solarpod™ 240

by Sunbird Solar

Sunbird Solar Ltd.
A Sunbird Group Corporation

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Solarpod 240 is a remarkably light 4.5kg/9lb. portable power center with a full 240-watt hours of rechargeable power to bring portable energy to your home, office, or job site. Whether as a backup power supply for areas experiencing power outages due to natural disaster or as a mobile generator for a campsite, the Solarpod 240 powers your world.

Charge it from available electricity or operate self-sufficiently using one of the Solarpod range. No set-up is required, just plug in and go. Includes a 12V DC car charger, an AC charger and a cable to connect directly to a solar panel. The internal LiFePo4 battery and energy management system is the most advanced on the market with a long life cycle and reliable performance.

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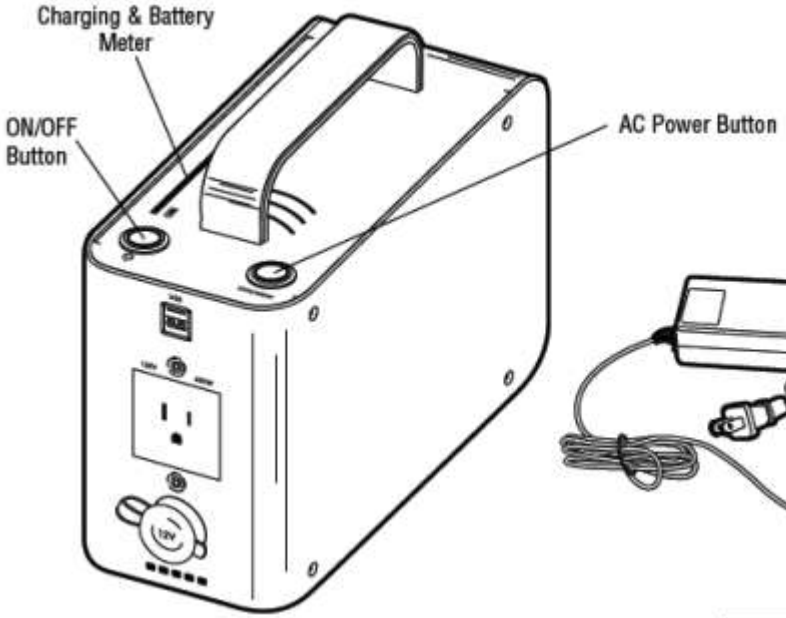
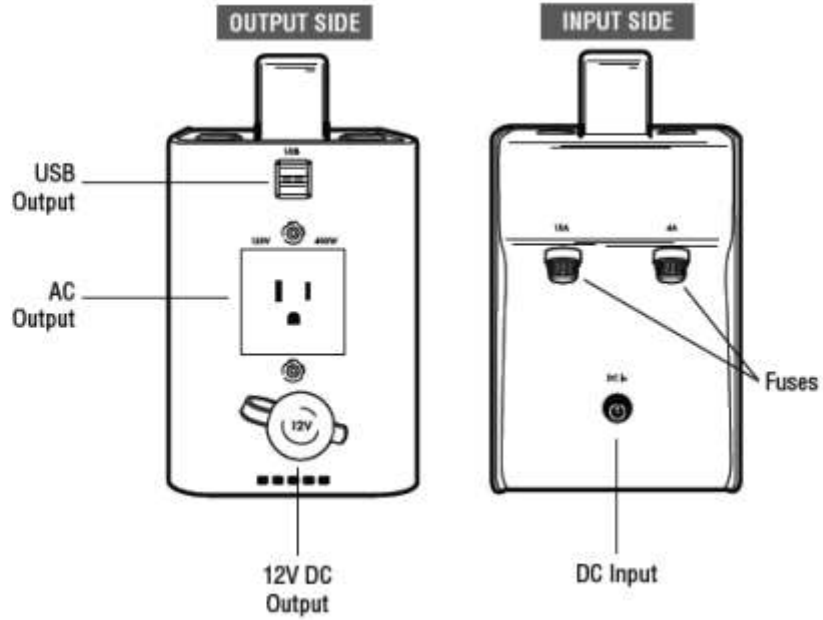
Parts Identification





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Charging

For maximum efficiency charge after each use or every 2 months if it is being stored. Failure to properly charge as listed below could damage the unit and affect performance. CAUTION: ONLY USE CHARGERS PROVIDED WITH THE SOLARPOD 240 OR DAMAGE MAY OCCUR.

