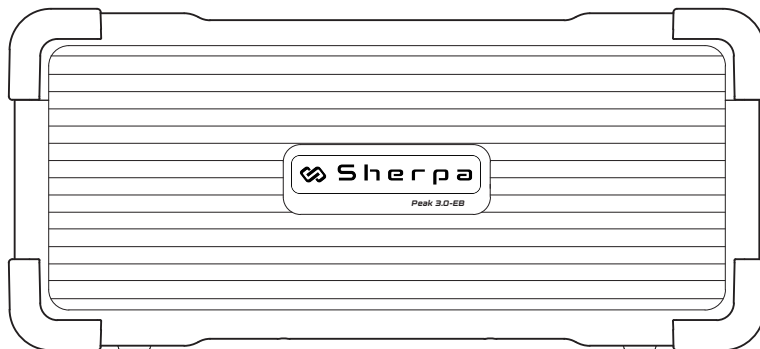




Sherpa

# *Peak 3.0-EB*






**Please read the user manual thoroughly before using**




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## BOX CONTENTS

		
PEAK 3.0-EB *1	Output adapter from XT60 to Aux and 5525 port *1	MC4 solar charging cable (LSMC4-5GX16) *1


			
MJ32 cascade cable *1	Input cable to 5521 connector *1	Anderson adapter cable *1	Car charge cable to GX16MF-5 connector *1

			
12V Alligator Clips *1	Corner protector *6	Metal fixing plate *6	Screw *6


## SPECIFICATIONS

					
Capacity	Battery Type	Protections	Temperature	Dimension	Net Weight
3072Wh (240Ah)	LiFePO4 Battery Retains 80%+ Original Capacity At 3500 Cycles	Over-Voltage, Overheat, Overload, Short-Circuit, Self-Recovery	0°C~45°C/32°F~113°F (Charging) -20°C~45°C/-4°F~113°F (Discharging)	L441*W312*H200 mm	26kg



## OUTPUT SPECS

		
XT60 Output *1	USB-A *1	USB-C *1
DC 12V-30A	(5V,9V,12V, Max 18W)*1	(5V,9V,12V,20V, Max 100W)*1

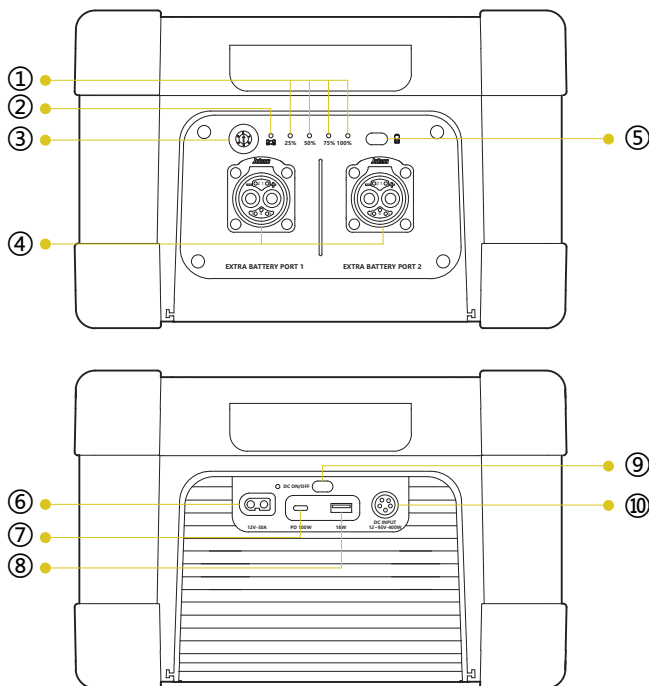
## INPUT SPECS


GX16MF-5 *1
DC Charging (12V-95V) Max 400W Max 15A

## EXPANSION

 
Expansion Port *2
To cascade with host units and extra batteries

## FUNCTION OVERVIEW



- ① LED Capacity Indicator
- ② Cascading Status
- ③ Battery Identification Dial
- ④ Battery Expansion Port

