amber rock

PORTABLE POWER STATION

AR500 PLUS

User Manual

PYLONTECH

Information Version: 1.4
5PMPA08-00299

Legal Information

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Disclaimer

The Manual contains instructions for the use of the product. All the pictures and charts in this manual are for description and explanation only. Pylon Technologies Co., Ltd. reserves the right to change the information in the manual which is subject to change without further notice.

Please read this manual carefully before using the product and keep this manual for further reference. Failure to use the product in accordance with the manual may result in serious injuries, property damages and may void the warranty, for which Pylon Technologies Co., Ltd. shall not be liable.

Pylon Technologies Co., Ltd. makes no representations or warranties express or implied, with respect to all the information in this manual.

In the event of any conflicts between this manual and the applicable law, the latter prevails.

The final interpretation of this manual belongs to Pylon Technologies Co., Ltd.

Safety Instructions

⚠ Warning

- The device should be used in strict compliance with local laws, electrical safety regulations, and fire prevention regulations of the nation or the region.
- Do not place the device near open fire, heat sources and flammable materials.
- Do not leave the device in an extremely hot environment.
- Do not place the device in dusty or damp locations.
- Do not expose the device to high electromagnetic radiation.
- Do not mechanically crush, cut or strike the device.
- Do not shake the device.
- Do not insert any foreign objects into the device.
- Do not operate the device with wet hands.
- Keep the device out of reach of children and pets.

⚠ Caution

Operation

- Please ensure good ventilation while the device is in use.
- Do not stack heavy objects on the device.
- For safety purposes, please use only the accessory (cable, charger, and etc) supplied or recommended by Pylontech. Pylontech shall not be liable for damage caused by third-party devices.

Transportation

- Do not bring the device on a plane.

Maintenance

- Charge the device every 3 months. If you need to store the device for a long time, please charge it to 60% every time before storing it.
- Recharge the device within 12 hours after it has been fully discharged. Leaving the battery empty for a long time without charging it will cause irreversible damage to the battery.
- If the device does not work properly, please contact your supplier or the nearest service center within 24 hours. DO NOT disassemble the battery for repair or maintenance by yourself. Pylontech shall not assume any responsibility for problems caused by unauthorized repair or maintenance.

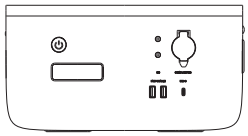
Cleaning

- Please use a soft and dry cloth to clean the exterior surfaces.

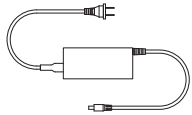
Disposal

- Dispose of used batteries according to the laws or the regulations of the nation or the region.