Solar Charging (*recommended #9580 80-Watt Solar Collector*)

1. The Solarpod 240 has built-in battery protection and does not require a solar charge controller.
2. Place the Solarpod 240 and Solar Collector in direct sun.
3. Connect the SOLAR CHARGING CABLE (included) male pin tip to the DC INPUT on the Solarpod 240. Connect the MC4 (+) and (-) tips to the solar collector.
4. Adjust the Solar Panel so that it is directly facing the sun. Charging will begin immediately and the orange Charging Meter indicators will illuminate.
5. To ensure full battery charge, continue charging for 1 additional hour.
6. Disconnect when charging is complete.

AC Wall Charging (*adapter included*)

The Solarpod 240 utilises a modified sine wave inverter. Refer to information below.

1. Connect the male pin tip of the AC Charger into the DC IN port of the Solarpod 240 and then plug the other end into an electrical outlet.
2. The charging indicator on the AC Charger will illuminate red when charging is in process and green when the Solarpod 240 has reached a full charge.
3. The Charging Meter indicators will also illuminate.
4. To ensure full battery charge, continue charging for 1 additional hour.
5. Disconnect when charging is complete.

12V DC Vehicle Charging (*adapter included*)

CAUTION: The vehicle engine must be operating to maintain the proper vehicle battery level required to charge the Solarpod 240. Vehicle battery discharge or slow charging to the Solarpod 240 could occur.

1. Connect the male pin tip of the 12V DC Charger into the DC IN port of the Solarpod 240 and then plug the other end into a vehicle power outlet.
2. The charging indicator on the 12V DC Charger will illuminate red when charging is in process and change to green when charging is complete.
3. The Charging Meter indicators will also illuminate.
4. To ensure full battery charge, continue charging for 1 additional hour.
5. Disconnect when charging is complete.

Operating Instructions

Once charged, the Solarpod 240 is ready to use right out of the box. No set up is required. All outputs may be used simultaneously. Check your device's specifications to make sure they are compatible with the Solarpod 240.

AC Power Button - When on, the surrounding LED lights will turn red.

ON/OFF Button - When on, the surrounding LED lights will turn green.

USB Operation

⇒ Turn the ON/OFF BUTTON on

⇒ Plug in your device's USB power or charging cable

⇒ A combined 5V/2A maximum output is available between the two ports

⇒ Disconnect and power off when not in use

AC Operation (max 400W output)

⇒ Press the AC POWER BUTTON to activate the inverter

⇒ Plug in your device's power or charging cable into the electrical socket

⇒ Disconnect and power off when not in use

12V DC Operation (max 15A output)

⇒ Plug in your 12V device's power or charging cable into the 12V Vehicle Socket

⇒ Neither POWER BUTTON need to be on

⇒ Disconnect and power off when not in use

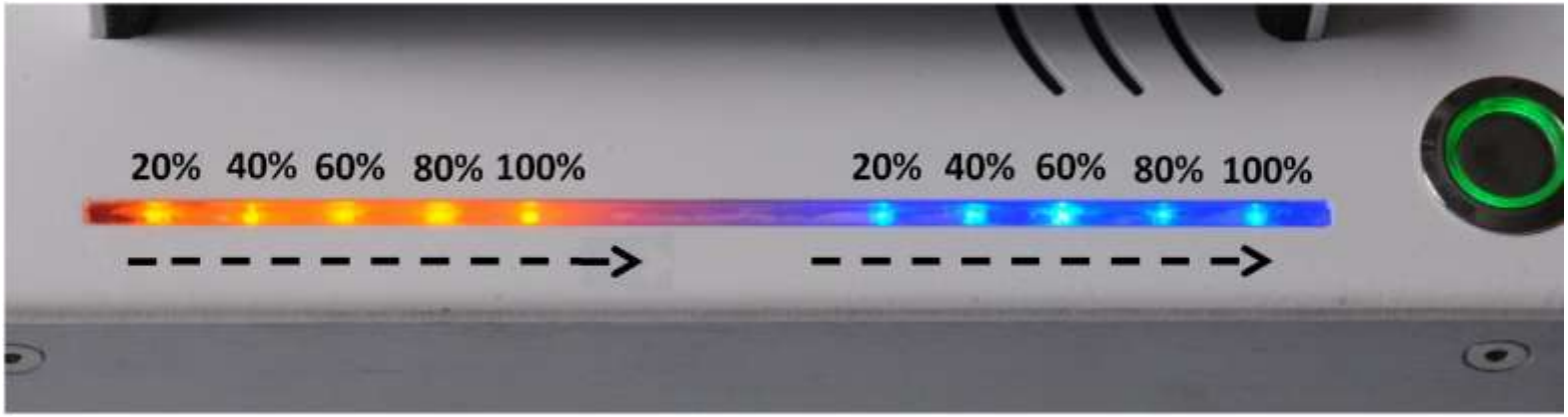
Using Solarpod 240 : LED Light Indicators

