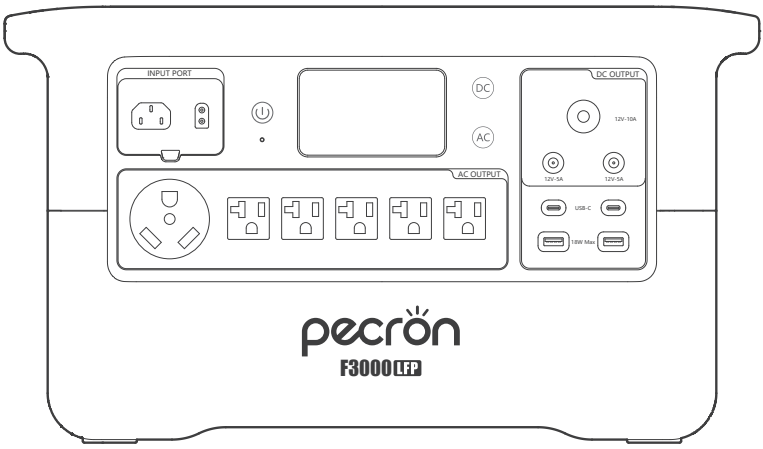
USER MANUAL

PECRON-F3000 LFP



Contact Us:
www.pecron.com

F3000 LFP-EN-V1.0

DESCRIPTION OF SYMBOLS

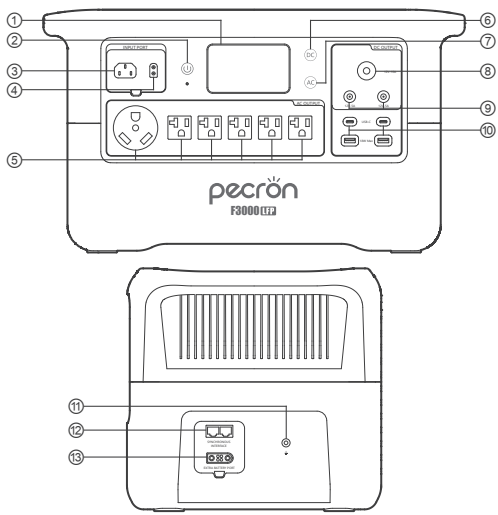
⚠ Important Notes Tips for operation and use

PRODUCT OVERVIEW

PECRON F3000LFP is a capacity 3072Wh(51.2V60Ah) with a weight about of 30kg portable power station supporting up to 3000W output. Its superior specs and versatile outputs meet nearly all digital and electronic device power backup needs. This user guide introduces its features, functions, and usage precautions.

FUNCTION INTRODUCTION

① LCD Display
② Main Switch
③ AC 100V~120V Charging Port
④ DC 22V~150V Charging Port
⑤ AC 100V~120V Output
⑥ DC 12V / USB Switch
⑦ AC 100V~120V Switch
⑧ DC Auxiliary Output
⑨ DC 5525 Output
⑩ USB-A / USB-C Ports
⑪ External Grounding Port
⑫ RJ45 Signal Sync Interface
⑬ Battery Expansion Port

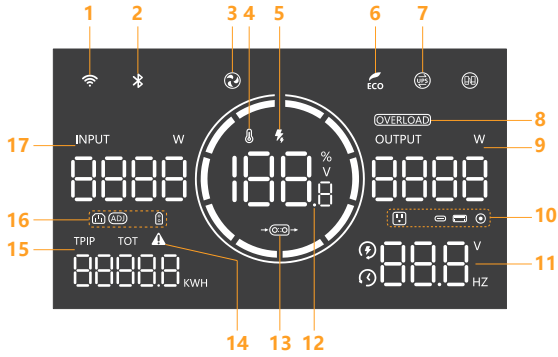


Product appearance and structure may vary by country/region; refer to the physical product.

SPECIFICATIONS

GENERAL INFO	
Model	F3000 LFP
Capacity	3072Wh(51.2V60Ah)
Net Weight	Around 28.7kg / Around 63.3lb
Dimension	L489*W295*H282 mm / L19.3*W11.6*H1.1 in
Maximum Operating Altitude	3000m
OUTPUT SPECIFICATION	
AC Output *6	Pure sine wave 100~120Vac Rated 3000W Max
USB-A *2	(5V,9V,12V,18W Max)*2
USB-C *2	(5V,9V,12V,18W Max)*1 (5V,9V,12V,20V,100W Max)*1
Cigar Port *1	DC 12V-10A
DC 5525 Output *2	DC 12V-5A
INPUT SPECIFICATION	
AC INLET *1	100~120Vac, 50/60Hz, 1800W Max, 15A Max
XT60 *1	25Vdc~120Vdc, 1600W Max, 25A Max
EXTRA BATTERY PORT	
XT120 *1	Cascade up to 2 charging packs
BATTERY SPECIFICATIONS	
Cell Materials	LFP (iFePO4)
Cycle Life	Maintains over 80% capacity after 3000 cycles
OPERATING TEMPERATURE	
Supply Ambient Temperature	-10℃ ~ 45℃ / 14℉ ~ 113℉
Charging Ambient Temperature	0℃ ~ 45℃ / 32℉ ~ 113℉
Storage Ambient Temperature	-10℃ ~ 45℃ / 14℉ ~ 113℉

