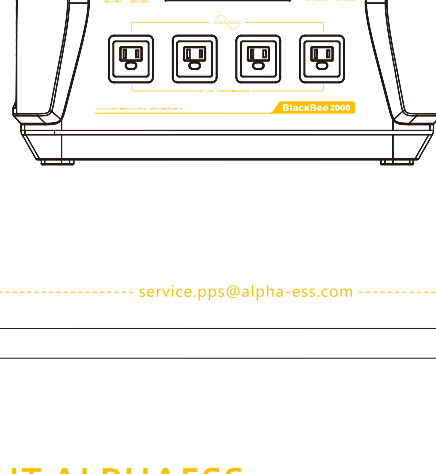


USER MANUAL

BlackBee2000



If in need of service, feel free to contact us.

www.alphaess-pps.com
service.pps@alpha-ess.com
@AlphaEnergyStorageSystem

service.pps@alpha-ess.com

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service.pps@alpha-ess.com

ABOUT ALPHAESS

Thank you for purchasing an AlphaESS BlackBee2000 portable power station. Hope you have a great time.

AlphaESS is one of the leading energy storage solution and service providers in the globe. The company specializes in the residential and commercial market, aiming to deliver the most cost-effective and fit-for-purpose solutions. AlphaESS has 10+ subsidiaries providing local services and 60,000+ systems actively running in over 60 countries, enabling millions of people to live with reliable, accessible and clean energy.



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I WARNING & ATTENTION

WARNING

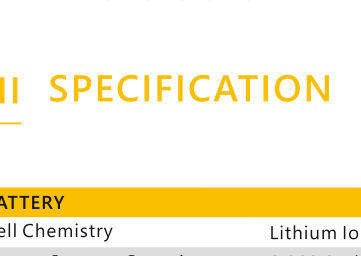
- Do not put the unit in a high temperature environment, or explode in the sun.
- Do not place the unit in water or rain outdoors.
- Do not place the unit on its side or upside down when in use or storage.
- Do not use the unit in an environment outside the scope of the use environment.
- Do not use the unit if the power cord is damaged or broken.
- Do not let children use the unit. Keep the unit away from children and pets.
- Do not recharge the unit via power supply systems that operate outside of 100-120V.

ATTENTION

- Keep the power vents open.
- Do not cover this product with objects, such as towels, clothing during use.
- Turn off any output ports (AC/DC/USB) that are not being used in order to conserve power.
- Use the original or certified charger and cables.
- Non-technical professionals should not disassemble the unit.
- Not permitted on aircraft.
- To preserve the battery lifetime, please use and recharge at least every 3 months.

01

II PACKAGE LIST



Power Station*1



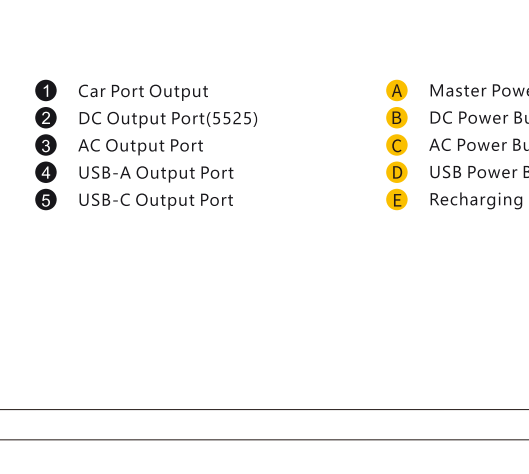
AC power cable*1
Warranty card*1
User manual*1

III SPECIFICATION

BATTERY	
Cell Chemistry	Lithium Ion
Energy Storage Capacity	2,203.2Wh
Lifecycles	> 1000 cycles
Shelf-life	Up to 6 months after full charge; re-charge every 3 months
Wattage Compatibility	Total Output: 2040W AC: 1600W Continuous, 3000W peak DC: 440W in total

02

IV PRODUCT TOUR & FUNCTIONS



- 1 Car Port Output
- 2 DC Output Port(S525)
- 3 AC Output Port
- 4 USB-A Output Port
- 5 USB-C Output Port
- 6 Master Power Switch
- 7 DC Power Button
- 8 AC Power Button
- 9 USB Power Button
- 10 Recharging indicator

Battery Management System (BMS)	Input undervoltage protection, Output over voltage protection, Overload protection, Short circuit protection, Overtemperature protection
---------------------------------	--

