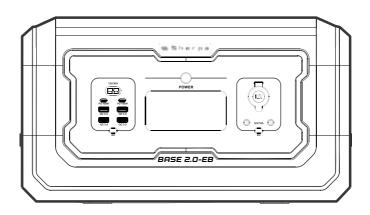


# BASE 2.0-EB



Please read the user manual thoroughly before using

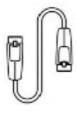
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# **BOX CONTENTS**



BASE 2.0-EB



Extra Battery Link Cable



**User Manual** 

# **PRODUCT SPECIFICATIONS**

# **OUTPUTS**

DC12V & Car Auxiliary Output	Rated Voltage	oltage 12V	
	Rated Power	120W	
USB-A Output	5V/3A; 9V/2A; 12V/1.5A (18WMax)		
USB-C Output	5V/3A; 9V/3A; 12V/3A; 15V/3A; 20V/5A (100W Max)		
Anderson Output	12V, 30A (350W max)		

# **INPUTS**

PV Input (Anderson) (12~150V DC) MPPT:18V-140V 15A Max 2100W Max
--

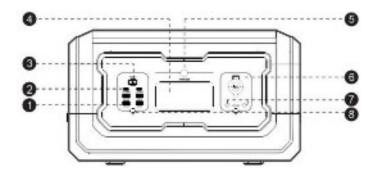
# **BATTERY**

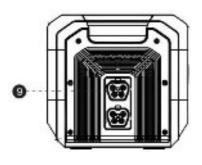
Rated Capacity	2048Wh
Rated Voltage	51.2V DC
Battery Type	LiFePO4

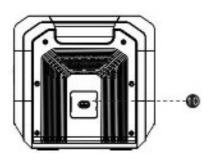
# **GENERAL**

IP Grade	IP21	
Working Temperature	<b>0~40</b> °C	
Dimensions	460 x 270 x 305 mm	
Net Weight	19kg	

## **FUNCTION OVERVIEW**



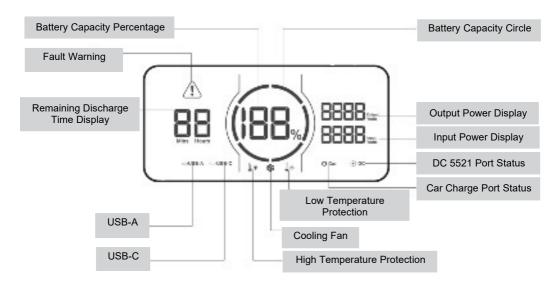




- 1. USB-A Output Port
- 2. USB-C Output Port
- 3. Anderson Output Port
- 4. LCD Screen
- 5. Main Power On/Off
- 6. 12V Car Auxiliary Output Port

- 7. DC 5521 Output Port
- 8. DC Output Power On/Off
- 9. Extra Battery Cascade Port
- 10. Anderson Input Port

#### **DISPLAY OVERVIEW**



#### **OPERATION INSTRUCTIONS**

## Powering the power unit ON/OFF:

Long press the main power button once to turn the BASE 2.0-EB ON. No outputs will be activated, just the display. Press and hold the main power button for at least 3 seconds to turn the power OFF.

# Display Sleep Mode:

Quick press the main power button to turn off the LCD display to save energy but keeping the unit ON. Quick press again to wake the LCD display up. After 5 minutes, the LCD automatically goes to sleep while the unit is not in use.

## Selecting 12V DC Outputs:

When the unit is powered ON, quick-press either DC buttons on the desired panels to activate the outputs. The left panel outputs Anderson and USB ports, while the right panel outputs auxiliary car port and 5521 ports.

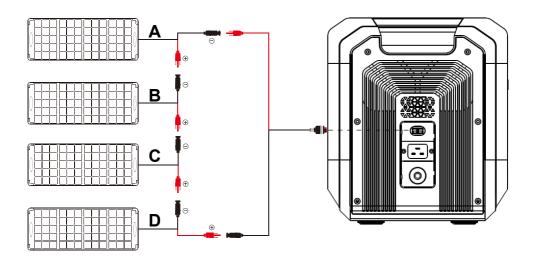
Unit Sleep Mode:

The BASE 2.0-EB will enter sleep mode after 12 hours if not in use or with loads connected to save battery energy.

#### **CHARGING**

#### **Solar Charge Configuration:**

Connect the solar panels to the Anderson input on the side of the unit by using the supplied Anderson to MC4 cable. Multiple solar panels can be connected in series or parallel to achieve the desired input (which should be within the specified 12-150V range). Maximum power input is 2100W, which will charge the unit in one hour.



