



## User manual for outdoor power station P500/P600

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## 1. Introduction

Thank you for purchasing Pecron P500/P600 outdoor portable power station. P500/P600 is a portable multiple-use battery-powered/solar generator. It features light weight, large capacity, and full capability. It provides you with easy access to power when you are off-the-grid. P500/P600 can be widely used in the field of mobile working, outdoor recreation, camping, rescuing, environment protection, emergency communication, power outage backup and so on.

### **P500/P600 Outdoor Portable Power Station Highlights:**

110V/60Hz Pure Sine Wave AC output

DC12V10A output

USB QC3.0\*2 (5V3A 9V2.5A) AC output

USB-C\*2 (5~9V3A 12V2.25A) AC output

LED Emergency Lighting

Three-Way Charging

Built-In MPPT Charge Controller

Please read the user manual carefully before using, and keep the purchase receipt as a proof of purchase for any warranty claim.

## 2. Technical Specifications

Model No.	P500	P600
Rated power	500W	600W
Peak power	1000W	1200W
Output voltage	AC 220V/50Hz Pure Sine Wave DC12-14V10A USB QC3.0*2 (5V3A 9V2.5A) USB-C*2 (5~9V3A 12V2.25A)	
Battery capacity	388.5Wh(25.9V15Ah)	578Wh(25.2V22.95Ah)
Battery type	Lithium ion	
Charging time	3~4h	2~3h
Charging voltage	29.4V 5A	DC29.4V 9A(MAX)
Car and solar charging	DC12V cigarette lighter / 18V solar panel (open circuit voltage is 22V and the maximum input is 100W)	
Protection	Over-Voltage, Low-Voltage, Over-Temperature Over-Load, Short-Circuit	
Working temperature	0°C~45°C for (charging)	
	-20°C~45°C for (discharging)	
LED light	LED 2W	
Product size	L280*W152*H225mm	
Net weight	10.8lbs(4.9Kg)	13lbs(5.9Kg)

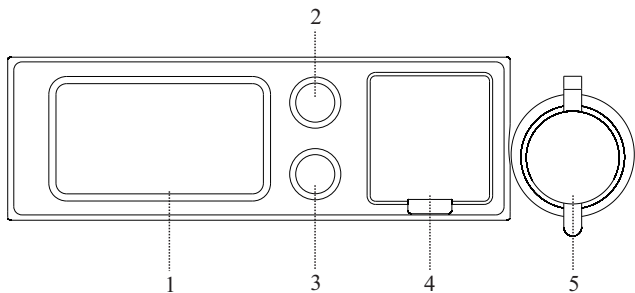
### 3. Function Instruction

Please read the instruction of functions carefully before using to avoid damage to the unit and it's connected devices.

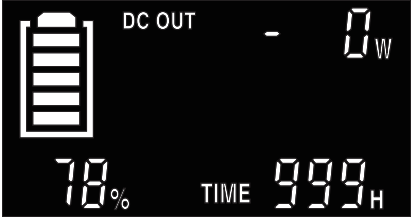
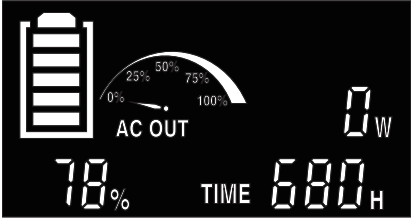

#### Packing List

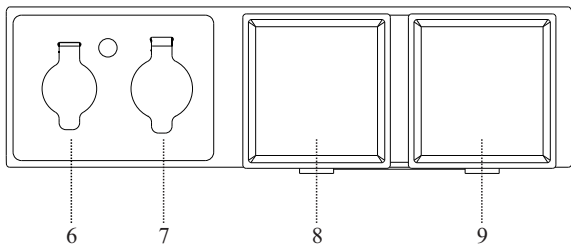
- .Charging Adapter
- .Charging Cable
- .Accessory Bag
- .User Manual

#### 3.1 Functions Of Each Part



Parts	Functions
1	LCD display (shown as Figure 4, Page 7)
2	<p>DC Output Switch: Press and hold the DC switch for a while, the USB ports and DC12V socket will be activated, at the same time, the LCD screen shows the battery level, estimated discharging time(h), discharge(load) wattages(shown as Figure1, Page5). Press the DC switch will show the discharging voltage;</p> <p>Press and hold the DC switch for a while to deactivate the USB ports and the DC 12V socket</p>
3	<p>AC Output Switch: Press and hold the AC switch for a while to activate the AC output, at the same time, the LCD screen shows the battery level, loading percentage, estimated discharging time(h), discharge(load) wattages(shown as Figure2, Page5). Press the AC switch will show the discharging voltage and PF value(shown as Figure3, Page5).</p> <p>Press and hold for a while to deactivate the AC outputs.</p>
3.1	Reset: In case of crash or abnormal display, press and hold the AC switch button for 14 seconds to reset.
4	USB QC3.0 Ports: Support 5V / 9V fast charging.5V for maximum 3A or 9V for maximum 2.25A. With overload and short circuit protection.
	USB-C Ports: Support 5V / 9V / 12V fast charging. 5V/9V for maximum 3A, or 12V for maximum 2.25A. With overload and short circuit protection.
5	DC 12V Socket: Support 12 ~ 14V DC output with the maximum output current 10A. With overload and short circuit protection.

