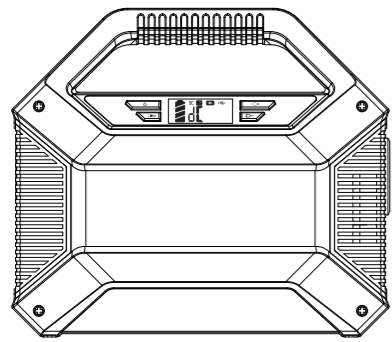


Powerhouse

PORTABLE SOLAR GENERATOR

M 8199A



Imported by Altronic Distributors Pty. Ltd. www.altronic.com.au

ABOUT THE UNIT

Thank you for purchasing this multi-function portable solar generator. In case of power fail or you need to charge on a travel, you can temporarily charge your electrical or digital devices with this unit. This unit can provide USB, DC and AC output. You can keep laptops, appliances, lights and more going for hours longer. Before using this unit, please read the user manual carefully and properly keep it for reference.

INCLUDED ACCESSORIES

- Plugpack 240V mains charger
- Car accessory plug charging cable (cigarette lighter plug to DC jack plug).
- MC4 x 2 solar connector to DC plug cable (for solar panel recharging).
- DC plug to car accessory socket (for powering DC appliances).

The unit provides Modified Sine Wave output

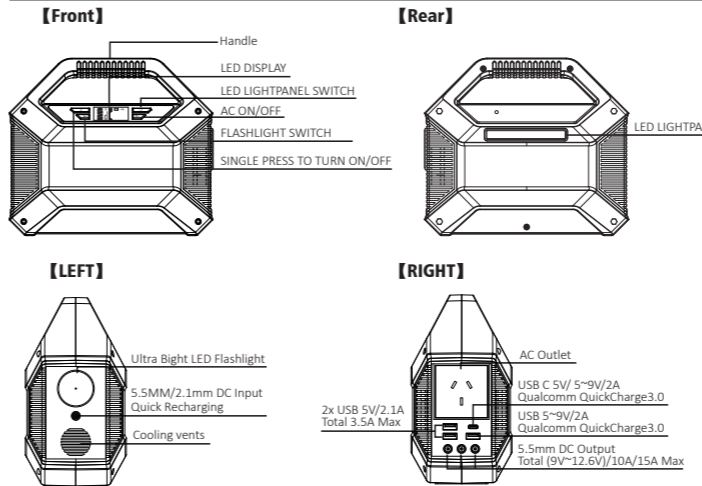
The unit provides Modified Sine Wave output, and can be compatible to AC electric appliance that works with Sinusoidal waveform(power <100W). However, anything that uses an AC motor isn't going to work to full capacity on a modified sine wave. such as an electrical fan, it will even make the electric appliance arouse some noise. Appliances like refrigerators, microwaves, and compressors that use AC motors and some delicate medical equipment will be better off with a pure sine wave inverter. Inverter is designed for occasional use rather than permanent powering of 240V AC devices.

【 I 】 PRODUCT PARAMETERS

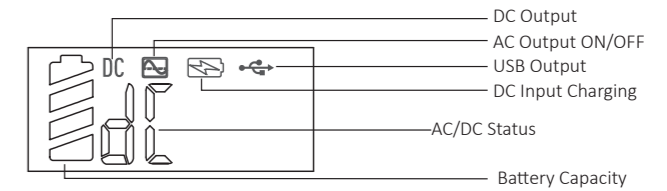
Capacity	155Wh,14Ah/11.1V(equivalent 4200mAh,3.7V)
Dimensions(LWH)	207x96x180mm
Weight	about 1.7Kg
Built-in Battery	High Quality Lithium ion Batteries
Input Recharging	Adapter: DC15V/2A Solar Panel Charging: DC 13V~25V/2A Max
Fully Charged Time	DC15V/2A: 8~9 hours
USB Output	2 x USB 5V-2.1A Total:3.5A Max 1 x USB 5~9V/2A Qualcomm QuickCharge3.0 1 x USB C 5~9V/2A Qualcomm QuickCharge3.0
DC Output	3 x 5.5MM DC Output: 9~12.6V/10A(15A Max Total)

AC Output	230V/50Hz Modified SineWave Rated Power:100W
AC Power	AC Continuous Output: 100W/150W Max
Bulb Type	1 x Ultra bright LED Flashlight 1 x LED Light Panel
Power Indicator	Led Display
Operation temperature	-10 C ~40 C
Lifecycle	>500 times
Package include	1 x Portable Power Supply 1 x 15V/2A Power Adapter 1 x Car Charger 1 x Cigarette Lighter Adapter 1 x user manual.

