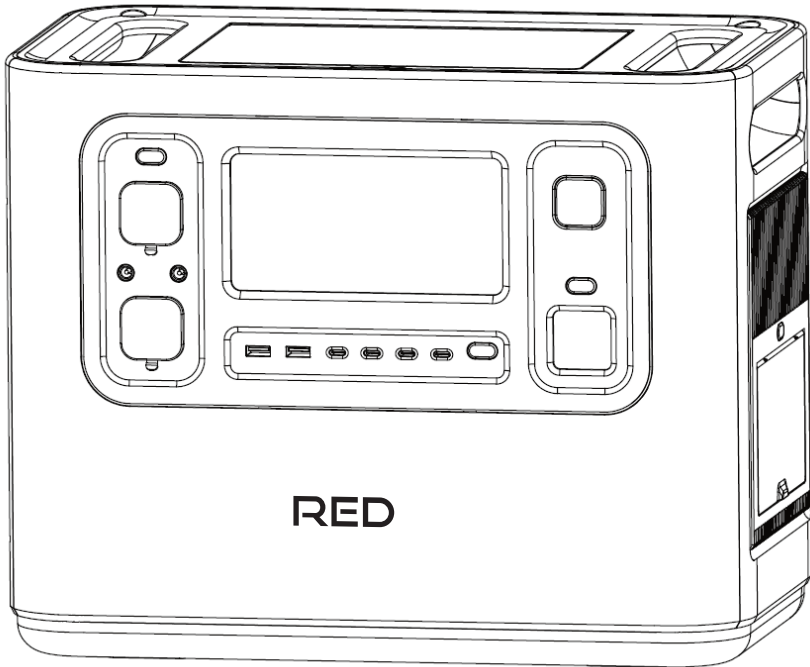


**RED**  
PORTABLE 1248  
**POWER STATION**

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**USER MANUAL**



Thank you for purchasing the Red-E 1248 Power station.

This Power Station is built with special emphasis on safety and reliability. It uses LiFePO4 batteries, has built-in BMS (Battery Management System) and provides protection against power surges, high temperature and short circuits.

The Red-E 1248 supports a pass-through UPS function and has a LiFePO4 battery that is guaranteed to have 80%+ capacity (1000wh) after 3000 cycles, (which is recharging the powerstation once a day for 8 years).

**RED**

## **Contents**

- What's included
- Product Introduction
- Button Function Introduction
- Introduction of Display Interface
- Troubleshooting table
- UPS Mode
- Connection of Solar Panels
- Car Charging
- Product Parameter
- Battery Specifications
- Disclaimer

## What's included



Portable Power  
Station



AC Charging Cable



User Manual



MC4 to XT90 Plug  
Charging Cable

## Product Introduction

This product is a portable power device with a built-in battery pack with charge/discharge function.

### **Features:**

- Outputs: two AC outputs
- DC outputs such as USB output, cigarette lighter output, DC output, etc.
- Variety of output connection points such as two three-prong plugs, USB-A, Type-C PD3,0, DC5521, XT60, cigarette lighter output, etc. This will meet most usage application scenarios.
- It also features a display, interface control, protection, and alarm.
- This product can be charged by mains AC, solar panels and vehicle charging.
- Equipped with safe EVE brand LiFePo4 battery
- Large battery capacity of 1248Wh
- 1200W pure sine wave AC output that can run most electronic equipment and small household appliances.
- Two-way fast charging technology to fully charge the product within 2 hours.
- Seamless switching in UPS mode with 20ms switchover time.
- Multiple safety features such as battery protection, circuit protection, over voltage and over temperature.