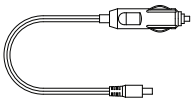
Packing List



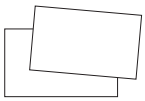
Portable Power Station



Standard Charger

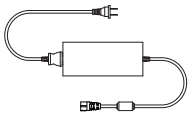


Car Cigarette Lighter Charging Cable

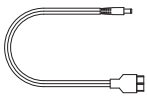


User Manual

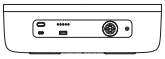
Optional Accessories



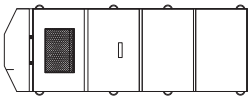
Fast Charger



PV Cable



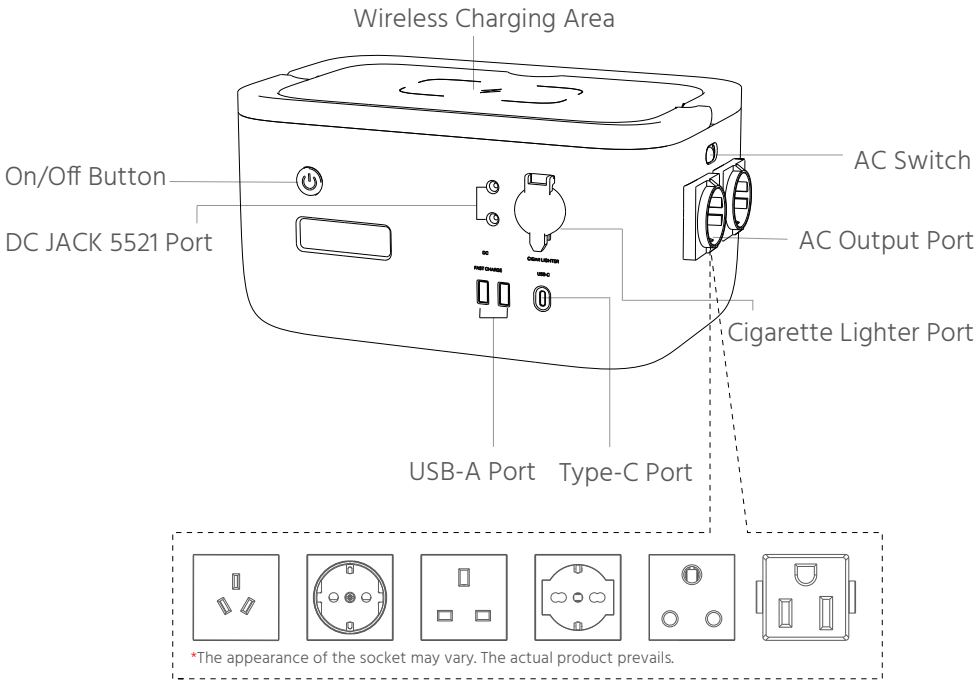
MA500
Extended Battery Pack



Solar Panel

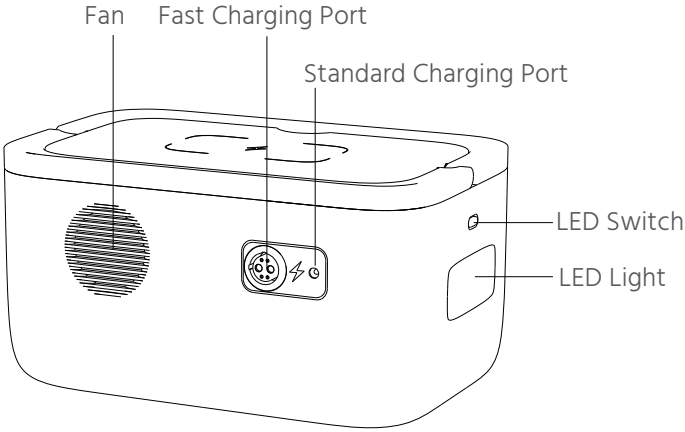
*Optional accessories shall be purchased separately. If there is any need, please contact the local supplier.

Interfaces & Functions



Function	Operation
Turn On/Off the Device	Press the On/Off button to turn on/off the device, and you can see **PYLON**TECH / **SHUTTING DOWN . . .** on the LCD screen. *Press and hold the button for 15 seconds to perform a forced shutdown. *If the total output power of all ports remains below 2 W for more than 40 minutes, and the device is not being charged during this period, the device will automatically shut down.
Power Other Devices	Wireless Charging Place a device with a wireless charging receiver on the top of the device to charge the device. *Please align the device to the center of the wireless charging area. Otherwise, the charging efficiency will be affected.
	Wired Charging/Powering Connect the device to be charged/powered to the corresponding ports with the right cables. *Available ports: DC JACK 5521 Port/ USB-A Port/Type-C Port/Cigarette Lighter Port/AC Output Port *If you want to power your device via AC output port, please turn on AC switch, and you will see on the LCD screen.

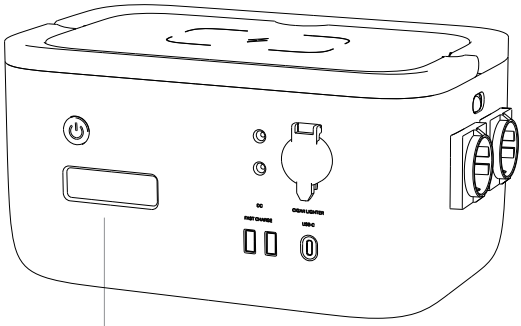
Interfaces & Functions



Function	Operation
*Charge the Battery	Standard Charging Charge the battery via the standard charging port with a charging current of 4 A.
	Fast Charging Charge the battery via the fast charging port with a charging current of 12 A.
LED Switch	• Short press the button to turn on the LED light. • Press the button again to brighten the light. • Press the button thirdly to turn on flashing mode for SOS help. • Press the button fourthly to turn off the light. • In any mode, you can always long press the button to turn off the LED light.

*The device has a charging-protection function. It will wake up and cannot be turned off when it is being charged.