【 II 】 PRODUCT DESCRIPTION



【 LED DISPLAY 】

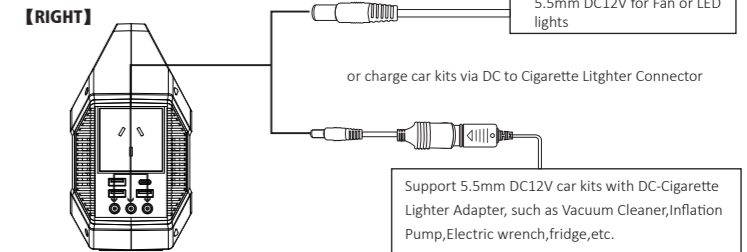


【 III 】 PRODUCT INSTRUCTION

1) How to provide power for DC12V appliances(such as head lamp, fan) with this product?

The 5.5mm 12V DC output is plug and play. Plug your appliances to the DC output port to gain power. DC output rated Current:10A , Max output Current<15A.

Notices: Please confirm whether your DC12V appliance support charging with 5.5mm DC header interface (The diameter of the DC Port of the Product is: 5.5mm),otherwise it is unable to connect with the DC output, you can consult the electrical manufacturer, buy the corresponding adapter and connect with it.



※ **Note:** The 12V DC output voltage is range between 9V~12.6V, maximum output current is 15A. DC output voltage drops while battery capacity drops due to chemical characteristics of the battery. If your appliance is not built-in input voltage stabilizing function, it may shutdown when input voltage is too low, please unplug your device from the unit in time. And please charge the unit in time.

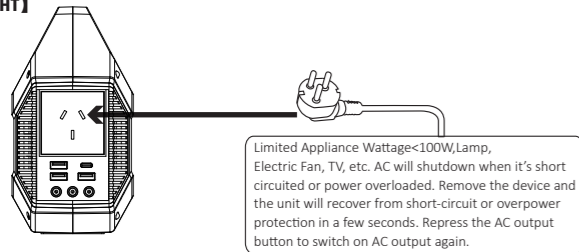
Protection Mode:

Short-circuit/Overpower Protection: If the DC output is short-circuited or overpowered(Load(s) power>150W), the unit will shutdown to protect itself. Please clear the problem and recharge the unit to recover from protection mode.

2) How to provide power for AC appliances with this product?

Connect the power cable plug of the electrical appliance to the AC outlet of the product, switch on the power button and the unit will start providing power to your appliances. **WARNING!** The AC outlets, AC voltage and frequency are different according to different countries ; please carefully check whether the product specifications are consistent with the appliance specifications before use, otherwise it can lead to dangerous situations.

【 RIGHT 】



When the AC port is not in use, turn it off to conserve power.

ATTENTION!AC Outlets,AC output voltage and frequency will be different according to different countries or areas. Please refer to the actual product before using.

Protection Mode:

Short-circuit/Overpower Protection: If the AC output is short-circuited or overpowered(Load(s) power>100W), the unit will shutdown AC output to protect itself. Please clear the problem and re-press the AC button for AC output.

※ Some devices, such as refrigerator, ice maker or a laser printer may require a surge power to start or work during a very time period, the surge power could exceed 150W or even higher, this could cause overpower protection with this unit. Please remove the devices and consult with the device manufacturers for more information. Please clear the problem and re-press the AC button for AC output.

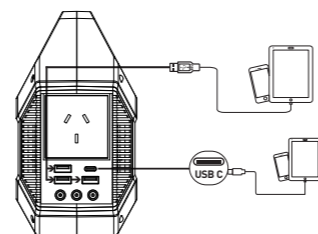
3) How to provide power for USB(C) digital appliances with this product?

Connect the standard USB cable of digital appliance to the USB output of the unit, press the " " to turn on USB output.

Notice: Some smart devices, such as Bluetooth headphones and LED lights, require very small input current to charge, which could be less than 150mA. The unit may fail to charge these kind of smart devices due to detection current limitation by the USB output ports. On this occasion, user can press the AC button " " to keep the USB port output running. Please turn off AC output when the smart devices are fully charged to save power.

Quick Charge Output: This product supports Qualcomm QuickCharge 3.0 output, support 5V-9V / 2A max output for smartdevices which also support Qualcomm QuickCharge 3.0. The actual output voltage and current depends on the actual smartdevices, it can be obtained by consulting the smartdevice manufacturer.

【 RIGHT 】



4) How to use the flashlight

This unit is built with ultra bright LED flashlight. Press the " " button to switch on flashlight and single press the button to switch to blink/SOS mode, Press the button to switch off.

Warning!Do not point directly at the eyes of human in case of any damage due to the strong light.

5) How to use the Led light panel

This unit is built with LED lightpanel. Press the " " button to switch on lightpanel and single press the button to switch brightness, Press the button again to switch off.

