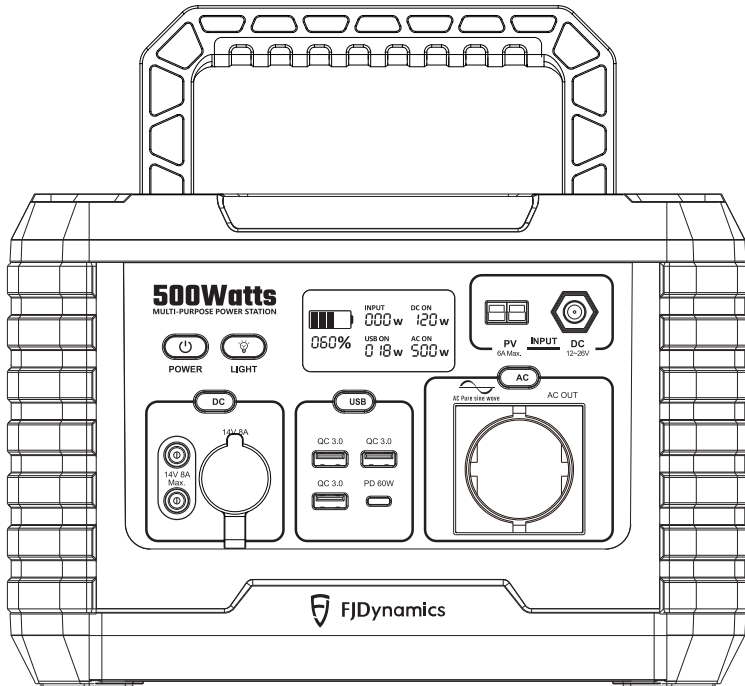




PowerSec User Manual



Thank you for purchasing PowerSec portable power station.

To make sure your personal safety, property security and user experience, please read this manual carefully before operating, and retain it for future reference.

CHARGE FIRST!

Before using PowerSec Power Station, plug it into a suitable power outlet until it is fully charged. Then you can start your exciting journey.

Safety Instructions

**Read the following instructions to ensure safety before using.
Improper use may result in fire, property damage or personal injury.**



INSTRUCTIONS PERTAINING TO RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS IMPORTANT SAFETY INSTRUCTIONS

1. Read all the instructions before using the product.
2. To reduce the risk of injury, close supervision is necessary when the product is used near children.
3. Do not put fingers or hands into the product.
4. Use of an attachment not recommended or sold by power pack manufacturer may result in a risk of fire, electric shock, or injury to persons.
5. To reduce risk of damage to the electric plug and cord, pull the plug rather than the cord when disconnecting the power pack.
6. Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
7. Do not operate the power pack with a damaged cord or plug, or a damaged output cable.
8. Do not disassemble the power pack, take it to a qualified service person when service or repair is required. Incorrect reassembly may result in a risk of fire or electric shock.
9. To reduce the risk of electric shock, unplug the power pack from the outlet before attempting any instructed servicing.

10. WARNING - RISK OF EXPLOSIVE GASES.

To reduce risk of battery explosion, follow these instructions and those published by battery manufacturer and manufacturer of any equipment you intend to use in vicinity of the battery. Review cautionary marking on these products and on engine.

11. Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.

12. PERSONAL PRECAUTIONS

- a. Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes.
 - b. Wear complete eye protection and clothing protection. Avoid touching eyes while working near battery.
 - c. If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at least 10 minutes and get medical attention immediately.
 - d. Never smoke or allow a spark or flame in vicinity of battery or engine.
 - e. Be extra cautious to reduce risk of dropping a metal tool onto battery. It might spark or short-circuit battery or other electrical part that may cause explosion.
13. When charging the internal battery, work in a well ventilated area and do not restrict ventilation in any way.
 14. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
 15. Do not expose a power pack to fire or excessive temperature. Exposure to fire or temperature above 130°C may cause explosion. The temperature of 130°C can be replaced by the temperature of 265°F.