LCD Display & Meaning



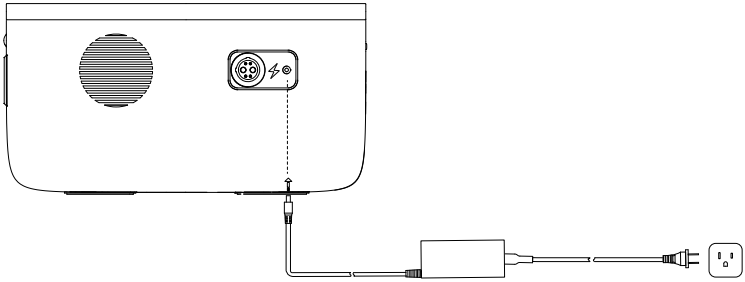
LCD Screen

LCD Display	Meaning
PYLONTECH	The battery is starting up.
SHUTTING DOWN . . .	The battery is shutting down.
50 %	SOC *The capacity of the device may be reduced at low temperatures. The actual situation prevails. *The number is for illustration only. The actual situation prevails.
70 INPUT W	Current input power. *The number is for illustration only. The actual situation prevails.
150 OUTPUT W	Current output power. *The number is for illustration only. The actual situation prevails.
	AC power is turned off.
	The extended battery pack is connected.

Charging the Battery

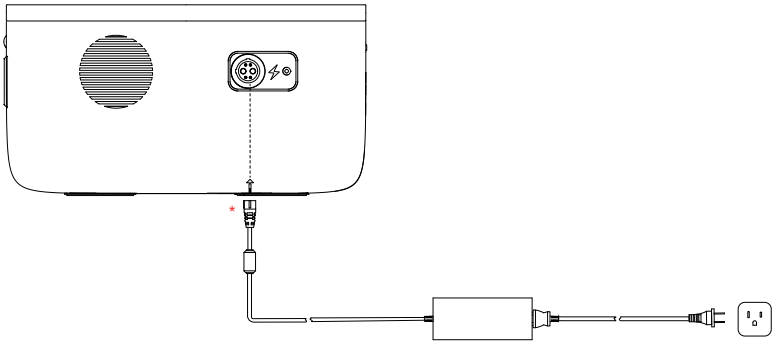
① Charging with Utility Power

Charge the battery via the standard charging port.



Standard Charger

Charge the battery via the fast charging port.

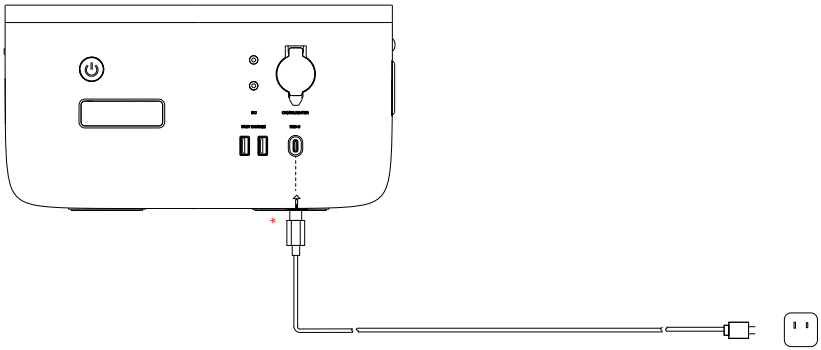


Fast Charger

*The fast charging cable shall be purchased separately.

Charging the Battery

Charge the battery via the Type-C port.

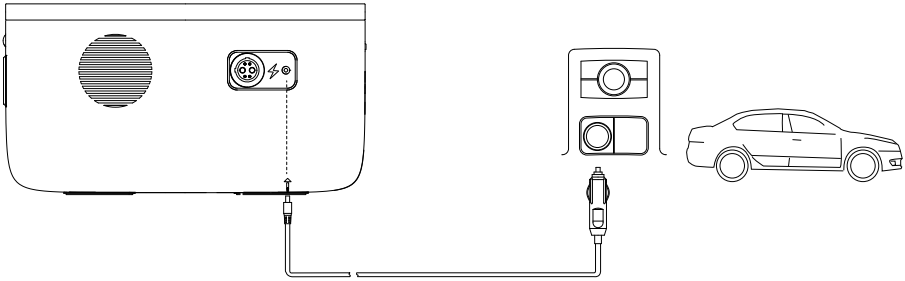


Type-C Cable

* The Type-C cable shall be prepared by yourself.
* Charging the battery via this method is not supported if the battery level is low and the LCD display shows ! BATTERY LOW or ! CHARGE FIRST at the same time.

