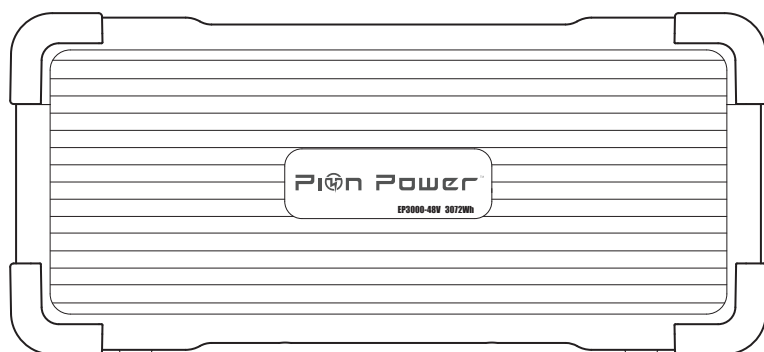


Pion Power™

# EP3000-48V

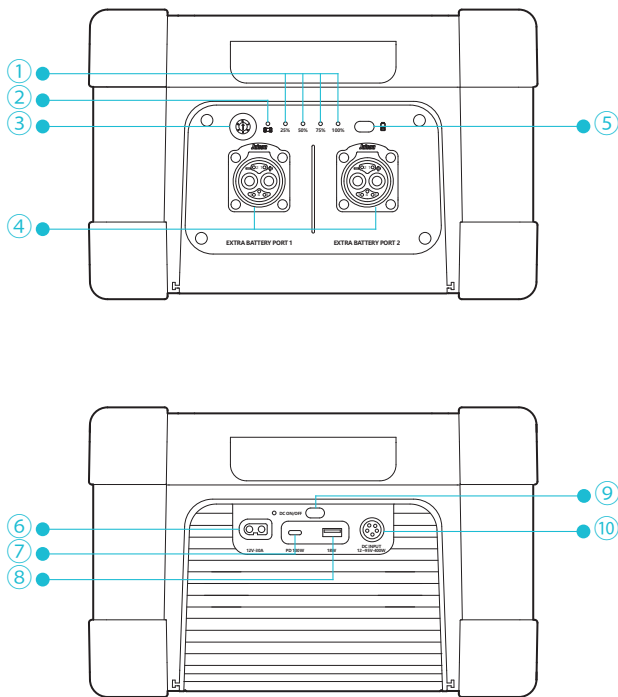


# USER MANUAL

Please read the user manual thoroughly before using

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PRODUCT OVERVIEW






- |                                  |                            |
|----------------------------------|----------------------------|
| ① LED Capacity Indicator         | ⑥ DC 12V XT60 Output       |
| ② Indicator Under Cascade Status | ⑦ USB-C Ports              |
| ③ Serial number knob             | ⑧ USB-A Ports              |
| ④ Battery Expansion Port         | ⑨ DC Switch                |
| ⑤ Power Display Switch           | ⑩ DC 12V~95V Charging Port |


SPECIFICATIONS

Capacity	3072Wh (51.2V60Ah)	Net Weight	Around 57lb (Around 26kg)
Battery Type	LiFePO4 Battery Retain 80%+ Original Capacity At 3500 Cycles	Dimension	L17.3*W12.2*H7.8 in (L441*W312*H200 mm)
Solar Input	400W; Voc 12V~95V / 15A Max	Temperature	0°C~45°C/32°F~113°F (Charging) -20°C~45°C/-4°F~113°F (Discharging)
Car Input	DC 12V~95V-400W Max	Protections	Over-Voltage, Overheat, Overload, Short-Circuit, Self-Recovery
DC Output	XT60 -12V 30A; PD 100W; USB-18W;	Cascadable Device	E3600LFP


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

CASCADE FUNCTION

 Port For Cascade *2
Cascadable to devices with MJ32 cascade port

PACKING LIST

 PION POWER EP3000-48V *1	 Cable from XT60 to Cigar port and 5525 port *1	 MC4 Solar Charging Cable (LSMC4-5GX16) *1	 M25 Cascade cable
 Solar Cable with 5521 Connector *1	 Anderson Solar Charging Cable *1	 Car Charging Cable with GX16MF-5 Connector *1	 12V Alligator Clips *1
 Corner Protector *6	 Metal Connecting Piece *6	 Screws *6	 Slotted Screwdriver *1

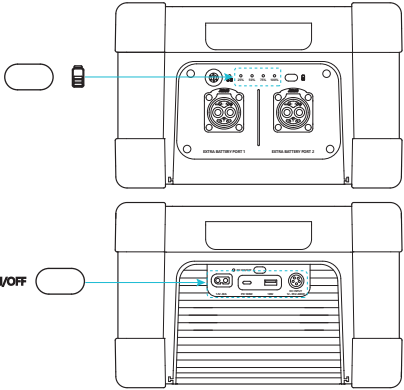
# HOW TO USE THE EP3000-48V



Press to show battery capacity



Press and hold to turn on/off DC (USB/XT60 12V)



**Note:** Operating temperature range of EP3000-48V is -20~45°C.  
If the operating temperature is not within this range, it will fail to work.