## Usage

**Will power up to max of 1200w. Devices include:**



Mobile Phone



Tablet



MP3/MP4



Digital camera



Portable games



GoPro



Drones



Laptops



Fans



Hot blanket



TVs



Lights



Mini fridges



Camping equipment



Ebike

## Precautions For Use

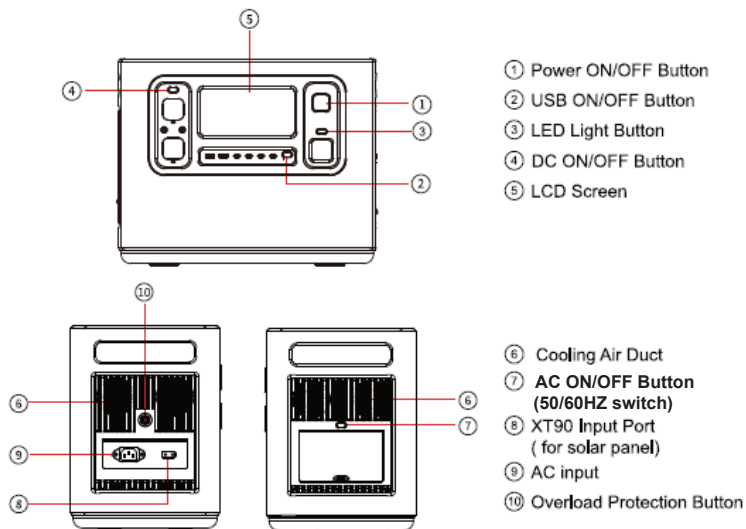
- To avoid shortened battery life and other failures, please avoid long-term storage and use of this product in environments with high temperatures and humidity or direct sunlight.
- Keep product away from fire or heat source.
- Do not disassemble or modify the product in any way.
- Store or use this product out of the reach of children.
- Only use original accessories. Failure to do this may affect the guarantee.
- Please plug the charge cable directly into the wall socket when charging and do not use extension cords.
- Turn off and unplug the power cable when the product is not in use.
- If the product needs to be stored for a long period of time, please:
  1. Charge the battery fully and then completely discharge the product by using it.
  2. Recharge the product to about 50% and store it.
  3. Please repeat this process every 6 months to prolong the battery life.

# RED

This RED-E Product is warranty against any manufacturing defect for the duration of the warranty.

This warranty excludes normal wear and tear through regular use or if the product has been subjected to abuse by the user (including liquid damage). Please retain proof of purchase as the guarantee will only be honoured if returned with an invoice.

## Button Function Introduction






### 1. Power ON/OFF Button

- Press and hold the power button for 3 seconds to activate the system and turn on the LCD display.
- Press and hold again for 3 seconds to turn it off.

### 2. USB ON/OFF Button

- Short-press the USB button to turn on the USB output port, and short press again to turn it off.

		
USB-A × 2	TYPE-C X 3	TYPE-C X 1
QC 3.0	PD-20W	PD-100W

### 3. LED Light Button

The light has 3 functions.

1. Short-press the **Light button** to turn the LED light on.
2. Short-press again to enter SOS mode.
3. Short-press again to enter strobe mode.
4. Short-press again to switch off the LED light.
5. During any mode, press the LED button for more than 1 second to switch the light off.

#### 4. DC ON/OFF Button

Short-press the DC button to turn on the DC output port, and short press again to turn it off.

 DC Output X 2	 Cigarette port × 1	 XT60 × 1
12V/3A	12V/10A	12V/25A

#### 5. LCD Screen

Displays the product's battery level and usage information.

#### 6. Cooling Suction and Exhaust Port

When the product reaches the pre-set temperature threshold, the cooling fan will automatically be activated, accompanied by a fan noise (fan noise below 60dB is normal).

- Do not block the cooling import and exhaust port when the product is in use.
- Do not place any object within a range of 30cm around the power station.

#### 7. AC Button (AC output port, the sum of electrical load power should be <1200W)

- Press the AC button to activate the AC Output function (the unit will not function unless you've turned it on; and also pressed the AC button); To turn off, press and hold.
- This unit operates at 50 Hz.
- Should you wish to change the frequency, press and hold the AC button for 2 seconds to enter the frequency switching mode, the 50Hz or 60Hz icon will flash on the display.
- Short-press the AC button again to select 50Hz or 60Hz.
- When the icon stops flashing it will displays 50Hz or 60Hz. This will be the frequency the unit will run at.

#### 8. XT90 Port

This interface supports solar panel input or car charger input. It can support a wide range of input voltages ranging from 11.5v to 50v. For details, please refer to "Solar Panel Connection" and "Car Charging" in this manual.

#### 9. AC Input

If being charged from a household plug socket, the Power Station can reach a super-fast charging speed of 700W. This will enable the product to be fully charge from 0-100% in 2 Hours. When charging in this way, please pay attention to the following points:

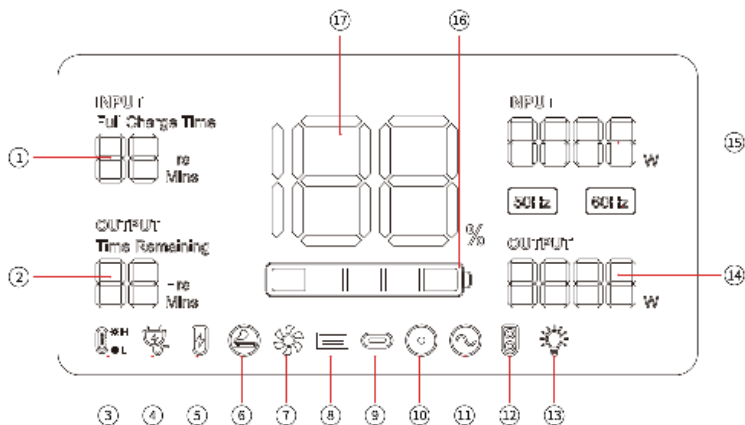
- Plug the power station directly in the wall socket to charge the product. Do not use extension cords as this can be a fire hazard.
- If you have to use an extension cable to charge the power station ensure that NO other appliances are plugged into the same extension cable plug at the time of use to avoid tripping the household plug socket.