② Charging with Car

Charge the battery with a car cigarette lighter charging cable.

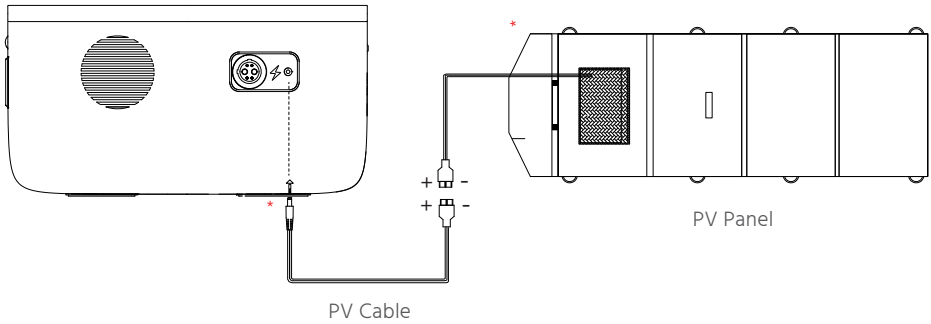


Car Cigarette Lighter Charging Cable

Charging the Battery

③ Charging with PV panel

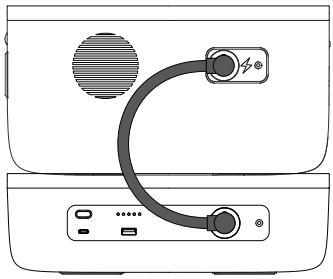
Charge the battery by connecting the standard charging port and a PV panel with a PV cable.



* The PV panel and PV cable shall be purchased separately.

Capacity Expansion

Connect the expansion pack to the portable power station to expand the capacity.



* When the extended battery pack is connected, you can see on the LCD screen.

Specifications

Battery	
Capacity	473 Wh (37 Ah)
Type	$LiFePO_4$
Charging	
Standard Charging Port	11 VDC ~ 28 VDC/Max. 4 A
Fast Charging Port	14.5 VDC ~15 VDC/Max. 12 A
Type-C Port	Max. 20 VDC/5 A
Max. Charging Current	15 A
AC Output	
Max. Output Power	500 VA
Output Voltage	230 VAC/120 VAC/100 VAC ± 5%
Output Frequency	50 Hz @230 VAC 60 Hz @120 VAC/60 Hz @100 VAC
Overload Capacity	1.1 times overload for 15 s (@230 VAC) 1.1 times overload for 5 s (@100 VAC & 120 VAC)
Cigarette Lighter	
Max. Current	10 A
Over-Current Protection Threshold	12 A
DC-JACK	
Max. Current	2 Ports, 5 A in total
Ports Number	1 Group × 2 Ports
USB	
Connection	USB-A × 2 Type-C × 1
Output Voltage	USB-A: 5 VDC/9 VDC/12 VDC/20 VDC Type-C: 5 VDC/9 VDC/12 VDC/15 VDC/20 VDC
Input Voltage	Type C: 5 VDC/9 VDC/12 VDC/15 VDC/20 VDC
Max. Output Current	3 A
LED Lighting	
Lightning Mode	Strong light mode, weak light mode, SOS helping mode

Specifications

Wireless Charging	
Output Power	5 W/7.5 W/10 W/15 W
Field strength	80.85 dBuv/m@3 m (only for CE)
Frequency	110 kHz~148 kHz
Foreign Object Identification	Support
Structural Information	
Dimension	11.93 in × 7.8 in × 6.3 in (303 mm × 198 mm × 160 mm)
Net Weight	Approx. 13.67 lbs (6.2 kg)
Protection Class	IP20
Cooling	Forced Air Cooling
Environmental Specifications	
Charging Temperature	41 °F ~ 104 ˚F (5 °C ~ 40 ˚C)
Discharging Temperature	5 °F ~ 104 ˚F (-15 °C ~ 40 ˚C)
Storage and Transportation Temperature	Short term: -4 °F ~ 140 °F (-20 ˚C ~ 60 ˚C) Long term: 68 °F ~ 77 °F (20 °C ~ 25 °C)
Humidity	0% ~ 85% (non-condensing)
Max. Altitude	≤ 6562 ft (2000 m)