INPUT PORTS

DC(Solar) INPUT(Anderson*2)	11V-45V, 10A/300W MAX each
	100-120V

OUTPUT PORTS

USB Port(6)	USB-C*2, PD60W each(5V~3A; 9V~3A; 12V~3A; 15V~3A; 20V~3A) USB-A*4, QC3.0 36W each(5V~3A; 9V~3A; 12V~3A; 15V~2.4A; 20V~1.8A)
-------------	--

DC Port(S525)(2)	12V~5A; 12V~3A
Car Port(1)	12V~10A
AC Port(4)	110VAC, 60Hz, Pure Sine Wave 1600W Continuous, 3000W Peak
Wireless Charging(2)	10W*2

GENERAL INFO

Dimensions(LxWxH)	17.2*13.4*11.4 inch(438 x 340 x 283 mm)
Weight	48.5lbs(22kg)
Recharging Temperature	14~113 F(-10~45 C)
Operating Temperature	14~113 F(-10~45 C)
Certification	FCC, CE, RoHS, UN38.3, MSDS, PSE, RCM
Warranty	24 months

03

V CHARGE & RECHARGE

WARNING SYMBOL DISPLAY

IF YOU OPERATE THE POWER STATION IN AN IMPROPER WAY, THERE WILL BE APPEARING SYMBOLS ON LCD SCREEN.

When the input voltage of recharging is too high or too low, this symbol will be displayed and the input charging will be paused. Please press the Master Power Switch(A) to restart your BlackBee2000. If the symbol still exists, please contact customer support for further solutions.

This symbol indicates your BlackBee2000 is under overload protection. Disconnect the output load to release the protection and the symbol will disappear.

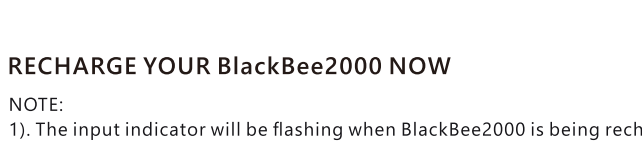
This symbol on display means the wireless charging is powered on. And if it is flashing, it means the wireless charging is malfunctioning. Please check the wireless charging panel or restart the wireless charging.

This symbol indicates that the product is in a low power state(less than 20%). Please kindly charge it to 100% and then use it.

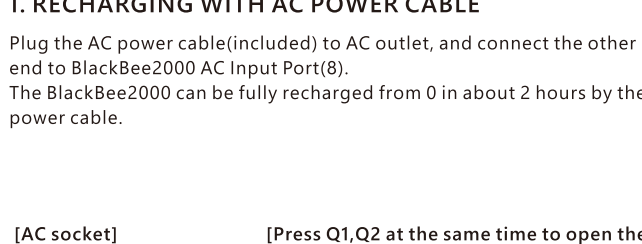
This symbol indicates that the device is under high-temperature(Red icon) or low-temperature (Blue icon) protection and the protection will be released if the icon does not display.

BATTERY SYMBOL DISPLAY

0%-20%	21%-40%	41%-60%	61%-80%	81%-100%
--------	---------	---------	---------	----------



- 1 Wireless Charging
- 2 Cable Storage Box
- 3 AC Input Port
- 4 PV Input Port(Anderson)



- 1 Info Display LCD
- 2 Power Input
- 3 Energy Output
- 4 Power Remaining(Percentage)
- 5 Recharging Time Remaining
- 6 Discharging Time Remaining
- 7 AC Input
- 8 Solar Input
- 9 AC Output
- 10 DC Output
- 11 USB Output

05

V CHARGE & RECHARGE

2. RECHARGING FROM SOLAR PANEL

IMPORTANT NOTICE: Please notice that the BlackBee2000 input voltage is 11-42V, and there are 2 Anderson input ports. The max input wattage of each input port is 300W.

- Place your solar panel where it can get as much direct sunlight as possible.
- Connect the solar panel into the Solar Input Port(9). You will know the BlackBee2000 is recharging when the indicator is flashing.
- Two separate solar panels can be connected to BlackBee2000 and they can work well simultaneously.

[Press Q1, Q2 at the same time to open the cover]



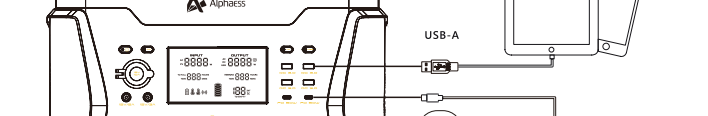
HOW TO RECHARGE

RECHARGE YOUR BlackBee2000 NOW

NOTE:
1). The input indicator will be flashing when BlackBee2000 is being recharged.
2). Once fully recharged, the energy remaining(%) will be 100%.
3). It is recommended to be recharged every 3 months.