Precautions for product charging

1. Do not charge the adapter via power supply systems that operate outside of AC100-240V.
2. Do not charge the unit via solar panel that operate voltage outside of DC12-26V.
3. Always use approved attachment charging cables. we take no responsibility for any damage caused by using other brand charging cable.
4. When charging, please place the product on the ground with no flammable or combustible materials around. To prevent accidents, never leave the machine unattended during charging.
5. Do not charge a product immediately after rated power output for longtime , because it maybe protected by the BMS.
6. DO NOT charge a product until it cools down to room temperature.
7. Once the unit is fully charged, unplug the adapt or charger.
8. Only charge, use the unit within an ambient temperature of 0 to 40 °C (32~104°F).



Product storage and transportation

1. Please keep the product away from children's reach. If a child accidentally swallows certain parts, seek medical attention immediately.
2. If a warning of insufficient battery power appears, please charge the battery before storing.
3. Please store the product in a dry environment. Do not place the product where it may come into contact with water or other liquid.
4. Please ensure that no small metal objects fall on the product or around the product storage.



Product maintenance

1. Do not store the product in an environment below -15°C or above 40°C.
2. If the battery is not used for a long time, the battery life may be shortened.
3. Fully charge and discharge at least once every 3 months to ensure battery life.

What It Powers



Laptops (41.4Wh)
Around
10 Recharges



32" TV(60W)
Around
7 hours



CPAP without heated
humidifier (15W)
29 hours



GoPro (5.9Wh)
Around
74 Recharges



Floodlight(4W)
Around
110 hours



Mini Fridge(40W)
Around
11 hours



DJ Drone(89.2Wh)
Around
4.9 Recharges



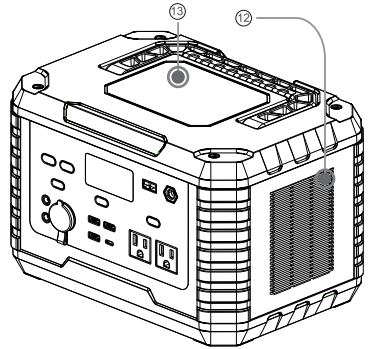
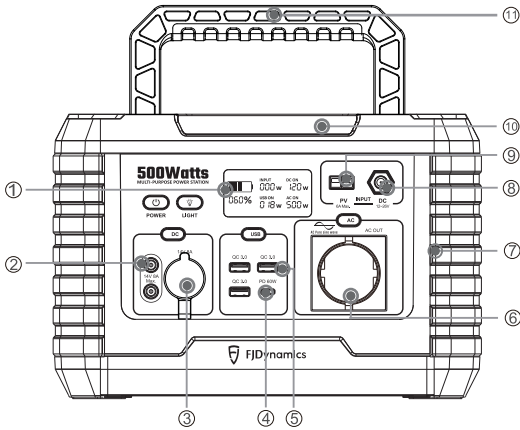
Smartphone(10Wh)
Around
44 Recharges



Switch(16Wh)
Around
27 Recharges

+MORE

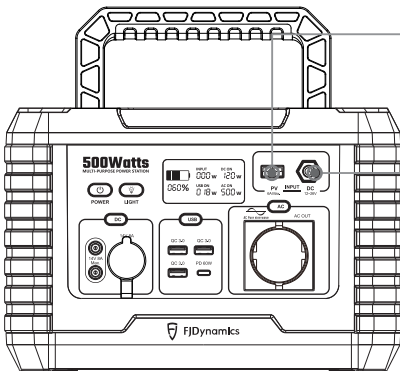
Feature Details



- | | | |
|----------------------------|------------------------|------------------------------------|
| ① LCD Screen Display | ⑥ AC Output | ⑩ SOS MODE & LED light |
| ② DC 5525 Output | ⑦ Anti-collision Strip | ⑪ Folding Handle |
| ③ Cigarette Lighter Output | ⑧ DC Input | ⑫ Air Intake Vent with Cooling Fan |
| ④ USB-C Output | ⑨ PV Input | ⑬ Wireless Charger |
| ⑤ USB-A Output | | |

**Note: No user-serviceable parts inside.
Recommended to fully charge the MP500 before use.**

How To Charge



From Solar Charger
150W 6-8 hours
depending on solar conditions



From Car Port 12V
9-11 hours when car running



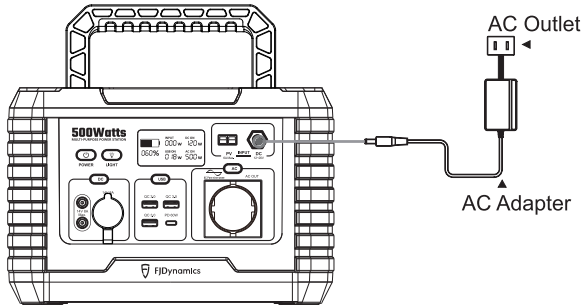
From Wall Charger 230V
6-7 hours

⚠ Once it is fully charged, unplug the adapter or charger.

