AP-SS-003 Portable Power System User Guide

AP-SS-003

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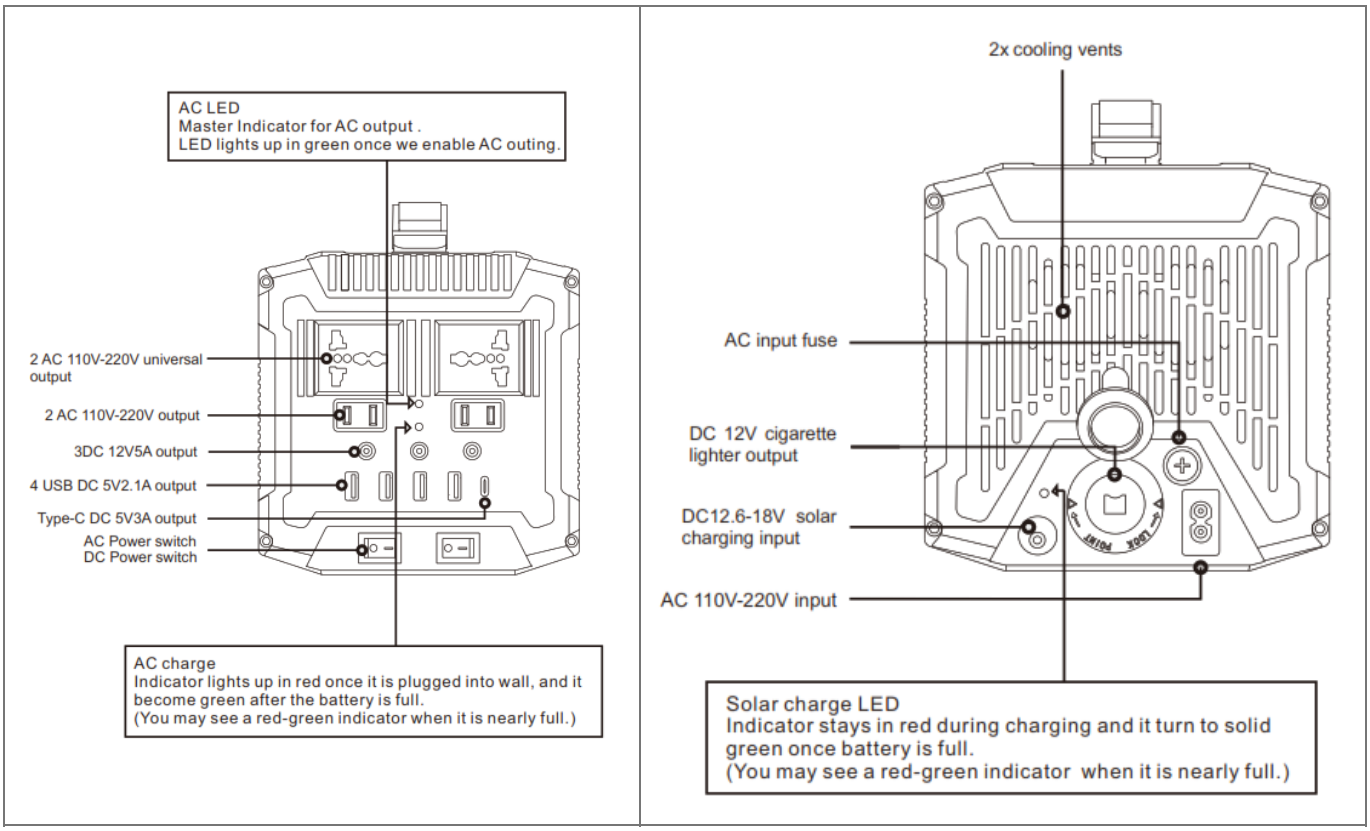
Welcome to the solar life:

Thank you for purchasing our multi-functional portable solar generator. In case of a power outage or you need to charge on travel, you can temporarily charge your electrical or digital devices with this unit, whether you are climbing a mountain, living in your van while you travel the world or camping in your backyard, we will keep you powered. (Please check the manual fully before any operation and keep it for future reference.)
Notice: Voltage and frequency are different according to different countries 11060Hz/220V50Hz), to avoid any unwanted damage, please do check your local
voltage and frequency to ensure compatibility.

Precautions before operations:

1. Do ensure the power level of this generator is not too low before taking it outdoors. It is capable of charging and discharging at the same time, but solar charging result affects a lot by bad weather.
2. Batteries'cycle life extends a lot with proper maintenance and usage environment.
   Batteries inside are Lithium-ion ones that cycle much longer time than normal SLA or AGM batteries.
   But all rechargeable batteries exhibit a self-discharge characteristic that varies by usage /storage temperature, state of health, etc. (Most important note: use at room temperature: 0 ~ +40(℃)/32~104(℉) , do avoid outdoor storage or damp environments)
3. Be sure your device's rated output power ≤ 350W, initial wattage < 500 wattages.
   In some cases, the initial starting wattage of some AC appliances is 3 times higher than its rated running wattage.
4. Unit might get warmer during charging/discharging which is normal, please use it in a cool and well-ventilated place.
5. Voltage and frequency from AC source might be different from country to country(US/JP 110V 60Hz or EU/UK 220V 50Hz). Make sure you've chosen the correct voltage and frequency accordingly.

 To better preserve its lifespan, it is suggested to recharge this unit at least once every 6 months, best to charge it every 3 months.