1. RECHARGING WITH AC POWER CABLE

Plug the AC power cable(included) to AC outlet, and connect the other end to BlackBee2000 AC Input Port(8). The BlackBee2000 can be fully recharged from 0 in about 2 hours by the AC power cable.



07

WHAT CAN IT POWER

IMPORTANT NOTICE

Press the Master Power Switch(A) first and then press the AC/DC/USB power button to activate its power/function. Make sure to switch the output off if there is no device connected. It can be switched off separately by the AC/DC/USB button or the Master Power Switch(A).

1. OUTPUT FROM USB-A, USB-C PORTS

SWITCH ON: Press the Master Power Switch(A) first and then press the USB Power Button(D) to activate power to the USB ports, connect the standard USB cable of the device to the interface. The BlackBee2000 will provide power for the device.



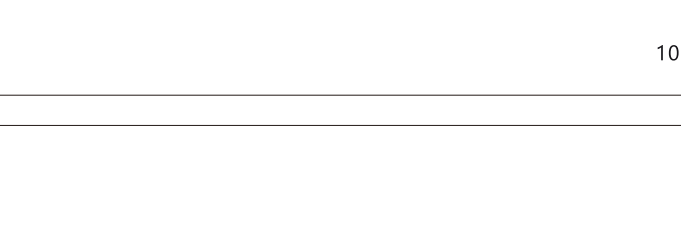
09

2. OUTPUT FROM AC PORTS

SWITCH ON: Press the Master Power Switch(A) first and then press the AC Power Button(C) to activate power to the AC devices ports, connect the plug of the power cord of the device to the AC output of the power station.

IMPORTANT NOTICE

If the AC output short-circuits or the load's power consumption exceeds the AC output power of BlackBee2000, it will trigger the short circuit protection or overload protection. Please disconnect the load, and reset the AC output power by pressing the Master Power Switch(A) first and pressing the AC Power Button(C).



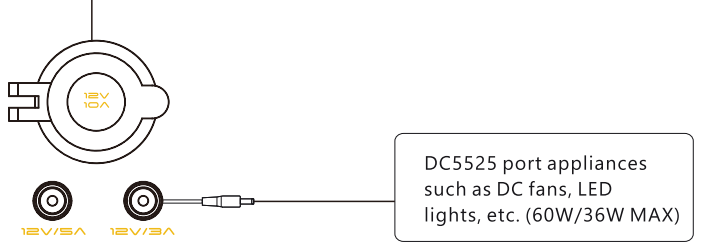
Please check the power consumption of your device and make sure it is under 1600W.

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3. OUTPUT FROM DC PORTS

SWITCH ON: Press the Master Power Switch(A) first and then press the DC Power Button(B) to activate power to the DC device ports, before connecting the device to the DC output of the power station.

Make sure the interface of DC 12V device is a DC5255 male connector, with an outer diameter power plug of 5.5mm. And the output of DC ports are 12V=5A, 12V=3A.



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4. WIRELESS CHARGING

SWITCH ON: Press the Master Power Switch(A) first and then press the DC Power Button(B) to turn on the wireless charging, then put your devices(with wireless charging function) on the appointed area.

BATTERY MANAGEMENT SYSTEM(BMS)

It is an electronic system that manages the charging of battery to ensure safety, including input under voltage protection, output over voltage protection, overload protection, short circuit protection, over current protection, over temperature protection.

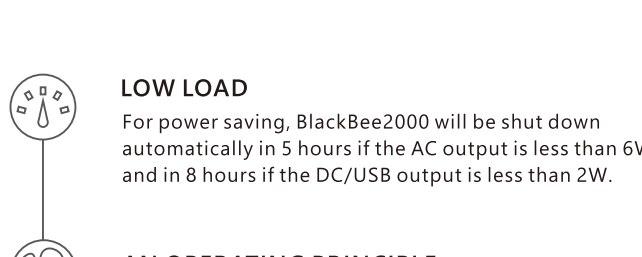
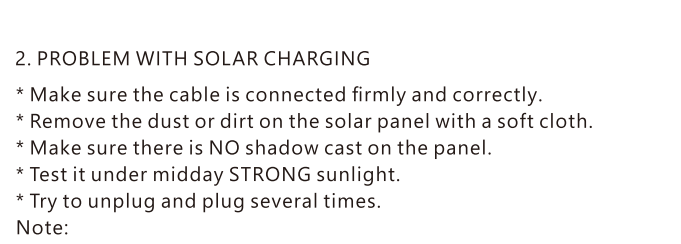
VI USE TIPS

FIRST USE

It will take a few seconds to activate when the first time BlackBee2000 is connected with a power source device (Wall outlet or solar panel).