Caution: Only one kind of charge modes is allowed when charging. Do not charge the product with solar charger and adapter or car charger at the same time!

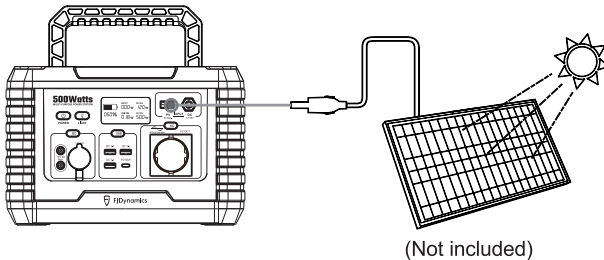
AC Adapter Charging

It will take 6-7 hours to charge fully by using the AC adapter we provided.



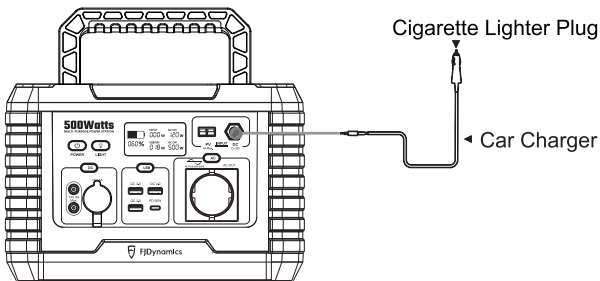
Solar Panel Charging

1. **DO NOT** charge the unit via solar panel that operate voltage outside of DC12-26V
2. Place Solar Panels in direct sunlight as much as possible.
3. Support 60W/80W/100W/120W Max Solar Panels (Not included), the charging time is determined by the solar light intensity.

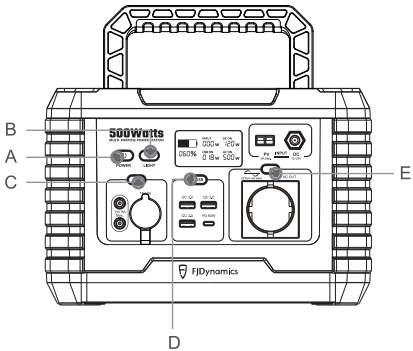


12V Car Charger Charging

Use the Car Charger we provided to charge this unit. The full charge time takes 9-11 hours. When the LCD display shows the battery power of 100%, it indicates that this unit is fully charged.



Function Buttons



- A: MP500 Power ON/OFF Button
- B: SOS mode & LED light Button
- C: DC Output Power ON/OFF Button
- D: USB Output Power ON/OFF Button
- E: AC Output ON/OFF Button

Button A: POWER ON/OFF

Button A is the main switch. Press button A to turn on or off.

Button B: SOS MODE & LED LIGHT

Function is available no matter the button "POWER ON/OFF" is activated or not as the following steps:

Firstly, press button B to turn on the LED light into the LED light mode.

Secondly, double click it to turn on the SOS mode.

Thirdly, press button B back to LED light mode, then press it again, the light will be turn off.

Button C: DC OUTPUT ON/OFF

Make sure the button "POWER ON/OFF" is activated before pressing button C to turn on; Press button C to shut down the output(s) when not in use.

Button D: USB OUTPUT ON/OFF

Make sure the button "POWER ON/OFF" is activated before pressing button D to turn on; Press button D to shut down the output(s) when not in use.

The USB-C cable of different devices need different endorsements of corresponding protocols, if the USB-C port doesn't work, try to use the AC adapter to charge .

Button E: AC OUTPUT ON/OFF

Make sure the button "POWER ON/OFF" is activated before pressing button E to turn on; Press button E to shut down the output(s) when not in use.