- ⑤ Capacity Display Switch
- ⑥ DC12V XT60 Output
- ⑦ USB-C Port
- ⑧ USB-A Port

- ⑨ DC ON/OFF
- ⑩ DC 12V-95V Charging Port

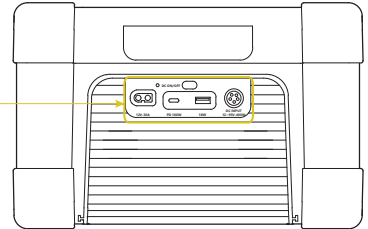
## HOW TO USE THE PEAK 3.0-EB


**Important:** On first use of your Sherpa product, please run one full cycle of the battery to condition the cells and calibrate the Battery Management System. This will also improve accuracy on the display screen.

○ DC ON/OFF 

Long press to turn DC on/off (for USB/XT60 12V power)

○ DC ON/OFF 

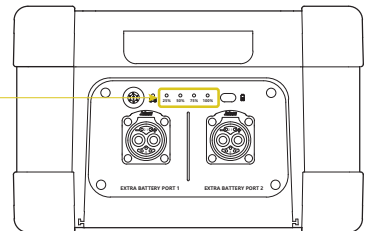


 **Note:** The operating temperature range of the PEAK 3.0-EB is -20 to 45°C.  
If the operating temperature is not within this range, it will fail to work.

Light press to show battery capacity

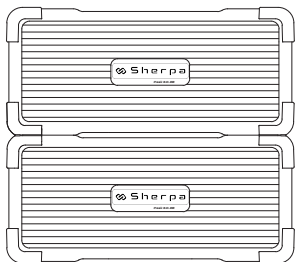
 



## NOTES BEFORE CASCADING WITH A HOST

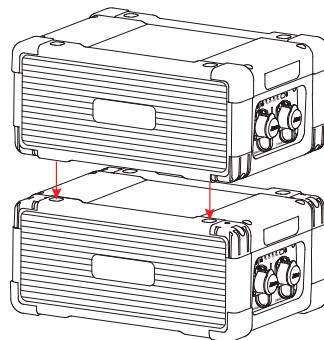
- 1 : Before use, check that the PEAK 3.0-EB module and the host have similar battery levels, with a difference of no more than 10%. Turn the extra battery module and the host units OFF.  
If there is a significant difference in battery levels, it will take a longer time for the host and extra battery to display green, indicating a complete balance.
- 2 : When cascading multiple extra batteries, ensure that the identification dial is set to a different number on each module. These identification numbers will correspond to the identification numbers of the backup battery in the app. Duplicate serial numbers can cause inaccuracies in battery levels, among other issues.
- 3 : Use the MJ32-48V cascade cable to connect the host and the extra battery via the cascade ports, as shown overleaf.
- 4 : Once the connection is completed, turn the units ON. The status LED of the PEAK 3.0 Extra Battery should light up.  
**Yellow** means a significant difference in battery levels, indicating that the balancing process is in progress. **Green** indicates that the extra battery and the host are fully balanced. (If you need to use high-power devices, please wait for a complete balance.)
- 5 : A maximum of **two** Peak 3.0 Extra Batteries may be cascaded with a Sherpa Peak 2.2 and up to **four** with a Sherpa Peak 3.6 host unit.

**IMPORTANT:** Without first connecting to the host, PEAK 3.0-EB units **cannot be actively linked**.

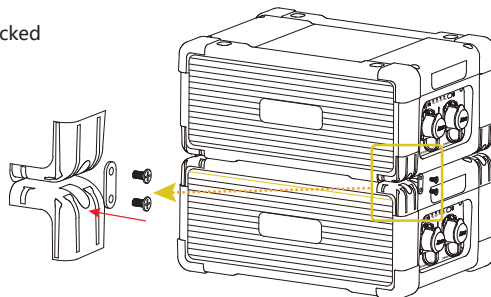


## STACKING AND SECURING MULTIPLE BATTERIES

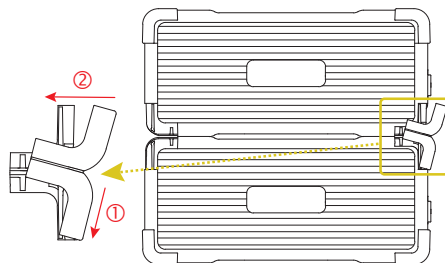
1 : First, remove the protective corners from the adjacent sides of the extra batteries you want to stack. Align the projections underneath with the notches on top, then stack.