Troubleshooting

LCD Display	Reason/Meaning	Solution
!	AC Protection • Overload output power • Excessive temperature inside the interface	• Disconnect the device. • Use the interface after it has cooled to the proper temperature. After the problem is solved, please turn on AC switch again to restore AC interface output.
!	Cigarette Lighter Interface Protection • Overload output power	Disconnect the device and tap On/Off button once to restore the Cigarette Lighter Interface output.
!	High/low temperature. Charging failed.	Wait for the device temperature to return to operating temperature. For specific temperatures, see the specification. *After the problem is solved, please turn on AC switch again to restore AC interface output if you want to use AC interface.
!	High/low temperature. Discharging failed.	Wait for the device temperature to return to operating temperature. For specific temperatures, see the specification. *After the problem is solved, please turn on AC switch again to restore AC interface output if you want to use AC interface.
!	**BATTERY LOW**	Low power. Shut down after 30 seconds.	Charge the device via the standard charging port or the fast charging port. *Charging the device via type-C port is not supported when the symbol shows.
!	**CHARGE FIRST**	Discharging stopped due to low power. Entering the self-charging mode.	Charge the device via the standard charging port or the fast charging port to at least 30%. *After the problem is solved, please turn on AC switch again to restore AC interface output if you want to use AC interface. *Charging the device via type-C port is not supported when the symbol shows.
!	Mismatched Charger	Please use the charger provided or recommended by Pylontech.

Troubleshooting

!	**CHG OVERCUR**	Charging Overcurrent	Disconnect the charger. Restart the device after ensuring that the charging current is less than the maximum charging current of the device.
!	**DSG OVERCUR**	Discharging Overcurrent	Disconnect the device to be charged. Restart the device after ensuring that the discharging current of each interface is less than its maximum current.
!	**POWER PROTECT**	Power Protection Total output power exceeds rated power.	Disconnect the device to be charged. Restart the device after ensuring that the total output power is less than the rated power.
!	⊗	Hardware Failure	Turn off the device and contact after-sales personnel.

FAQ

Why does the device restart automatically after a successful shutdown?

Please check if the device is being charged.
The device has a charge protection function. The device will wake up once charged. Please disconnect the charging cable if you want to turn off the device.

Why does LCD display show the AC protection symbol after being connected to a device whose rated power is less than 500 VA?

The actual power or peak power of some electrical devices (eg. electric fans, drills, air conditioners or devices with built-in switching power supply) when they are running is higher than their rated power.

Cigarette lighter interface is not working?

The cigarette lighter interface has over-current and short-circuit protection. If the protection is triggered three times in a row, the cigarette lighter interface will stop working.
Please check if the load of the cigarette lighter interface is normal, and restart the device.

All ports are not working after power protection is triggered due to the use of high power devices?

When the total output power exceeds the rated power, the device triggers power protection and disables the function of all ports.
Please make sure that the total power connected to the device is less than the rated power of the device, and then restart the device to restore the port functions.

Regulatory Information

FCC Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: —Reorient or relocate the receiving antenna. —Increase the separation between the equipment and receiver. —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. —Consult the dealer or an experienced radio/TV technician for help.

RF Exposure Statement

This equipment complies with radio frequency exposure limits set forth by the FCC for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the device and the user or bystanders.

The FCC certification of this device refers to RF exposure testing performed in typical operating conditions, where a person is no closer than 20 centimeters from the device surface at all times, except for non-repetitive patterns with transient time intervals in the order of a second. Only in the stated conditions, the device is shown to fully comply with the FCC RF Exposure requirements of KDB 447498.

Caution!

Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

EU Declaration of Conformity

Hereby, Pylon Technologies, Co. Ltd. declares that the radio equipment type wireless charger(AR500 PLUS) is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address:
https://en.pylontech.com.cn/

WARRANTY

User

Name: _____

Tel.: _____

E-Mail: _____

Post Code: _____

Address: _____

Product

Model : _____

Serial No.: _____

Seller

Name: _____

Tel.: _____

Purchase Date: _____

Thank you for your purchase from Pylontech. Please read the user manual carefully and make sure you are familiar with the instructions before use.
When a fault occurs, please contact the local distributor or send an email to service@pylontech.com.cn.

For more information, please scan the following QR code to visit Pylontech website.

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