#### 10. Overload Protection Button

The overload protection function (safety circuit breaker) will be activated when the power supply current is unstable due a large current input at the AC input or lightening, etc. This is necessary to protect the product and cut off the AC input port. Please follow the sequence below to restore the AC input function:

1. Turn off the power button and unplug all ports.
2. After confirming that there is no abnormality in each port, turn on the power button.
3. Press the overload protection button and connect the AC Cable to restore the AC input.

## Introduction of Display Interface.



- |                                   |                              |                            |
|-----------------------------------|------------------------------|----------------------------|
| ① Recharging Time                 | ⑥ Cigar Lighter (12V) Output | ⑫ XT60 (12V) Output        |
| ② Usage time remaining            | ⑦ Fan Status                 | ⑬ LED Light                |
| ③ High/Low Temperature Protection | ⑧ USB Output                 | ⑭ Total Output power       |
| ④ Connected to the AC Mains       | ⑨ PD3.0 Output               | ⑮ Total Input power        |
| ⑤ XT90 Input                      | ⑩ DC (12V) Output            | ⑯ Battery Progress Bar     |
|                                   | ⑪ AC Output                  | ⑰ Battery Level Percentage |




### Screen Display Description

Power display:

- When the product is in the charging state, the battery progress bar rotates clockwise and the battery level percentage gradually increases.
- When the product battery level is 0, the battery level percentage icon flashes.
- Input and output status: When the product is in-use, the total input power, total output power and the cursor corresponding to the working area will be displayed on the screen.



## Troubleshooting Table

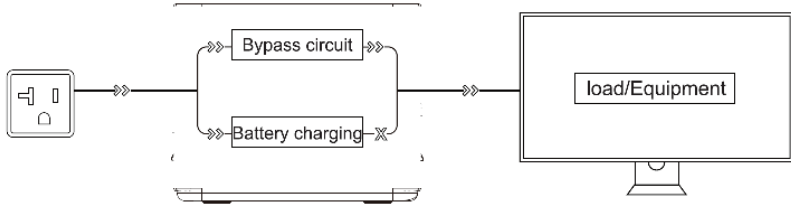
	<u>Cause</u>	<u>How to fix</u>
 <p>The above output icon flashes and beeps.</p>	The output exceeds the standard and has short-circuited.	Remove the load, and then short press the switch in the area that corresponds to the icon to turn off the alarm.
 <p>The temperature warning icon flashes and beeps.</p>	The temperature of the product is too high or too low.	Take the product out of the charging state and remove anything plugged into the device. Turn the power off and wait for the device to reach a suitable working temperature. The alarm will then switch off.
 <p>AC input connection icon flashes and the product cannot be charged.</p>	The overload protection function is enabled.	Disconnect all the loads and make sure everything is connected properly. Press the overload button to reset the unit.

## UPS Mode

This product has a UPS (Uninterrupted Power Supply) function. This allows you use the device to power items while the unit charges.

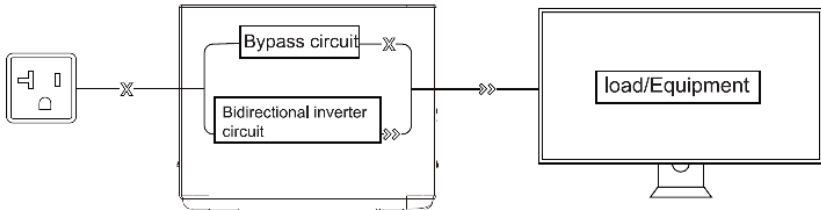
The usage and operation precautions are as follows:

See pic 1 below: when connected to the AC Mains power supply, via the AC input, the Power Station will enter UPS working mode. This means that the unit will power the AC electrical appliances in bypass mode and recharge the unit at 700w of power. In this working state, the rated power of the electrical appliance must be lower than 1100w otherwise overload protection may be triggered.



(Pic 1)

See Pic 2 below: When the AC mains is off, the bypass stops working and the product switches over to the inverter circuit within 10 milliseconds (1/10th of a second). This will enable the UPS mode and will continued to supply power to the electrical appliances uninterrupted and will work as normal within the specs of the power station.



(Pic 2)

As soon as AC power is restored, it will enable the UPS working mode again.