2 : Use screws and metal connecting piece to secure the stacked batteries from top to bottom.



3 : Install the protective corners as shown, ensuring that the push-fit retainers in the corner join pieces engage with the slots in the battery casing.  
Note: the protective corner joins provide aesthetic value only.





## CONNECT AND REMOVE THE CASCADE CABLE

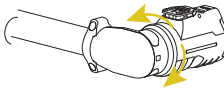
### Adjusting the angle of the cascade cable:

Power the units OFF before insertion.

Note the angle range on the cascade cable plug.

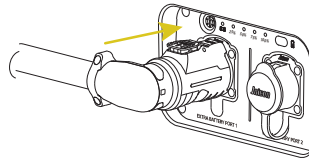
Twist the plug within this range to match the red locking button to the top of the port if required.

(Do not exceed this angle and do not rotate after insertion.)



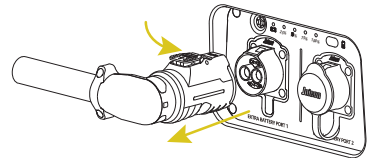
### Inserting the cascade cable:

With the "PUSH" button facing upwards, align it with the corresponding socket. Push it forward until you hear a "click" sound, indicating that it is inserted in place.



### Removing the cascade cable:

Press down and push the "PUSH" button downward, grip the plug, and pull it outward.



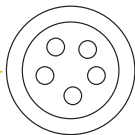
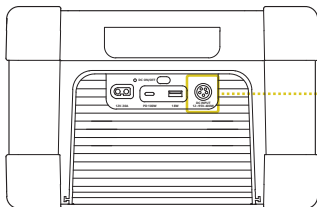
## CASCADING PROCESS

- 1 : First power the module OFF.
- 2 : Set the identification numbers on the dial. Each ID number should be unique to each PEAK 3.0-EB module.
- 2 : After completing the cascade connection, the host will calculate their combined battery level.
- 3 : After completing the cascade connection and the host is powered on, the extra batteries will perform a self-check and the status lights may have a delayed response of about one minute. This is normal.
- 4 : After completing the cascade connection and the host is powered off, the extra batteries will balance with the host for about a minute before shutting down.

## CHARGING THE PEAK 3.0-EB

### GX16MF-5 Charging Port:




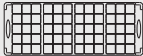
This is a multi purpose DC input port. It will accept charge within 12V-95V range up to 400W maximum from solar, vehicle or mains (via an AC to DC charge adapter).



### GX16MF-5 Charging Port:

PV12-95V 400W Maximum Input

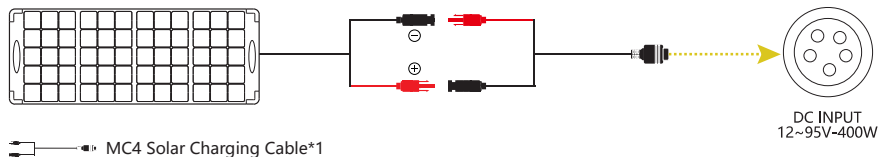
## CHARGING TIMES

 AC-DC Adapter (sold separately)	 Generator (via AC-DC adapter)	 Car Charger
Approx 8 h	Approx 8 h	Approx 30 h (via aux port) or 7-8 h (via Sherpa Charge-500)
 Solar panel <b>200W</b>	Solar panel <b>400W</b>	
19-20 Hours	10-11 Hours	

Note: Charging time depends on tilt of panel and weather conditions.