DETAILS AND OPERATING INSTRUCTIONS OF THE DISPLAY



1		WIFI Connection	**Bright:** The product has been networked via WIFI. **Blinking:** The product has been reset and is in pairing mode.
2		Bluetooth Connection	**Bright:** The product has been connected via Bluetooth.
3		Fan Working	**Bright:** Fan in operation. **Blinking:** Fan failure.
4		Temperature Alarm	**Blinking:** Triggered high/low temperature protection.
5		Fast Charge	**Bright:** Displays when charging rate is >0.5C / >32.9°F.
6	ECO	ECO Mode	**Bright:** Energy-saving mode on: screen auto-off after prolonged inactivity to reduce energy consumption.
7		UPS Function	**Bright:** The product has automatically turned on the UPS function.
8	OVERLOAD	Overload Alarm	**Blinking:** Overload protection triggered. Please disconnect some devices to reduce total power output. The alarm will automatically reset once power output returns to normal.
9	OUTPUT W	AC/DC Output	**Bright:** Displays machine output information.
10		AC output port	**Bright:** AC output activated **Blinking:** Interface failure.
		USB-C output port	**Bright:** DC output activated **Blinking:** Interface failure.
		USB-A output port	**Bright:** DC output activated **Blinking:** Interface failure.
		5521 output port	**Bright:** DC output activated **Blinking:** Interface failure.
11		Remaining charging time	**Bright:** Displays remaining charging time.
		Remaining usage time	**Bright:** Displays remaining usage time.
	V HZ	AC output voltage/time /frequency	**Bright:** Display AC output-related information

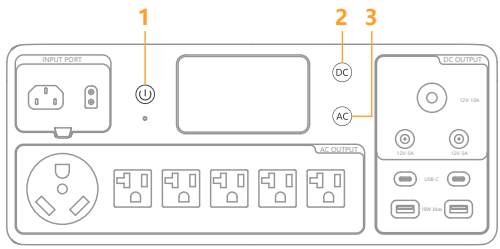
12	188 % V 8	Percentage of Power Display	**Bright:** Displays current battery level.
13	→○::○→	Input/Cascade Port Access /Output	**Bright:** The interface has physical access. **Blinking:** Interface failure.
14	⚠	Alarm symbol	**Blinking:** Product failure, please refer to the PECRON APP for troubleshooting tips.
15	TPIP	Power consumption per use	**Bright:** Battery consumption since product power-on.
	TOT	Cumulative power usage	**Bright:** Battery consumption since product manufacture.
	88888 KWH	Power usage	**Bright:** Display product power usage.
16		AC Input	**Bright:** The interface has physical access. **Blinking:** Interface failure.
	ADJ	AC power adjusted	**Bright:** AC charging power has changed.
		DC Input	**Bright:** The interface has physical access. **Blinking:** Interface failure.
17	INPUT W 8888	AC/DC Input	**Bright:** Displays the AC/DC input power.

BUTTON USAGE INSTRUCTIONS

⏻ **1: Main on/off button:** Short press/ long press to turn on, short press to turn off the screen when it power-on.

DC **2: DC button:** Short press toggles the percentage voltage display when the power-on. Long press turns power on/off(beep).

AC **3: AC button:** Short press toggles the percentage voltage display when the power-on. Long press turns power on/off(beep). / Same function as DC Button.



⏻ + DC ECO MODE: Press & hold power + DC button for 3s to enter ECO mode when it power-on.

⏻ Device reset into pairing mode: long press the on/off key for 5 seconds under power off state, power on to reset the machine and join pairing mode (3 minutes). At this time the Bluetooth/WIFI icon is blinking.

DC Access User Settings Interface: press and hold the DC button for 10s to enter the user settings interface when the power-on.

USER SETTINGS INTERFACE

(DC) **Enter user settings interface:** While powered off, press and hold the DC button for 8s to enter.

(⏻) Press the power-off button to exit, or navigate to the last page to end and exit.

Short press DC button to switch setting, short press AC button to enter the next setting.