WIRELESS CHARGER

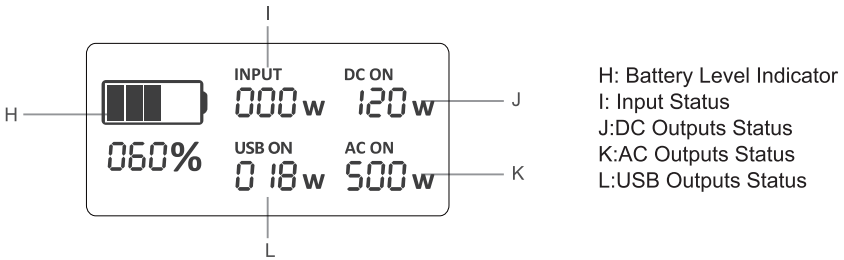
Press "POWER ON/OFF" button to turn on the wireless charger. Press "POWER ON/OFF" button to shut down the output(s) when not in use.

COOLING FAN

MP500 utilizes an internal cooling fan to ensure the product is operating within the appropriate temperature range. MP500, when it experiences a higher output load, will automatically turn on the fan during discharge or recharging, the fan may operate intermittently to keep internal temperature within operating range.

The fan will likely start when the AC circuit is activated to ensure proper operation.

LCD Features



Details Displayed On LCD

Battery Level Indicator :

1. The battery level is provided by percentage of battery charge corresponding to the number of bars and percentage displayed.
2. The segments in the battery level correspond to the current state of charge, 0-5% empty, 6-20% one segment, 21-40% two segments, 41-60% three segments, 61-80% four segments, and all five are lit when charge level is above 81%.
3. Provides the user live telemetry data on time to completely charge, or deplete the battery based upon the energy entering or leaving the battery.
4. Highly recommend to fully charge MP500 when first use.
5. Higher battery level indicator show, more precise the data will indicate.
6. Please be aware that this value can adjust multiple times as the energy draw changes from the connected devices.
7. This is evident during initial activation of ports with a connected device.
8. Recommended to charge the MP500 when battery indicate less than 20%.
9. Note that when you first plug in a power source, whether it's a solar panel or a wall charger, the MP500 may take a minute to detect and adjust its charge circuitry before it starts drawing power from the source.

INPUT Status : The MP500 is capable of providing input energy in watts.

DC Output Status : The display will provide output watts of the DC port.

AC Output Status : The display will provide output watts of the AC port.

USB output status: The display will provide output watts of the USB port.

Power-saving mode:

10. When the device enters the input or output state, it will enter the screen-off mode after more than 20 seconds, which does not affect the normal operation of the device.
11. When the output power of the device is less than 5W, the device will go into hibernation after more than 3 hours, and the input can be "awakened" when the input is charged or any button is pressed. When not in use, press the switch button to turn off the output.

Powering / Charging Devices With The Unit

The output port will not work until the appropriate button is pressed to activate the output ON/OFF button C/D/E.

When it was activated, the LCD display will turn on and it will display the details of the power of input or output.

The LCD Screen will automatically shut down when no outputs are activated.

Pass-through charging

The advanced battery management system of the MP500 allows it to charge a connected device via AC output or DC output & USB output while charge the MP500.

OVERLOAD

If an overload occurs on the output, MP500 will:

Automatically turn off AC Output power.

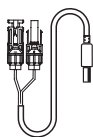
The indicator light of LCD Screen still illuminated.

DC output status still the same status as usual.

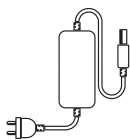
Do as following:

Check the output power of the load, unplug it.

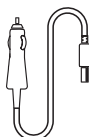
Accessory List



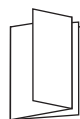
MC4-7909
connector cable



AC 100-240V wall plug
power adapter



12V Car Charger
cable







User Manual






Recommend to use 120W Solar panel (not included).