Charging Meter - Indicates Charging Rate

1. Five orange LEDs represent the charging rate when using any of the methods of charging below.
2. Each LED equals approximately 20% charge rate. This will help you to position a solar panel in the best angle to the sun. If the Solarpod 240 is plugged into a 120/240V or 12V power source using the supplied chargers, all 5 LEDs should be illuminated.

Battery Meter - Indicates Battery Capacity Level

1. Five blue LEDs represents the current battery capacity.
2. Each LED represents approximately 20% full.



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Specifications

Battery Type

LiFePo4 (lithium iron phosphate) 20Ah - 14, 6V

Battery Lifespan

2000+ cycles (cycle = charge and discharge)

Protection Circuit

Built-in over voltage, self discharge, and short circuit protection

Fuses (replaceable)

2A (240V) or 4A fuse (120V) and 15A fuse (12V DC outlet)

DC Input Power

14.6V/4A, 10A max

AC Wall Charger

Input: 100-240V AC, 50/60hz

Output: 14.6V-15V DC, 4A

C-UL, FCC approved

12V DC Vehicle Charger

Input: 12-30V DC (regulated)

Output: 14.6V DC, 2A

Rated Output Power (watt-hours)

AC 120/240V, 50/60hz, 400 watts max modified sine wave inverter, 210 watt-hours

12V DC - 15A, 240 watt-hours

USB 2.0 (5V-2A) - 2 ports, 240 watt-hours

Operating Temperature

32ºF TO 113ºF (0ºC TO 45ºC)

Dimensions

9.84” x 4.33” x 7.68” (250 x 110 x 195mm)

Weight

9 lbs. (4.5kg)

Certification

CE, FCC, meets EU low voltage 2006/95/ED and EMC 2004/108/EC

Charging Time

Using 60-Watt foldable solar panel :
5-6 hours

Using AC wall charger:
5 hours

Using 12V DC car charger :
7-8 hours

Operating Time

Max Burton® Digital Stove To Go® :
2 hours

Standard TV :
8 hours

Small power tools :
6 hours

Laptop (65-90 watts) :
3-4 hours

Recharge a cell phone :
20 times

Recharge a tablet computer :
10 times

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Troubleshooting

If your Solarpod 240 fails to operate as specified, follow these troubleshooting steps to correct the issue. If you still experience issues, please contact your local distributor.

Charging Issue

⇒ Ensure all cords are connected securely.

⇒ Check power indicators on chargers and the Solarpod 240 to make sure they are operating.

⇒ If using a solar collector to charge, ensure it is correctly positioned in direct sunlight.

⇒ If using the 12V DC charger make sure the vehicle it is connected to is operating.

⇒ Check that the fuses on the Solarpod 240 have not blown.

12V DC Output Fails

⇒ Check the Battery Meter to see if the Solarpod 240 has sufficient battery charge available. If not, follow the charging steps previously described.

⇒ Check to make sure that the 12V DC circuit protection fuse is not blown by removing the 15A FUSE housing. Inspect the fuse and replace if needed with the same size fuse.

⇒ Check the 12V DC Out socket for obstructions or other visible damage.