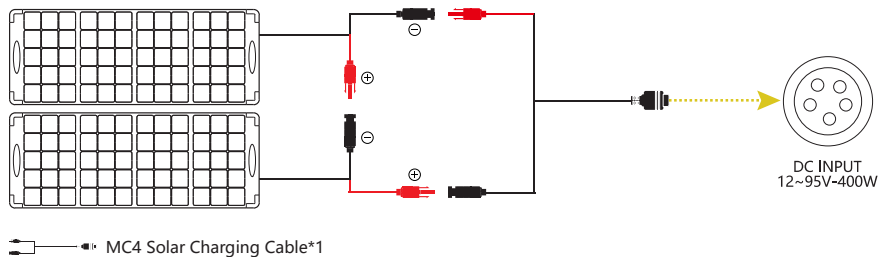
# SOLAR CHARGE CONFIGURATIONS

## Single panel setup



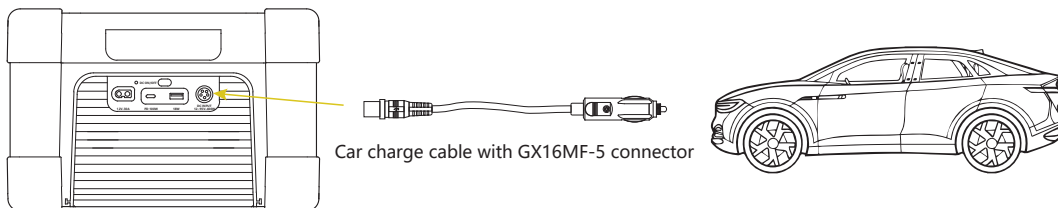
\* The Voc of a single solar panel should be less than 95V, and the Vmp should be greater than 12V.

## Two panels in series setup

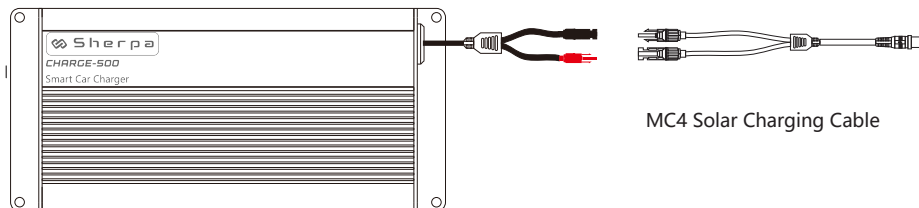


\* The Voc of each solar panel should be less than 48V, and the Vmp should be greater than 6V. Series wiring effectively combines voltages, not the amperage.

## VEHICLE CHARGING



**Note:** Start the vehicle engine before connecting the charge cable to the PEAK to avoid draining the crank battery.



The Sherpa CHARGE-500 has MC4 connectors allowing you to use the MC4 Solar Charge Cable adapter to charge the PEAK 3.0-EB at a maximum rate. Please refer to the CHARGE-500 manual for installation instructions.

## FAQS

**Q1 :** What kind of battery is used in PEAK 3.0-EB?

**A :** PEAK 3.0-EB utilizes high quality UL certified automotive LiFePO4 battery cells.

**Q2 :** What machines can the PEAK 3.0-EB power pack be cascaded to?

**A :** PEAK 3.0-EB can be cascaded to Sherpa Peak power units with MJ32 cascade port.

**Q3 :** Once PEAK 3.0-Extra Batteries are cascaded, can they be used to charge or discharge?

**A :** Yes, but the charging and discharging power cannot be displayed on the host separately, the current and voltage of each battery pack can be viewed through the APP however.

**Q4 :** How do I calculate the PEAK 3.0-EB run time?

**A :**  $\text{Run Time} = \text{Total Capacity (3072Wh)} * 0.85 (\text{Depth of Discharge}) / \text{Load (Watts)}$

**Q5 :** Does PEAK 3.0-EB have built-in MPPT controller?

**A :** Yes, PEAK 3.0-EB has an inbuilt MPPT charge controller which supports 12V-95V (max 400W).

**Q6 :** How many PEAK 3.0-EB power packs can be cascaded to the host at once?

**A :** Each MJ32 port can be cascaded up to two. If this is exceeded, the resistance between the host and the power pack will increase, and the voltage difference will also increase, causing the cascaded battery to fail to function properly.