## Connection of Solar Panels

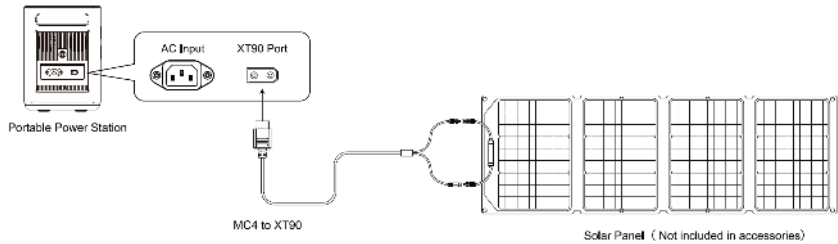
Under the correct light conditions, this product can be recharge via solar panels. The recharge power is determined by the equipment (solar panels) and weather conditions.

In this charging mode, the power station can be recharge at a speed of up to 500w. The maximum input voltage is 50v.

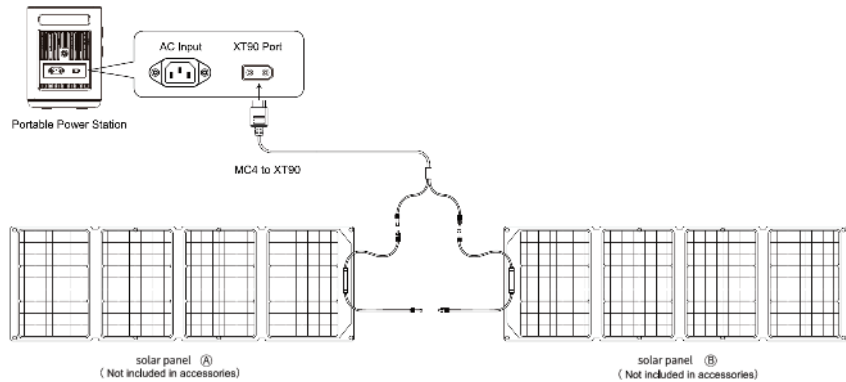
Please make sure you are using the correct solar panels and solar panel configuration. The input voltage cannot exceed 50v as this will damage the device and will render the warranty void.

- We recommend the following two charging schemes using RED-E solar panels:

### Scheme one



### Scheme two

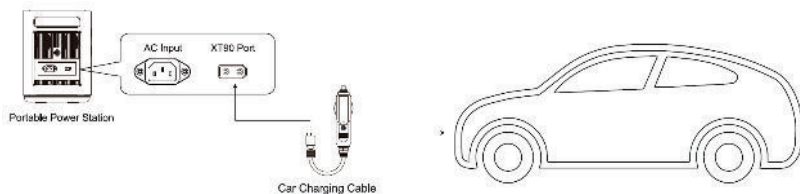


## Car Charging

- Connect the car charging port to the power station XT90 port.
- Connect the other end of the car charging cable to your car power source such as a cigarette lighter. The connection method is shown in the picture below.

This product supports 12V/24V car charger charging, please note the following when car charging:

- Only charge the device through your car when it is running, otherwise it may discharge your car battery.
- Vehicle charging power is usually in the range of 90W-120W, and it can take up to 15 hours to charge the power station. If fast charging is required, the AC mains charging is recommended.



## Product Specifications

Product Name	1248Wh Portable Power Station
Dimension	L*W*H=392X230X315mm
Weight	15.5kg
Capacity	1248Wh
AC Charging	AC Mains Input, 700W max
XT90 Input	11.5-50V 20A below 500W max
AC Output	50/60Hz (switchable), rated 1200W, pure sine wave with overload, short circuit protection
USB-A Output	(QC3.0 18W)X2
Type-C ① Output	(PD20W) X3
Type-C ② Output	(PD100W)X1 Included PD3.0 protocol
DC 5521 Output	12V/3AX2
XT-60 Output	12V/25A
Car Charging Output	12V/10A
Shutdown Current	<500uA
Working Temperature	-10~40°C
Environment Humidity	≤90%RH
Cycle Times	> 3500 times

## Battery Specification

Cell type	32130 LiFePo4
Rated voltage of single battery	3.2V
Rated capacity of single battery	13Ah
Rated voltage of battery pack	48V
Output voltage range of the battery pack	42-54V
Rated capacity of battery pack	1248Wh

## **Disclaimer**

Please read the user manual of this product before use to ensure full understanding and correct use and keep the user manual for future reference.

Failure to operate this product correctly could cause serious injury to yourself or others, or result in damage to the product and property. Once you use this product, you are deemed to have understood, recognized and accepted all terms and content of this document. Users undertake to be responsible for their own actions and all consequences arising therefrom. Red-E is not responsible for any loss caused by the user's failure to utilise the product in accordance with the User Manual.

**RED**

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