**Important:** Series wiring combines voltages A, B, C and D. Do not exceed the total Voc limit of 150V or you can damage the MPPT. This can be measured using a voltmeter.

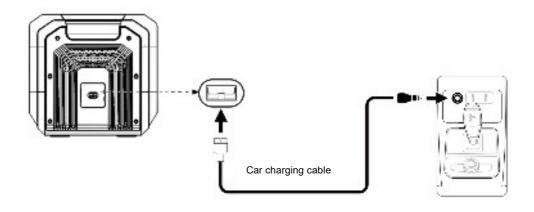
## Charging by Vehicle.

## **Standard Charging:**

Use the 12V auxiliary car charger port in your vehicle to charge via the supplied cable. Please start the engine **before** connecting the cable or you can risk running your starter battery flat. Ensure both cable ends are connected properly for and observe the display to confirm the power input (100-120W).

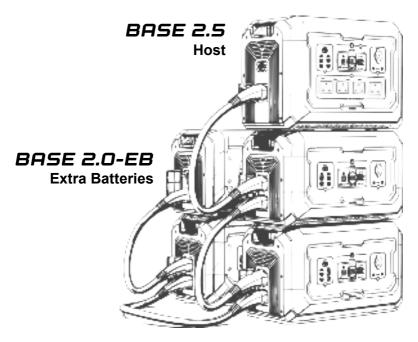
## **CHARGE-500 Smart Charging:**

- 1. Follow the CHARGE-500 installation setup.
- 2. Connect the MC4 connectors to the unit via the MC4 to Anderson cable provided (into the solar/Anderson port).
- 3. Start the vehicle and ensure the CHARGE-500 is ON to receive up to 500W input.



## Cascading with a Host (BASE 2.5)

Up to 15 extra BASE 2.0-EB can be connected to a BASE 2.5 by following the instructions below. All linked units will charge in tandem via the host unit from mains AC, vehicle or solar.



## **Cascading Procedure:**

- 1. Please make sure that both the host and any extra batteries are turned OFF before connecting.
- 2. After the host is connected to all extra batteries, long-press the main power button on any unit to power all units simultaneously.
- 3. Do not connect or remove any link cables during the charging and discharging process or while units are ON. Always power all units OFF before disconnecting or connecting the link cables.
- 4. Do not touch or put any conductive items in contact with the cascade ports.

**Note:** Ensure the ports are covered when not in use and that they do not get dirty. Failure to follow the correct procedures can result in damage to the unit.

## FREQUENTLY ASKED QUESTIONS

- Q1. What type of battery does the product use?
- A1. It uses high-quality lithium iron phosphate batteries (LiFePO4).
- Q2. How long can the product charge or run my devices?
- A2. The remaining energy time is shown on the product's LCD display, which is more accurate when appliances using a constant power are used.
- Q3. How do I know if the product is charging?
- A3. The input power is shown in Watts on the LCD display. The circular charging indicator icon rotates to indicate charge activity.
- Q4. How do I clean the product?
- A4. Wipe it with a dry, soft, clean cloth.
- Q5. How to store the product?
- A5. Please charge fully then turn off the BASE 2.0-EB and store it in a dry, ventilated place at room temperature. Do not place it near water sources.
- For long-term storage, please discharge and charge it every three months to extend its battery life.
- Q6. Can this product be transported by plane?
- A6. No, it is classed as dangerous goods and must be shipped by sea and land only.