## HOW TO USE THE EP3000-48V IN CASCADE WITH THE HOST

- 1: Before use, make sure the EP3000-48V power pack and the host have similar battery levels, with a difference of no more than 10%.  
**If there is a significant difference in battery levels, it will take longer time for the host and power pack to display green, indicating complete balance.**
- 2: When cascading multiple power packs, check the serial number knob on each power pack to ensure the uniqueness of the serial numbers. These serial numbers will correspond to the identification numbers of the power packs in the app. Duplicate serial numbers can cause inaccuracies in battery levels, and other issues.
- 3: Use the MJ32-48V cascade cable to connect the host and the EP3000-48V power pack through the cascade port.
- 4: Once the connection is completed, the status LED of the EP3000-48V power pack should display either yellow or green. Yellow indicates a significant difference in battery levels, meaning the balancing process is in progress. Green indicates that the power pack and the host are fully balanced.  
(If you need to use high-power devices, please wait for complete balance.)

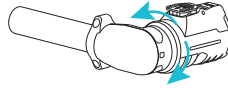


# HOW TO INSERT AND REMOVE THE CASCADE CABLE

## Adjusting the angle of the cascade cable:

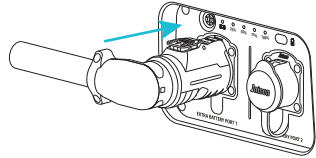
Before insertion, determine the desired angle and grip the plug. Within the range of the rotating arrow, you can rotate it 90° clockwise or 90° counterclockwise.

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



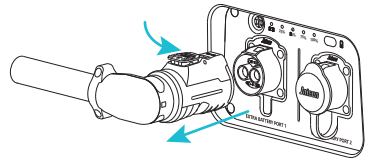
## Inserting the cascade cable:

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.

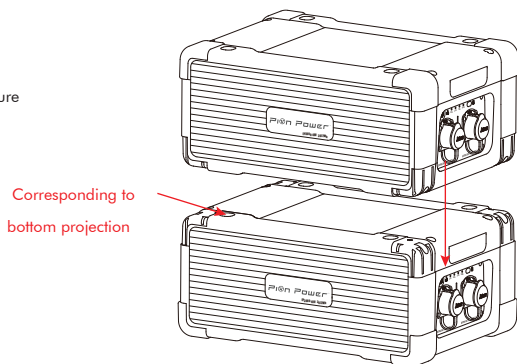


# CASCADE PROCESS NOTES

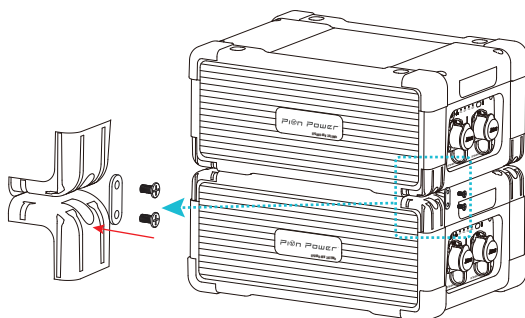
- 1: When cascading multiple EP3000-48V units, it is important to maintain the uniqueness of the serial numbers.
- 2: Without connecting to the host, EP3000-48V units cannot be connected or activated.
- 3: After completing the cascade connection, the charging and discharging power of the EP3000-48V units may not be displayed on the host screen. However, the host will still calculate and monitor their battery levels.
- 4: Once the cascade connection is complete and the host is powered on, the power packs will perform a self-check. The status lights may respond with a slight delay (within one minute), which is normal.
- 5: After completing the cascade connection, when the host is powered off, the power packs will wait to be fully balanced with the host before shutting down.