General Specifications










General Specs

	Rated capacity	519.4Wh
	Weight (net weight)	≈6.8kg
	Weight (including accessories)	≈7.8kg
	Product size	292mm*202mm*194mm




Input

	Recharging input voltage	12-26V
	Recharging input power	100W
	AC/DC Adapter	AC 100-240V (50Hz/60Hz), DC 25V, 4A
	Solar Charge Input	12-26V, DC 6A MAX
	Car Charger	DC 12V, 100W MAX

Output

	AC Output Voltage	220V/50Hz
	Rated Output Power	500W
	Output waveform	pure sine wave
	Overload protection Power	550±40W
	Cigarette Lighter Socket Output	14V/8A
	DC 55*2.5 output	14V/8A
	Wireless charger	10W
	USB output	QC3.0/18W
	Output Type-C	PD60W

Battery

	Standard capacity of cells	3.7V/140400mAh
	discharging Temperature	14 to 104°F (-10 to 40°C)
	Recharging Temperature	32 to 104°F (0 to 40°C)

Equipment cleaning

Please make sure that the device is disconnected from all input power and output devices, Wipe with a clean, dry, non-soft cotton cloth. Removing any foreign objects, dirt or other obstructions on the vents on both sides. When cleaning foreign objects in the side vents, do not allow debris, dirt or other Blockage enters the equipment.

Do not use corrosive cleaners or solvents.

Do not use compressed air to clean the side cooling vents, as it will cause other particles to enter the interior and cause a short circuit.

⚠ Note: To avoid the risk of electric shock, do not use metal objects to clean the ports.

Storage

If it will be stored for more than 1 month, please charge it to 50% capacity and keep it indoors, at normal temperature, and the maximum storage time shall not exceed 6 months. please keep away from direct sunlight.

Excessive temperature will lead to reduced service life, overheating and fire.

Extremely cold conditions below the specified storage range can also impair the performance and service life of the equipment. Please keep away from corrosive chemicals and gases.

After taking it out of storage, perform a visual inspection to ensure that the appearance of the equipment and all accessories are qualified. Checking the vents on the intake and exhaust sides to make sure they are free of foreign objects.

Allowing the device to return to the environment before charging or other devices.

Notice

Transportation:

The power station meets all legal requirements for the transportation of dangerous goods. The capacity of the lithium battery pack exceeds 100Wh. According to international standards Standard, if the power station is transported by air, it must be transported in accordance with IATA standard packaging. The instructions and labeling requirements of the International Air Transport Association and related declarations must be completed.



Not Permitted On Aircrafts



Avoid Dropping



To Preserve The Battery Lifespans, Please Use And Recharge At Least Once Every 3 Months



Do Not Disassemble



Use Original Or Certified Charger And Cables



It's Not Waterproof, do Not Expose To Liquids



Avoid Extreme Temperature



Please Dispose Of Batteries And Electronic Goods In Accordance With Local Regulations

Troubleshooting

The device does not discharge:

1. Check whether the output buttons are activated;
2. Check whether the total output power exceeds the rated output power;
3. Check the battery power indicator to confirm whether the power supply is sufficient;
4. If the device cannot be discharged after it is discharged for longtime, please wait for several hours and try again, it may enter the over-temperature protection.

The device can not be charged:

1. Confirm that the wall plug power adapter's cord is inserted fully into the DC Input.
2. Confirm that the AC wall plug power adapter is the charger provided with MP500. If the input does not comply with the requirements located in the general specifications section, the low power range 0% to 10% may be displayed on the LCD.
3. If the device cannot be charged immediately after it is discharged, please wait for several hours and try again, it may enter the over-temperature protection.

Maintenance and warranty

Recharge as needed. There are no pre-designated intervals at which to recharge as long as the MP500 is being used regularly.

Avoid discharging completed on a regular basis, as this can impact overall life.

Regularly inspect all ports and wall charger for any debris, dirt, damage and corrosion.

Do not attempt to fix.

Do not cover the MP500 with towels, clothing or other items.

Regularly observe if the side vents are collecting dirt or dust, and clean following cleaning procedures noted in manual.

Disposal / Recycle



Do not place equipment and its accessories in the trash. Items must be properly disposed of in accordance with local regulations. See www.epa.gov for additional information.

Statement

© All rights reserved. All trademarks cited herein are the property of their respective owners. The information contained herein is subject to change without notice.

The only warranties for the products and services are set forth in the warranty statements accompanying such products and services.

We shall not be liable for technical or editorial errors or omissions contained herein. Second Edition: Mar 2021. This user guide describes features that are common to most models.