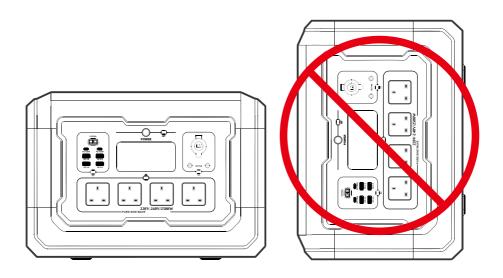
# **FAULT CODES AND TROUBLESHOOTING**

Code	Description	Symptom	Trouble Shooting
E007	PV input over-voltage and low voltage protection	No solar charging via Anderson port available	Check the Voc of your panel set up using a voltmeter. It will recover automatically when the input voltage meets the input voltage range
E008	12V 30A overload short circuit protection	Flashing, no DC output	Remove the load and reset the DC output using the DC ON/OFF button
E009	24V auxiliary power overload short circuit alarm	The DC board reports a fault, but does not turn off the output	Reduce the load on the DC port
E010	Auxiliary car port overload and short circuit	Flashing, no DC output	Manually press the DC power button to recover and remove the load
E011	USB-A port overload and short circuit	Flashing, no DC output	Manually press the DC power button to recover and remove the load
E012	USB-C port overload and short circuit	Flashing, no DC output	Manually press the DC power button to recover and remove the load
E013	Battery low voltage protection during DC discharge	No DC output	The unit needs more charge to run DC outputs
E014	PV charging over-temperature	Solar charging disabled	Allow the unit to cool down before using it again
E015	Anderson 30A output over-temperature	Flashing, no DC output	Remove the load and reset the DC output using the DC ON/OFF button.
E020	BMS communication failure	Flashing, no output	Call support for help
E021	Internal voltage fault	F021 code flashing	Set the device aside and wait for the battery voltage to recover automatically
E022	Single cell of the battery has low-voltage	E022 code flashing	Discharge and charge fully to balance cells
E023	Internal over-voltage	E023 code flashing, but does not turn off the output	Set the device aside and wait for the battery voltage to recover automatically
E024	Internal low-voltage	Flashing, no output	Discharge and charge fully to balance cells

Code	Description	Symptom	Trouble Shooting
E025	Battery cell over-temperature	Flashing, no output	Allow the unit to cool down before using it again
E026	Battery cell low-temperature	Flashing, no output	Allow the unit to warm up slowly before using it again
E027	System overload	The AC icon flashes, AC output disabled. DC and AC combined load is higher than 2600W	Manually press the AC power ON/OFF button to reset
E028	Charging over-temperature	Flashing, not able To charge	Allow the unit to cool down before using it again
E029	MOS over-temperature	Flashing, no output	Allow the unit to cool down before using it again
E030	Incompatible Extra Battery	The Extra Battery or host are not linking	Ensure you are linking either BASE 2.5 or BASE 3.6 to the BASE 2.0-EB

#### STORAGE AND MAINTENANCE

- 1. Please store the product away from moisture, in a dry, ventilated place.
- 2. To prolong the life of the battery, we recommend using or storing this product at temperatures between 20  $^{\circ}\text{C}$  and 30  $^{\circ}\text{C}$
- 3. For long-term storage, we recommend discharging the battery to 30% every three months and recharging it to 60% to sustain the battery life. If left discharged for more than 6 months, it may enter deep-discharge and will not be covered under warranty.
- 4. For safety, do not store this product in extreme temperatures (above 45°C or below -10°C) for a long time.
- 5. Over longer periods, please store the unit horizontally as shown.



## WARRANTY EXCLUSIONS

- 1. Misused, abused, damaged by accident or damaged due to force majeure (e.g. lightning strikes, hurricane, floods, etc.).
- 2. Unauthorised modification, repair, dis-assembly or operation not in accordance with the official instructions or manuals.
- 3. Any defects or damages caused by reliability or compatibility issues when using unauthorised third-party parts.
- 4. Purchase from unauthorised resellers.
- 5. Use for special applications other than normal consumer use.
- 6. Lost, stolen or fully refunded product.
- 7. Any defect or damage caused by exposure to excessive heat, cold, liquids or other external causes.
- 8. Invalid proof of purchase.
- 9. Warranty period expired.
- 10. The battery model on the warranty certificate does not match the actual item.
- 11. Unauthorised alteration on the warranty certificate.
- 12. Product wear and tear from general use.

#### **DISCLAIMER**

Read this user manual carefully before using the product to ensure that you completely understand the product and can correctly use it. After reading this user manual, keep it safe for future reference. Improper use of this product may cause serious injury to yourself or others, or cause product damage and property loss. Once you use this product, it is deemed that you understand, approve and accept all the terms and content in this document. Sherpa Tek Ltd is not liable for any loss caused by the user's failure to use this product in compliance with this User Manual.

In compliance with laws and regulations, Sherpa Tek Ltd reserves the right to final interpretation of this document and all documents related to this product. This document is subject to changes updates, revisions, or termination) without prior notice. Please visit the official website to obtain the latest product information.

Please read our warranty exclusions on Page 12 for our terms and conditions.

#### **DISPOSAL**

- 1. When conditions permit, please be sure to completely discharge the battery of this product, and then put the product in the designated battery recycling box. This product contains batteries which contain dangerous chemicals and are strictly prohibited from being disposed of in general waste. For details, please follow local laws and regulations on battery recycling and disposal.
- 2. If the battery cannot be completely discharged due to the failure of the product itself, please do not dispose of the battery directly in the battery recycling box, and contact a professional battery recycling company for further advice.
- 3. The battery can enter a deep discharge state if left to drain over a long period and will no longer be able to accept charge, please dispose of it according to current waste regulations.

CUSTOMER SUPPORT: support@sherpapower.co.uk
www.sherpapower.co.uk
Sherpa Tek Ltd.



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