

# Portable Lithium Solar Generator

Instruction Manual

### **THIA**





## **Packing List**

1Pcs Solar Generator

Solar Charging Cable (DC) 1Pcs

1Pcs AC/DC Adapter

User Manual 1Pcs

1Pcs Car Charger

1Pcs Light Bulb



**THIA** 



**User Manual** 



**AC Adapter** 



**5W Light Bulb** 



Car Charger



Solar Charging Cable (DC)

## **Part Description**



### Turning on AC Output

Refer to image to the right

- 1. After switching it on (#4) press the 'Torch & Inv.' button (# 1 in the image) for 3 seconds to turn on the AC Output
- 2. Wait till the LED labelled 'INV' (#3 in the image) turns green
- 3. Now the AC output is ready to use.



## Safety and Precautions

### Safety Warning

- 1. Please read all the safety warnings and labels before using the product.
- 2. Avoid exposing the product to rain or using the product in a humid environment.
- 3. Do not install the product near heat sources, such as electric furnaces and heaters.
- 4. Wipe the product clean with a dry cloth.
- 5. In case of fire, use dry powder fire extinguishers for this product. Do not use water fire extinguisher, which may cause electric shock.
- 6. Please do not alter or disassemble this product.

## Safety and Precautions

### Storage and Maintenance

- 1. Operating and storage environment may influence product life and the reliability of performance. Remember to:
  - (i) Place the product in a dry and well- ventilated area with mild temperature (suitable temperature:  $0^{\circ}$ C -45°C, suitable relative humidity  $10\% \sim 90\%$ )
  - (ii) Place the product in a safe area where it will not fall or shake.
  - (iii) Keep the product away from corrosive and combustible material.
- 2. The product will turn itself off when the battery voltage is very low. If this happens, you need to charge the battery within 2-3 months.
- 3. If you are not going to use it for a long time, please charge it fully before storage and then charge it at least once every month. Store the product in a dry environment.

## How to charge this Product?

#### Solar Panel to charge the Product

- 1. Choose a suitable solar panel (Recommend SR Portables 40W Foldable Solar Panel).
- 2. Keep the solar panel under direct sunlight and facing the sun.
- 3. Connect the solar panel to the product at the input port (Part 5 in the Part Description) using the DC cable.
- 4. Please charge the product under Operational Temperature: Charge 0°C ~ 45°C, Discharge -20°C ~ 60°C (powering appliances)
- 5. When the product is fully charged by the sun, it will stop charging automatically. (The charging time is different under different sunlight intensity)
- 6. All products can be charged and used simultaneously.
- 7. During charging, it is normal for the product to get a little hot.
- 8. Make sure that the positive and negative poles of solar panels are connected correctly.
- 9. Please make sure the cable connection is correct and stable, or it will result in overheating and short circuits.



### AC Charger to charge the Product

- 1. Always use the standard AC charger that comes with the product.
- 2. Insert one end of the adapter into the wall outlet and insert the other end into the input port (Part 5 in the Part Description) of the product.
- 3. Please unplug the charger after charging is completed. (It takes about 5-6hrs to fully recharge the product if using a 25W AC adapter charger).
- 4. During charging, it is normal for the product to get a little hot.
- 5. Make sure that the wiring is connected properly, otherwise the contact terminals may melt or ignite at high temperatures.

### Car Charger to charge the Product

- 1. Connect the product to the cigarette lighter socket (Part 5 in the Part Description) in the car with the cigarette lighter cable provided in the package.
- 2. The product will be fully charged with a 24V car battery, but only partially charged with a 12V car battery.
- 3. Charge the product after starting the car.
- 4. Make sure that the wiring is connected properly, otherwise the contact terminals may melt or ignite at high temperatures.

### Turn ON/OFF the Product

Press and hold the master power button about 2 seconds to turn ON/OFF the product. The LED indicator light will light up/switch off.

### AC/DC Output

- 1. Check to make sure the product is turned on. Otherwise, you cannot use the AC/DC output.
- 2. DC output The DC output is turned on when the product is switched ON. Connect the appliance to the respective DC output.
- 3. AC output Connect the appliance to the AC output socket. Press the Torch/Inverter button for 3s to turn on the inverter / AC output. Press the Torch/Inverter button for 3s to turn off the inverter / AC output.



### Output

#### USB - A Ports

USAB - A Ports for smartphones, cameras, e-readers, tablets, wearable devices, etc.

#### DC 5525 Ports

DC 5525 Ports for WiFi routers, etc or use as 12V battery

#### AC Outlet

AC Outlet for lamps, fans, laptops and other small household and electronics appliances.









Car Vacuum Cleaner (<96W)





1.5+hours
DESKTOP
(100W)

# **Technical Specifications**

Model	THIA
Battery Capacity	130Wh (10.8V 12Ah)
Cell Type	Lithium Ion Battery, 4000+ cycles to 80%
Input	Adapter 12V-9V 2A Max
	Solar Panel: 12.9V-24V 2A Max
	Car Charger: 12V -24V 2A Max
AC Output	AC Power: 100W
	Peak Power: 200W
	AC Voltage 220V or 110V, 50Hz or 60Hz
	Wave Form: modified sine wave
DC Output	4x DC 5525: 9V-12.6V/2A
	2x USB-A: DC 5V/2A
Size	L204xW90xH160.7mm
Net Weight	1.5kg
LED Lighting	Floodlight: 5W
	Torch: 1.5W
Protection Functions	AC Overload: 150W ± 20W
	AC Undervoltage: rated voltage - 20%
	AC Overvoltage: rated voltage - 20%
	AC Overheating: 80 °C± 5°C
	AC Short circuit:Yes, recovery by disconnection & re-start
	DC Output Protection: over current
	DC Input Protection: anti-reverse
Cooling Fan	SmartAir Cooling SmartAir Cooling
Solar Panel Suggestion	20W ~ 40W mono crystalline or poly crystalline

# **Operating Conditions**

- 1. Operational Environment: Indoor and Outdoor (non waterproof)
- 2. Operational Temperature: Charge 0°C ~ 45°C, Discharge -20°C ~ 60°C (powering appliances)
- 3. Storage: -20°C ~ 45°C

## Frequently Asked Questions

#### 1. Which devices can be powered by the product?

Please check the specification label of your device and make sure the power rating and voltage range meets the power output of the product. For example, the AC output outlet can power most of device with power rating lower than 100 watt, and the USB-A ports power most of the USB-enabled devices.

#### 2. How long can the product power my devices?

The backup time depends on the power rating of your device. For e.g. a 50w laptop can be powered for more than 2.5 hours (130wh / 50w)

#### 3. How long can the battery be stored after one charge?

The internal battery can maintain its capacity for 1 year after full charge. But we strongly recommend recharging the battery every 6 months.

#### 4. Can the product be charged and discharged/output at the same time?

Yes, the product can be charged by solar panel or AC/DC adaptor and power your device simultaneously.

#### 5. Is the internal battery replaceable?

Please contact our service center for any technical issues or modifications to the product.