ENERGY CONSUMPTION TIP

When power is converted via the inverter, there is some energy loss.



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2. PROBLEM WITH SOLAR CHARGING
* Make sure the cable is connected firmly and correctly.
* Remove the dust or dirt shadow on the solar panel with a soft cloth.
* Make sure there is NO direct sun on the panel.
* Test it under midday STRONG sunlight.
* Try to unplug and plug several times.
Note:
Test if the power station can be recharged via the AC Power normally, if yes, please check if something is wrong with the solar panel.

3. PROBLEM WITH OUTPUT(AC/DC/USB/LCD SCREEN)

* Try RESETTing the power station by holding the Master Power Switch(A) for 15 seconds.
* Recharge the power station to 100% and test it again.

VIII FAQ

Q1: What devices can BlackBee2000 power?
A: Please note that the total output of BlackBee2000 is 2040W (AC 1600W and DC 440W), which means it can power any AC devices under 1600W.

Q2: Can the BlackBee2000 be recharged while using?
A: Yes, but please note BlackBee2000 only supports pass-through charging while it is charged by the solar panel.

LOW LOAD
For power less, BlackBee2000 will be shut down automatically in 5 hours if the AC output is less than 6W, and in 8 hours if the DC/USB output is less than 2W.

AN OPERATING PRINCIPLE
The fan will run automatically when cell temperature is higher than 104°F/40°C.

BATTERY RECYCLE
Always return used electronics, batteries, and packaging materials to dedicated collection points.

VII TROUBLESHOOTING

1. PROBLEM WITH INPUT(AC)

* Make sure the ORIGINAL AC power cable is connected firmly and correctly.
* Check if the charging indicator is ON.
* Check if the LCD shows INPUT WATTS.

* Check if the power station can be recharged via the AC Power cable normally.

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Q10: Can the battery inside be replaceable?
A: No, the batteries inside of AlphaESS power station are not replaceable.

More questions, please kindly find the answer in the following way:
1. Go to www.alphaess-pps.com
2. Click the "Support", and then choose "FAQs"

IX WARRANTY

WARRANTY PERIOD

The warranty period is 24 months. In each case, the warranty period is measured starting on the date of purchase by the original consumer purchaser. The sales receipt from the first consumer purchase, or other reasonable documentary proof, is required in order to establish the start date of the warranty period.

AFTER-SALES SERVICE

AlphaESS will repair or replace(at AlphaESS's option) any AlphaESS 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, AlphaESS, at its option, will either(1) replace the product, or(2) exchange the product with a product that is of equal value.

NOT APPLICABLE CONDITIONS

AlphaESS's warranty does not apply to:
1). Any product that has been misused, abused, modified, accidentally

Q3: Can the BlackBee2000 be used as UPS?
A: No, the BlackBee2000 can't be used as UPS.

Q4: How to know the working time for my device?
A: Working time = 2203.2Wh* 0.9/power consumption of your device.

Q5: Does the BlackBee2000 include a built-in MPPT controller?
A: All AlphaESS power stations have built-in MPPT controller.

Q6: How do I know the BlackBee2000 is recharged?
A: The input indicator will be flashing when the BlackBee2000 is being recharged or you can check if the LCD screen shows the input watts.

Q7: Why it takes so long to recharge the power station from the 90% to 100%?
A: When the power station is charged at low power, the charging power is the largest. With the increase of the power, the internal battery pack voltage of the energy storage gradually increases to the charging limit voltage and then enters the trickle charging stage with a lower charging rate, which can protect the battery from high current impact to damage the internal structure, so the charging speed will slow down.

Q8: Can I find any video about recharging the BlackBee2000?
A: Please kindly check the video in the following instructions:
1. Go to www.alphaess-pps.com
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3. Check "Product Video"

Q9: Is the voltage of the output ports regulated?
A: Yes, the voltage of the output ports in AlphaESS power stations is regulated. The voltage won't change when the battery power decreases.

15

Q10: Can the battery inside be replaceable?
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