1: AC charging power setting:
rated power 20~100%

2: AC output frequency: 50Hz/60Hz

3: AC output voltage:
100V/110V/120V/220V/230V/240V

4: Automatic shutdown time without output:
OFF/1H/2H/3H/4H

5: Button brightness: OFF/L1/L2/L3

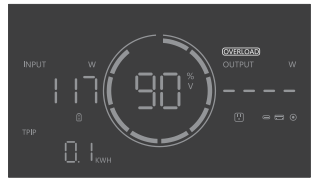
6: Buzzer sound: ON/OFF

7: Anti-false touch mode

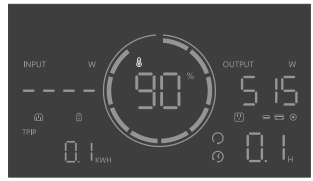
8: Setup completed

FAULT RESOLUTION

Output overload alarm interface:
OVERLOAD flashing
Buzzer alarm 2 times



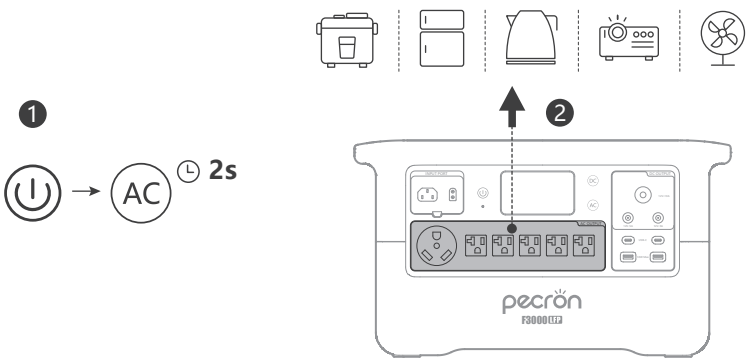
Battery temperature alarm interface:
temperature symbol flashing
Buzzer alarm 3 times



Other alarm interfaces: Exclamation mark flashes

ALARM ITEMS			
01	Battery pack overvoltage	15	DC output overcurrent
02	Battery pack undervoltage	16	DC output over-temperature
03	Battery pack short circuit	17	Abnormal utility voltage
04	Battery pack charging overcurrent	18	Abnormal utility frequency
05	Battery pack discharge overcurrent	19	Utility input overload
06	Charging board input overvoltage	20	Inverter output overload
07	Charging board input overcurrent	21	Inverter output short circuit
08	Charging board output overvoltage	22	Inverter overheating
09	Charging board output overcurrent	23	Fan Failure
10	Charging board output short circuit	24	Power Pack Low Temperature
11	Charging board input undervoltage	25	Power Pack Over-temperature
12	Charging board over-temperature	26	Power Pack Overvoltage
13	DC output short circuit	27	Power Pack Undervoltage
14	DC output overvoltage	28	Power Pack Charging Overcurrent

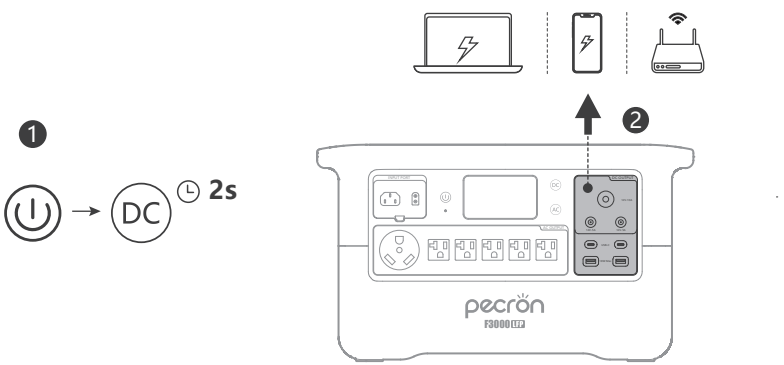
AC OUTPUT TO POWER THE DEVICE



1: In the power-on state, press and hold the AC button to turn on the power output of the corresponding interface area.
2: Connect the device to the AC output socket of the product.

A mild odor may be present during high-power output from internal electrical components, which is normal and will naturally dissipate with daily use.

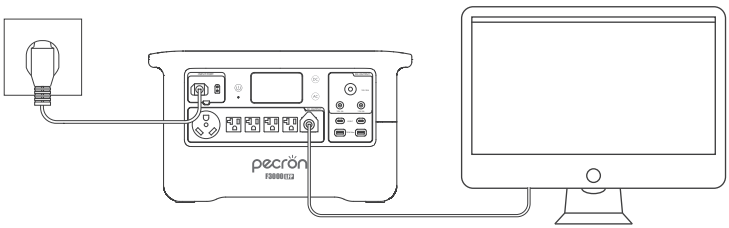
DC OUTPUT TO POWER THE DEVICE



The power supply can be used with other DC adapter cables (sold separately) to meet the charging needs of different types of devices through the DC output port.