**Q7 :** How do I store the PEAK 3.0-EB?

**A :** When storing, please turn the product off and store it in a dry, ventilated place at room temperature.

Do not place this product near water sources. When storing for long time periods, we recommended first discharging the battery to 30% and then recharge it to 60% every three months to benefit a longer product life.

**Q8 :** Is there any other safety advice?

**A :** This product is IP rated 20 and is therefore NOT waterproof.

Ensure adequate space is made for the vent fans to dissipate internal heat when in use.

Do not use the product in environments where volatile gas may be present.

## DISCLAIMER

Please read the user manual thoroughly before using this product, and keep this manual in a safe place for future reference. Failure to follow the instructions for proper set up, use, and care for the device can increase the risk of serious personal injury, death, or property damage. Once you use this device, you are deemed to have understood, recognised and accepted all terms and contents of this document. The user shall be responsible for their own actions and all consequences arising from failure to use the device in accordance with the “User Manual” , or as authorised in Sherpa's current product literature. In compliance with laws and regulations, Sherpa Tek Ltd reserves all rights for final explanation, and to change these terms and conditions at any time without prior notice. In the event that any revisions are made, the revised terms and conditions shall be posted on our website immediately, please visit our website to inform yourself of any changes.

## SAFETY ADVICE

1. Do not place the device near heat source, such as a fire or a heater.
2. Do not immerse in any liquid, or expose the unit to rain or wet conditions.
3. Do not use the battery in a strong static electricity or electromagnetic environment.
4. Do not disassemble or puncture the product with sharp objects in any way.
5. Short circuits can be caused by: vermin or pests chewing through wires; water or other fluids coming into contact with electrical wiring or placing metallic objects across the terminals.
6. It is not designed to be used as car jump starter, it should be used to charge a vehicle battery over a longer time period.
7. Do not use accessories or parts other than those provided by Sherpa. Please visit our website [www.sherpapower.co.uk](http://www.sherpapower.co.uk) or reach our support team for a complete list of accessories and parts.
8. When using this product, please follow the ambient temperature guidelines in the user manual. If the battery temperature becomes excessively high, it can degrade the capacity as would exposure to an excessively low temperature environment.
9. Do not stack heavy objects on this product.

10. Do not block the air vents during use, or leave the device in a non-ventilated or dusty space.
11. Avoid impacts and violent vibration to the unit. Please turn off the device immediately and stop using it in the event of major exterior impact. Please fasten the unit firmly during transportation to avoid vibration and impact.
12. In the event of immersing the device into the water accidentally, please place the unit in a safe open area and keep away from the unit until it is completely dry. The unit should not be reused and should be disposed of properly according to the local regulation. If the device catches fire, use the fire extinguishing equipment in the following recommended order: water or mist, sand, fire blanket, dry chemical, carbon dioxide fire extinguisher.
13. To clean the surface of the device, wipe with a dry cloth.
14. Please store this device in a place out of reach of children and pets.
15. Please take care when lifting the product, consulting safe lifting guidance
16. It is good practice to monitor your product for any damage to the exterior and the battery charge level to maintain a longer lifespan.

## DISPOSAL

1. When conditions permit, please be sure to completely discharge the battery of this product and take it to a designated battery recycling facility. 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 a battery recycling bin. Contact Sherpa Tek or 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.