## STACKING AND SECURING MULTIPLE POWER PACKS

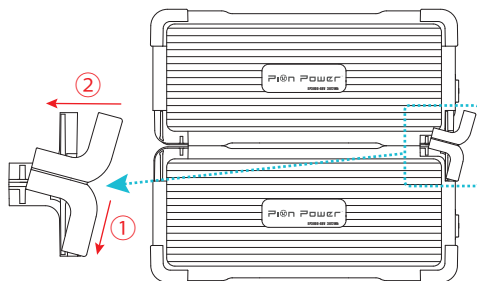
- 1: First, remove the protective corners from the power packs you want to stack. Then, align them with the positioning structure and place them on top of each other.



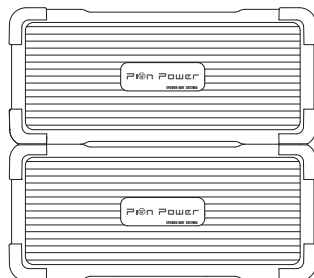
- 2: Use screws and metal connecting piece to secure the stacked power packs from top to bottom.



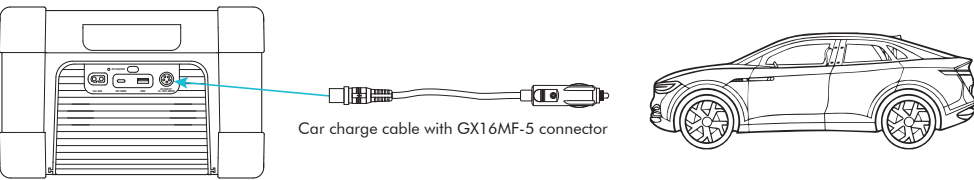
- 3: Install the protective corners in the following order: first, align the side with the positioning structure then snap the front side into place. Install them one by one until they are properly






- 4: After installation, as shown in the diagram, to ensure safety, stack a maximum of four EP3000-48V power packs. (The protective corners in the middle of the power packs are for aesthetic purposes only and do not provide structural strength.)



# HOW TO CHARGE THE EP3000-48V BATTERY PACK BY VEHICL



## RECHARGE TIME

 Charged by adatper	 Generator	 Car Charger
Around 8~9Hours	Around 8~9Hours (By wide voltage adapter)	Around 30Hours

## SOLAR CHARGE TIME

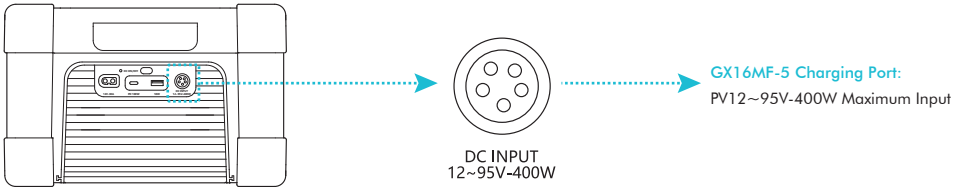


<b>200W</b> Recommended ★★★	<b>400W</b> Recommended ★★★★★
19~20 Hours	10~11 Hours

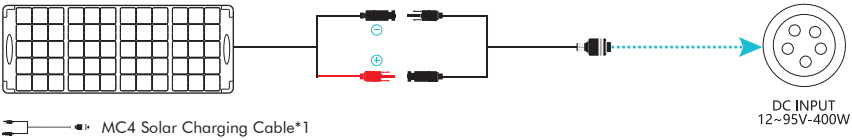
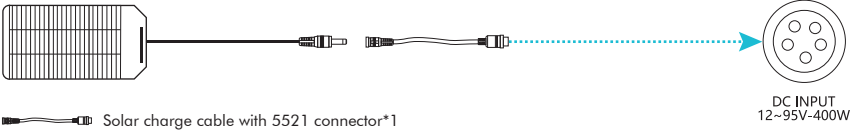
Note: Actual charging time depends on the weather conditions.

# USING SOLAR PANELS TO CHARGE THE EP3000-48V

**GX16MF-5 Charging Port:** PV (operating voltage) range 12V~95V, 400W maximum; VOC (open circuit voltage) of solar panel/array must be less than 95V, otherwise, it will damage the unit! Do not wire more than two 36V solar panels in series, or more than four 18V solar panels in series. (18V/36V stands for Vmp, the operating voltage, of the solar panel)