⇒ Verify the device being charged is not damaged.

AC Output Fails

⇒ Check the Battery Meter to see if the Solarpod 240 has sufficient battery charge available. If not, follow the charging steps previously described.

⇒ Ensure the AC POWER BUTTON has been activated and the red light is on.

⇒ Check to make sure that the AC circuit protection fuse is not blown by removing the 2A/4A FUSE housing. Inspect the fuse and replace if needed with the same size fuse.

⇒ Check the AC Out socket for obstructions or other visible damage.

⇒ Verify the device being charged is not damaged.

USB Output Fails

⇒ Check the Battery Meter to see if the Solarpod 240 has sufficient battery charge available. If not, follow the charging steps previously described.

⇒ Ensure the ON/OFF BUTTON is on and the green light is on.

⇒ Check the USB port for obstructions or other visible damage.

⇒ Verify the device being charged is not damaged.

Important Warnings & Safeguards

Read all instructions thoroughly before operating this unit to avoid injury to self or property and avoid damage to the unit. Keep instructions handy for reference during use.

ENERGIZED EQUIPMENT - ELECTRICAL SHOCK & EXPLOSION HAZARDS

⇒ Do Not submerge in liquid or operate in wet environments. Device is not waterproof or water resistant. Operate in dry environments only.

⇒ Do Not operate in flammable or explosive environments.

⇒ Do Not operate if the unit is damaged in any way including loose electronics or if charging cords are frayed and wires are exposed.

⇒ Do Not place foreign objects inside of the power outlets.

⇒ Do Not disassemble. There are no user serviceable parts. Contact the manufacturer for all repairs.

⇒ **Do Not use to operate any medical life support equipment.**

⇒ **Consult your physician before using with CPAP devices or other non-life support medical equipment.**

⇒ Administer close supervision when operating around children or persons with disabilities.

⇒ Do Not use any devices over 400W for risk of damage to the inverter.

⇒ Do Not block the air inlets.

Recommended Operating Temperature

Not recommended for use or storage below 14º (-10ºC) or above 120ºF (49ºC). If using above 120ºF, place out of direct sunlight to prevent overheating.

Care and Maintenance

Dust regularly with a clean dry cloth to prevent dust and dirt from building up on the vents and power inputs/outputs.

⇒ Store in a clean, dry place when not in use.

⇒ Recommended to charge after each use (or every 30-60 days) for better long life efficiency.

FCC Requirements

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of more of the following measures:

⇒ Reorient or relocate the receiving antenna.

⇒ Increase the separation between the equipment and receiver.

⇒ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

⇒ Consult the dealer or an experienced radio/TV technician for help.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Warranty

Solarpod 240 comes with a 1 year warranty (full replacement).

Solarpod 240 is only serviceable by an authorized repair facility. Do not dismantle. Warranty is void if the device is opened by unauthorized personnel.

For support and return, you must contact the place of acquisition with a copy of your receipt or any bona fide proof of payment during the warranty period.

Disclaimer for Modified Sine Wave Inverter used in Solarpod 240

Modified Sine Wave Inverter Information

Modified side wave inverters are the most common type on the market and work well for most uses. It is designed for use with small electronic equipment up to the power limits stated - 400W. Due to the nature of the electrical output from this inverter, some devices using variable speed controllers and solid-state power will require the use of a Pure Sine Wave inverter (found in the Solarpod Pro 1000). You may notice additional noise from audio equipment or devices with electric motors.

Unsuitable Device

Use of any of the following items with Solarpod 240 is at the user's own risk and Thousand Suns does not accept any responsibility for damage or injury re-sulting from use.

- Fluorescent lights with electronic ballasts
- Power tools with solid state power or variable speed control
- Digital clocks with radios
- Sewing machines with speed/microprocessor control
- X-10 home automation systems
- Medical equipment such as oxygen concentrators

Estimate Your Needs

To estimate how many hours of power are in the Solarpod 240, find the watt hour draw of the device that you wish to power and divide into 210W (120/240V AC) or 240W (USB & 12V DC). (EX: One 10-watt light = 21 hours of continuous light)

For more information about our products please visit our website at www.thousandsuns.com or contact your local distributor

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