 <p>The DC display screen shows a battery icon on the left. To its right, the text "DC OUT" is displayed above a digital readout of "0 W". Below the battery icon, the battery level is shown as "78%". To the right of the battery level, the text "TIME" is displayed above a digital readout of "999 H".</p>	<p>DC DISPLAY SCREEN FIGURE 1</p>
 <p>The AC display screen - 1 shows a battery icon on the left. To its right is a semi-circular gauge with markings at 0%, 25%, 50%, 75%, and 100%. Below the gauge, the text "AC OUT" is displayed above a digital readout of "0 W". Below the battery icon, the battery level is shown as "78%". To the right of the battery level, the text "TIME" is displayed above a digital readout of "680 H".</p>	<p>AC DISPLAY SCREEN - 1 FIGURE 2</p>
 <p>The AC display screen - 2 shows a battery icon on the left. To its right is a semi-circular gauge with markings at 0%, 25%, 50%, 75%, and 100%. Below the gauge, the text "AC OUT" is displayed above a digital readout of "215 V". Below the battery icon, the battery level is shown as "78%". To the right of the battery level, the text "PF" is displayed above a digital readout of "0.00".</p>	<p>AC DISPLAY SCREEN - 2 FIGURE 3</p>



Parts	Functions
6	DC5521 Input: Supports wide voltage 12V/18V car charging and solar charging(MPPT charge controller), with the maximum input 100 watts.
7	DC GX16-4 Input(1, 2 are positive; 3, 4 are negative): Support 16mm four-pin aviation plug for DC charging (29.4V 9A max)
8	AC Output Socket: when the unit is on, it can produce 110V AC output.
9	AC Output Socket: when the unit is on, it can produce 110V AC output.



### 3.2 LCD Intelligence Display

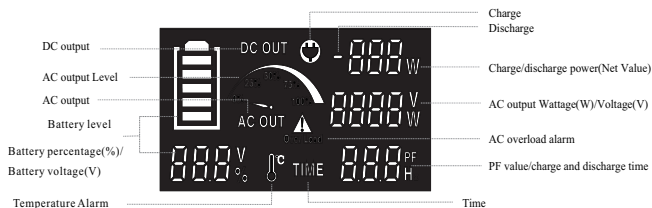


Figure 4 (Intelligence Display)

**DC output:** When the DC output is turned on, the LCD screen will display "DC OUT", and the USB ports, 12V DC Socket works.


**AC output level:** It shows the current loading percentage of the maximum AC output, 100% is fully loaded.


**AC output:** When the AC output is turned on, the screen will display "AC OUT", and it will be able to produce 110V AC output.

**Battery level:** It shows the remaining battery, each grid represents 20% of the total battery capacity; and it will flash in a marquee style during charging, and stop flashing when it's fully charged; The battery icon starts flashing when the unit has less than 10% battery, please charge the power station immediately.

**Battery percentage/battery voltage:** The power station will reserve some power to protect itself from over-discharging even the battery level drop to 0%; When the power station is loaded with high power consumption devices, the low-voltage alarm will be displayed when the battery level drop to 10%-20%, please charge the power station immediately.


**Temperature alarm:** When the temperature is too high, the power station will shut down all output and you will hear five "di" tone; The power station will resume to work when the temperature falls within its working range.

**Charge:** When the power station is charging(AC/DC), the LCD intelligence screen will display .

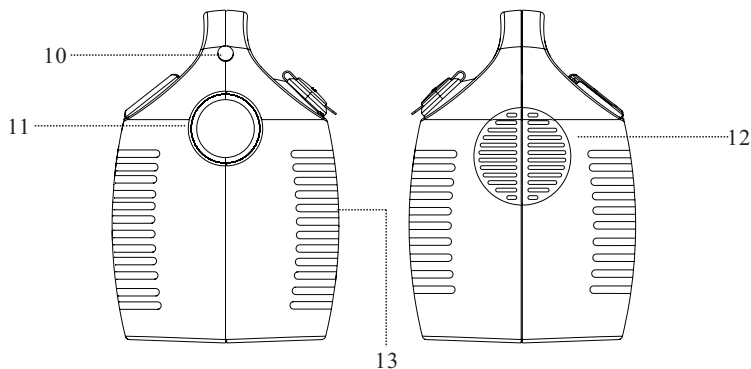
**Discharge:** The LCD intelligence screen will display  icon to indicate that there is DC output.