## WARRANTY EXCLUSIONS

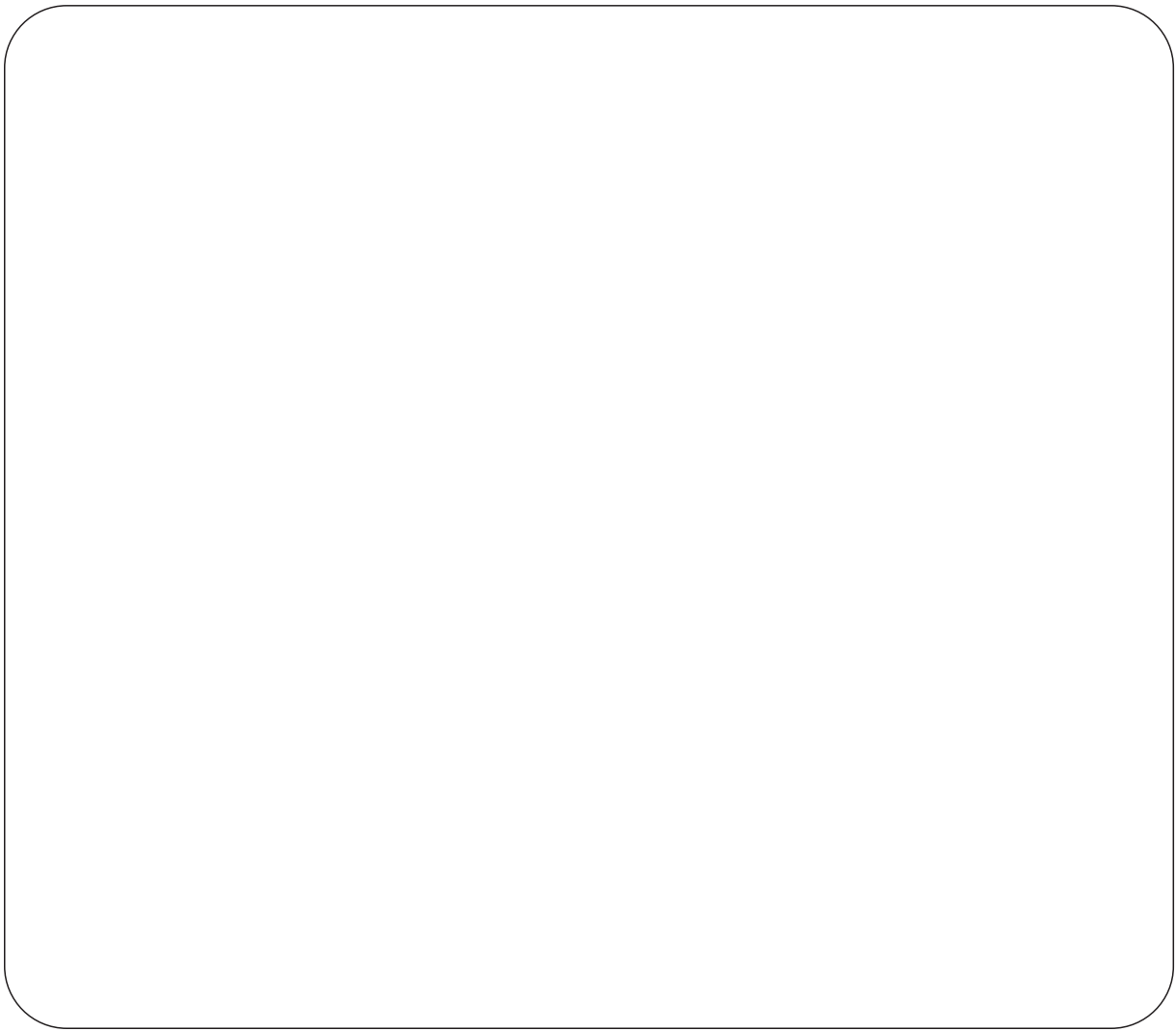
1. Misused, abused, damaged by accident or damaged due to force majeure (e.g. lightning strikes, hurricane, floods etc.).
2. Unauthorised modification, repair, dis-assembly or operation not in accordance with the official instructions or manuals.
3. Any defects or damages caused by reliability or compatibility 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. Product wear and tear from general use.
12. Inadequate storage and/or incorrect maintenance of the battery.

**CUSTOMER SUPPORT : [www.sherpapower.co.uk](http://www.sherpapower.co.uk)**

[www.sherpapower.co.uk](http://www.sherpapower.co.uk)

Sherpa Tek Ltd.







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