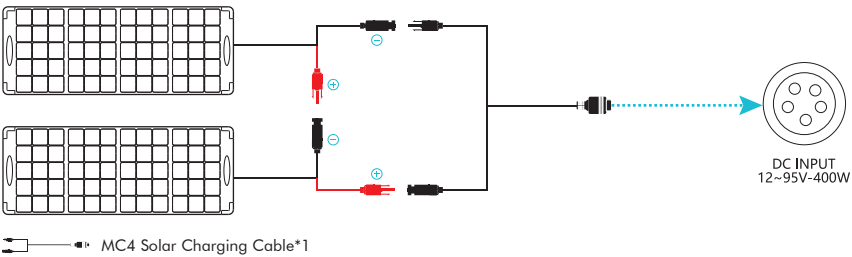


## Charging the EP3000-48V with a single solar panel



※ It is recommended to choose PION POWER solar panels for optimal user experience! The VOC of a single solar panel should be less than 95V, and the VMP should be greater than 12V.

## Charging EP3000-48V with two solar panels in series



※ It is recommended to choose PION POWER solar panels for optimal user experience! The VOC of a single solar panel should be less than 48V, and the VMP should be greater than 6V.

# FAQS

1、What kind of battery is used in EP3000-48V?

EP3000-48V utilizes high quality UL certified automotive LiFePO4 battery.

2、What machines can the EP3000-48V power pack be cascaded to?

Currently EP3000-48V power pack can be cascaded to machines with MJ32 cascade port.

3、After the EP3000-48V power packs are cascaded, can the EP3000-48V power packs be used to charge or discharge?

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.

4、How to calculate the EP3000-48V running time?

Running Time=Total Capacity(3072Wh) \* 0.85 (Depth of Discharge)/Loading Power(Watts)

5、Does EP3000-48V have built-in MPPT controller?

Yes, EP3000-48V has a built-in MPPT charge controller, which supports 12V-95V(max 400W).

6、How to store the EP3000-48V?

When storing, please turn off the product and then store it in a dry, ventilated place with room temperature environment. Do not place this product near water sources. For long-term storage, it's recommended to discharge the battery to 30% and then recharge it to 60% every three months to extend the life of this product.

7、Other issues to be noted.

The product is not waterproof, so prevent water from getting into it.  
Ensure proper ventilation and heat dissipation during use, and maintain good ventilation at the air inlet and outlet of the product.  
Do not use the product in special occasions (under the mine, gas station, etc.)

# 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 setup, 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, recognized, and accepted all terms and contents of this document. The user shall be responsible for his own actions and all consequences arising from failure to use the device in accordance with the "User Manual," or as authorized in Pion Power's current product literature. In compliance with laws and regulations, Pion Power 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.

## WARNING

- 1、 Do not place the device near heat source, such as a fire or a heating furnace.
- 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.
- 6、 It's prohibited to be used as car jump starter, only can be used to charge the car battery.
- 7、 Do not use accessories or parts other than those provided by PION POWER. Please visit our website [www.pionpowertech.com](http://www.pionpowertech.com) or reach our support team for a complete list of accessories and parts.
- 8、 When using this product, please strictly follow the ambient temperature for use in the user manual. If the temperature is too high, the battery can potentially result in self-combustion and will burst into flames, which can cause widespread damage. If the temperature is too low, the performance of the battery will be seriously degraded, and it may even fail to meet the normal use requirements.
- 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、 Please avoid impacts, fall off, and violent vibration. 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 dried 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、 Please wipe it with a dry cloth to clean the surface of the device.
- 14、 Please place this device with care to prevent the product from being damaged due to fall off. If the product is damaged due to fall off, please turn off the unit immediately and place it in an open area, keep away from combustibles and crowds, and dispose of in accordance with local laws and regulations.
- 15、 Please store this device in a place out of reach of children and pets.

# 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. Batteries are dangerous chemicals and are strictly prohibited from being disposed of in ordinary trash. 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 disposal.
- 3、 The battery will not be able to start after being over-discharged, please dispose of it according to the principle of disposal.

# EXCLUSIONS

Pion Power's warranty does not apply to:

Misused, abused, modified, damaged by accident, or used for anything other than normal consumer use as authorized in PION POWER's current product literature.

**CUSTOMER SUPPORT:** [support@pionpowertech.com](mailto:support@pionpowertech.com)

WEBSITE: [www.pionpowertech.com](http://www.pionpowertech.com)



This product has passed inspection, meets the standards,  
and is approved for factory release.

## Product Qualification Certificate

Inspection Date: \_\_\_\_\_

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

### ONTARIO, CANADA

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Phone: +1 (416) 756-9210

Email: [support@pionpowertech.com](mailto:support@pionpowertech.com)

<http://www.pionpowertech.com>

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