**Charge/discharge power:** The screen will display the net value of the input and output when the power station is being charged and discharged at the same time.

**AC output wattage/voltage:** When the AC output is on, the loaded wattage (W) and voltage (V) levels of the power station will be displayed.

**AC overload alarm:** When the total AC output exceeds the rated power(500W/600W),  "Over Load" small icon flashes, and you will hear two "beep" tone, the power station will shut down all AC outputs.

**PF value/charge and discharge time:** PF(Power Factor) expresses the ratio of the real power absorbed by the load to the apparent power flowing in the circuit; The power station displays the PF value and calculates the remaining working/charging time (in hours) according to the input and/or output power.



Parts	Functions
10	LED Lighting Switch: Press the LED lighting switch to turn on/off the light.
11	LED Light: The working power of the LED light is 2W, please do not stare directly into it when the light is on.
12	Air Vents
13	Air Vents

## 4. Using Guideline

### 4.1 Working environment

Dry	Use and store the unit only in a cool and dry environment
Temperature	0°C~45°C for charging -20°C~45°C for discharging
Ventilation	Keep the air vents at least 20cm away from any objects to prevent improper air flow
Safety	Do not store, charge or use the unit in an area exposed to flammable or corrosive gas

### 4.2 Charging:

(A) Please use Pecron original power adapter to charge, and do not leave the unit unattended while using. It is recommended to charge the power station without load to prevent excessive heating. Please plug the charger into the DC charging port first for charging. When the unit is 100% charged, the charger will still delivery a small voltage to the power station through trickle charge until the indicator turns green.

(b)When you leave the unit unused for a long period of time, make sure to charge it every 6 months. If the power station has been kept idle for a long time, please charge it to full even if the battery level shows 100%.

### 4.3 AC Output

P500/P600 portable power station support any devices with working power under its rated power. However, some appliances require extra power to start up; In general, the starting power for inductive load equipments(e.g. motor, compressor, drill, fluorescent lamps) is 3~8 times higher than its rated power. The BMS will activate the over-load protection and shut down all outputs if the total output exceeds its working power.

Operation steps:

- (1) Turn on AC output.
- (2) Check the working power of your device and ensure it's within P500/P600 rated power. You can get larger capacity and wattages power stations from [www.pecron.com](http://www.pecron.com) if P500/P600 does not meet your needs.
- (3) Plug into the AC socket and turn on your device.
- (4) Turn off the AC output after using.
- (5) Please charge your P500/P600 on time when the battery is running low.

*When the battery is running off, the total load exceeds the maximum output(500W for P500, 600W for P600), or the temperature is too high, the power station will automatically turn itself off.*

## 5. Warranty

All Pecron products come with a 12-month warranty. The warranty activate automatically since the date of receiving your Pecron.

Pecron warrants that our product to be free from defects in workmanship and material under normal consumer use during the applicable warranty period .We will not assume, nor authorize any person to assume for us, any other liability in connection with the sale of Pecron products.

Pecron will repair or replace (at our discretion) any Pecron product that fails to operate during the applicable warranty period due to defect in workmanship or material. If a valid claim is made during the applicable period, Pecron, at its option, will either(1) replace the product, or (2) exchange the product with a product that is of equal value. A replacement product assumes the remaining warranty of the original product. Customer is responsible for the return shipping costs.

Pecron warranty does not apply to following situations even it's within warranty period:

- \* Alter or disassemble the unit.
- \* Wear/tear on the out surface.
- \* Misused or abused for anything other than normal consumer use as authorized in Pecron's current product literature.
- \* Breakdown or damage caused by natural hazard beyond control (earthquake, fire, tsunami and etc.)
- \* Maintenance does not cover the packaging and accessories

We will offer paid service once warranty expired.

## Certificate of Conformity

Item and specifications: \_\_\_\_\_

Inspector: \_\_\_\_\_

Date of manufacture: \_\_\_\_\_

## Warranty Card

Item: \_\_\_\_\_ Name: \_\_\_\_\_ Date of purchase: \_\_\_\_\_

Serial number: \_\_\_\_\_ Customer: \_\_\_\_\_ Tel: \_\_\_\_\_

Address: \_\_\_\_\_ Invoice: \_\_\_\_\_

Distributor: \_\_\_\_\_ Address: \_\_\_\_\_