snow Joe®, LLC is not liable for indirect, incidental or consequential damages in connection with the use or misuse of the Snow Joe® + Sun Joe® products covered by this warranty. This warranty does not cover any cost or expense incurred by the purchaser in providing substitute equipment or service during reasonable periods of malfunction or non-use of this product while waiting for a replacement part or unit under this warranty. Some states do not allow exclusions of incidental or consequential damages so the above exclusions may not apply in all states. This warranty may give you specific legal rights in your state.

HOW TO REACH US:

We're here to help Monday through Friday from 9AM to 7PM EST and Saturday and Sunday 9AM to 4PM. You can reach us at 1-866-SNOWJOE (1 866-766-9563), online at snowjoe/com, via email at help@snowjoe.com or tweet us @snowjoe.

EXPORTS:

Customers who have purchased Snow Joe® + Sun Joe® products exported from the United States and Canada should contact their Snow Joe® + Sun Joe® distributor (dealer) to obtain information applicable to your country, province or state. If for any reason, you are not satisfied with the distributor's service, or if you have difficulty obtaining warranty information, contact your Snow Joe® + Sun Joe® seller. If in the event your efforts are unsatisfactory, please reach out to us directly.