Product specification parameters:

Capacity	78000 mAh(288Wh)
Built-in Battery	Li-polymer batteries life cycle≧ 500 times
Working temperature	-5℃~45℃
INPUT	AC input: US-110V 60Hz/EU-220V50Hz Solar input: 12.6-18V3A 50-150W (connector size 5.5×2.1mm)
OUTPUT	Rated power:350W Surged Power: 500W AC output:US-110V 60Hz/EU-220V50Hz DC output 12V-12A 4xUSB output 5V2.1A Type-C output 5V3A Cigarette lighter output: 12V15A
Pure Sine Wave output	There is a built-in pure-sine wave invert inside, which means it generates an output that is exactly the same as plugging with an AC wall plug in your house. The Pure-sine wave invert allows the unit to safely power almost everything under 350 watts in your house that you would normally plug into the wall. **Note:** This product is only used for emergencies, it can not replace the normal alternating current for long-term use.
Multiple protection	The indicator lights up in red if over-load, It stops AC outputting, please disconnect and replace it with a lower load, then restart it. If short-circuit happens, It stops AC outputting, please disconnect the load then restart it.

Two ways to recharge the unit itself.

Inputs	1 AC adapter(AC charging cable include)
	2 Solar input (Input connector: DC5521) user should purchase extra solar charger for pairing, no stan dard charging cable included.

Note: Every time before operation or storing, it is recommended to have this unit fully recharged. There are 2 charging ways totally, but we only can choose one charging way at a time.
Charging from Wall: Please do use the included AC wall charger charges this unit, it takes approximately 6-8 hours to fully recharge.
(Do use the included AC wall adapter as any extra one might shorter its service life.)
Charging from Solar: Charging from ALLPOWERS's foldable solar charger or any other regular PV modules. Up to 48 watts maximum input per hour, Charging time takes approximately 6-8 hours under STC conditions.
Most common variables that affect the performance of solar charging: Ideal time of day: Panels operate at peak efficiency when the sun is most direct-typically around mid-day.
Sunlight and proper alignment: The brighter the sun is shining, the clearer the day, the better the panels will work.
A south-facing panel angle at 30-60 degrees from flat will harvest the most possible sun energy.
Avoid any possible shelter: make sure your panels are free of shading —- even minor partial shading reduces yields. What is more, dirt accumulated might overtime decrease wattage, a periodically cleaning on the panel is recommended. Time of year: the number of daylight changes from season to season. For temporary solar charging, it is important to know that cold weather should not negatively affect the panel's performance as they run on light, not heat.

Charge for AC/DC/USB-Powered appliances:

1. AC outputs: ensure the AC output button is pressed, LED light bar will display the remaining power level. When your device is full, please disconnect it to minimize power loss and if you want to use the output again, please wait at least 5 seconds to restart the unit.
2. DC outputs, charging for 12V devices such as lights, min fans, press the button to activate the DC output ports. Three 5.5 mm 12V DC ports are female and plug and play. **Note:** Please do ensure your male connector is compatible with 5.5 mm 12V DC ports. Otherwise, you may need to consult to your devices' manufacturer or retailer for the corresponding adapters.
3. Power your 5V devices by USB ports or Type-C ports.
4. 12V Car Socket: Car On-board Fridges, 12V appliances, etc. This socket is always live, no master button is needed.

Warm tips:

1. Remember to turn off the AC/DC outputs button after use.
2. Please charge it to full power state if not in use for a long time.
3. Different loads require different power, you may notice that: If you plug in devices that drain a high power(a refrigerator), the charging level of this unit can drop very quickly and you may not get exactly 288Wh energy. On the flip side, if you're recharging devices that draw power more slowly(a small TV), you will get closer to 288W from this unit. Below is some common devices and their watt-hour requirements for your reference:

Device name	Backup Time(only for reference)
USB for iPhone 8	about 45 times
12V3W LED	about 98 hours
100WDesktop computer	computer host+ Display about 3 hours
50W Fan	about 6 hours
42-inch LCD TV	about 5 hours
80W car Refrigerator	about 4 hours
10W camera	about 30 hours

Security and Maintenance

1. Avoid short-circuiting the unit, and keep it away from all metal objects(e.g. coins, hair-pins, key, etc.)
2. Avoid heat sources and fire, do not expose it to direct sunlight for a long time, for solar charging, make sure it is properly sheltered. (keep it stay in a cool and well-ventilated place, do not cover it with towels, clothing or another item.)
3. Avoid damp or dusty places, water, or other liquids.
4. Do not attempt to disassemble this unit.
5. Do not place any heavy objects on it, avoid dropping or hitting it.
6. This unit is not intended for use by persons(including children)with reduced physical, sensory or mental capability, or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.

Attention:

1. This unit is equipped with top-A lithium-ion batteries, no memory effect but high capacity and it is durable. However, we still recommend the best operating temperature is 10-30 ℃ so as to obtain the optimal charging capacity.
2. When charging, in order to avoid interference, please stay away from TV, and radio equipment.
3. Please disconnect the cable /wall charger if it is not in use for a long time.
4. To better preserve its lifespan, it is suggested to recharge this unit at least once every 6 months, best to charge it every 3 months.
5. Due to the cold weather and chemical characteristics of the battery, the battery s capacity may reduce rapidly, it is recommended to keep it in an insulated cooler and connected it to a power source(solar panel). The nature power generated will keep the battery topped off.
6. The battery pack inside is non-removableand , non-disassembled, and the life cycle for charged and discharged is over 500 times, but it will wear out eventually.

Low battery warning(BiBiBi…)
The AC socket is powered by an internal inverter that converts 12V DC to 110V AC with a continuous power output of 350 W.
The inverter will start to sound a warning alarm (BiBiBiBi….) once the battery voltage is getting low and reach 9.5V, please switch off the outing and recharge it before use AC outing.

Warranty

We have 18 months warranty on this product(from the date of its original purchase), if you have any concerns regarding to our products or services, please email us at support@allpowers.net, we will offer help within 1 business day. Website: www.iallpowers.com

Documents / Resources

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