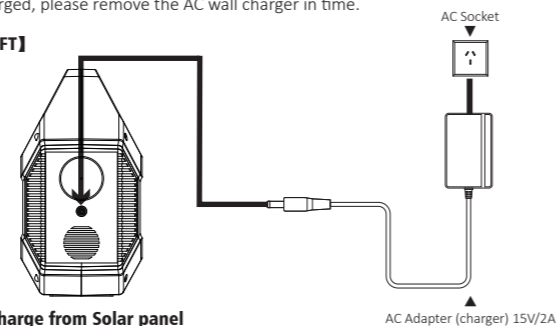
Warning!Do not point directly at the eyes of human in case of any damage due to the strong light.

6) How to charge the unit?

a.Charge through AC Wall Charger

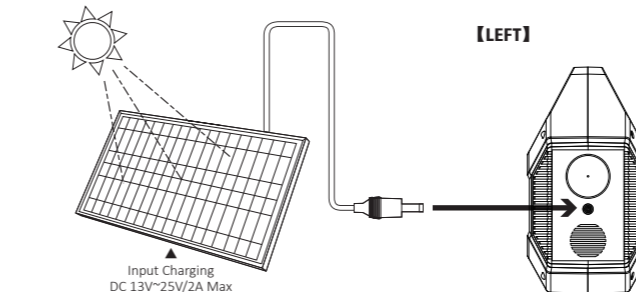
Using the included AC Wall Charger, plug the unit into any wall outlet to charge the unit. You will know the unit is charging when the blue LED battery indicators are blinking. The unit is fully charged when all battery indicators stop blinking and remain solid. After the unit is fully charged, please remove the AC wall charger in time.

【 LEFT 】



b.Charge from Solar panel

1. Place your solar panel where it will get as much direct sunlight as possible.
2. Plug the output of the solar panel into the input of the unit to start charging.You will know the unit is charging when the blue LED Battery Indicator lights up and blinks. The unit is fully charged when all battery indicators stop blinking and remain solid.



c. Charge from your car with a 12V car port.

Using the included car charger, plug the unit into a 12V cigarette lighter (car port) of your car. You will know the unit is charging when the blue LED Battery Indicator lights up and blinks. The unit is fully charged when all battery indicators stop blinking and remain solid.

Notice: Since the output voltage from 12v car port will float, charging speed and time from a 12v car port will be depending on actual vehicles and vehicle status.

Attention: To avoid car battery power loss. Charging this unit through your car cigarette lighter is only available when your car engine is started.

【 IV 】 SECURITY AND MAINTENANCE

- Do not short-circuit the unit. To avoid short-circuiting, keep the unit away from all metal objects (e.g. coins, hair-pins, keys, etc.).
- Do not heat the unit, or dispose of it in fire, water or other liquids. Keep away from high temperatures. Do not expose the unit to direct sunlight.
- Keep away from high humidity, dusty places.
- Do not disassemble or reassemble this unit.
- In order to extend the life of product (lithium battery), it is best to charge within 3 Do not drop, place heavy objects on, or allow strong impact to this unit.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- Do not cover the device with towels, clothing and other item.
- The unit may become hot when charging. This is normal. Use caution when handling.
- Do not charge the unit over the required time.
- Disconnect the unit when fully charged.
- Use the unit properly to avoid electronic shock.

m) Please deal with scrap products in accordance with the regulations, do not treat the built-in battery as a household garbage, so as not to cause the explosion and pollution.

n) The product is only used for emergency situations, it cannot replace the standard DC or AC power of household appliances or digital products.

【 V 】 PRODUCT APPLICATION SKILLS

- This product is built in high quality original lithium ion battery, it has no memory effect but high-capacity, and it is durable. However, we still recommend you to apply in the range of 10 C ~30 C , so as to obtain the optimal charging capacity.
- When charging, in order to avoid interference, please stay away from TV, radio and other equipment.
- If the device has not been used for a long time, please disconnect the cable and store.
- Some portable devices may need to be set in charge mode to charge, see the corresponding equipment use manual for more information.
- In order to extend the life of product (lithium battery), it is best to charge within 3 months, and charge at least once within 6 months.

Cold Weather Usage

Cold temperatures (below freezing) can affect the unit's battery capacity due to chemical characteristics of the battery. If you'll be living off-grid in sub-zero conditions, we recommend you keep your unit in an insulated cooler, and connected to a power source (solar panels). The natural heat generated by the unit contained in an insulated cooler will keep battery capacity at its highest.

Recycle

Always return your used electronic products, batteries, and packaging materials to dedicated collection points. This way you help prevent uncontrolled waste disposal and promote the recycling of materials.

Battery information

Your device has an internal, non-removable, rechargeable battery. Do not attempt to remove the battery, as you may damage the device. The battery can be charged and discharged over 500 times, but it will eventually wear out.

Statement

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