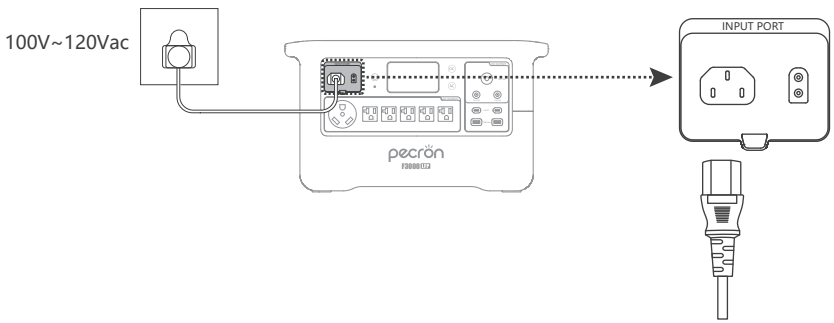
UPS FUNCTION

F3000 LFP supports UPS functionality. It provides nearly instantaneous (within 8 to 20ms) protection for loads (such as computers) against unexpected main power interruptions. In UPS mode, the power supply supports automatic restoration of AC output. If there is a power outage and the power supply is depleted, when mains power is restored, the power supply can automatically turn on AC output to continue powering the electrical equipment.
This UPS function only support protection for loads under 1800W(120V), we recommend that you only connect one device at a time to avoid overload and thus result in protection failure.
PECRON is not responsible for any devices damage or loss of data resulting from failing to follow the instructions.



⚠ 1：Not suitable for specific applications requiring transmission times below 8ms, such as servers and workstations, as it may cause abnormal operation of the equipment or data loss.
2：This feature is not supported in some regions.
Please refer to local laws and regulations for details.

USING AC CHARGING

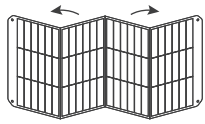


⚠ 1：Please disconnect the mains power after charging is complete.
2：To extend the battery core life and improve the user experience, please avoid discharging the battery to an excessive level, which may damage the battery cores.
3：During charging, if the battery core temperature is too high or too low, the temperature alarm icon on the screen will flash. To ensure battery core life and safety, the charging power will decrease, which is a normal phenomenon.

USING SOLAR PANELS CHARGING

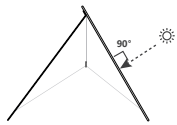
Follow these steps

1：Unfold the solar panel and secure it using the bracket.

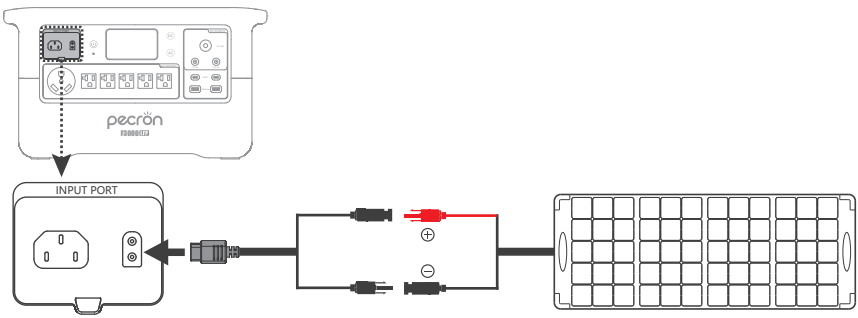


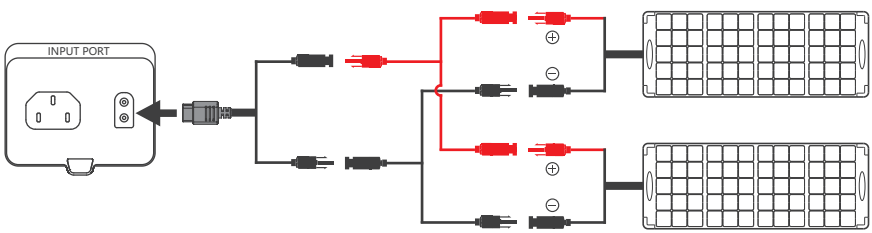
2：Adjust the bracket to change the angle of the solar panel to ensure it is directly aligned with the sunlight.

3：To improve solar charging efficiency, try to let sunlight vertically hit the solar panel and ensure there are no obstructions.



4：XT60 interface supports input voltage range of 25Vdc~120Vdc, maximum input power of 1600W, maximum current of 25A. When wired in series, the actual input voltage is the sum of all the connected solar panels, the total solar panels open-circuit voltage (Voc) must be less than 120V, and the operating voltage (Vmp) must be greater than 25V.
When wiring in parallel: the total solar current (Imp) should be close to the maximum input current (Imax) of the product interface.



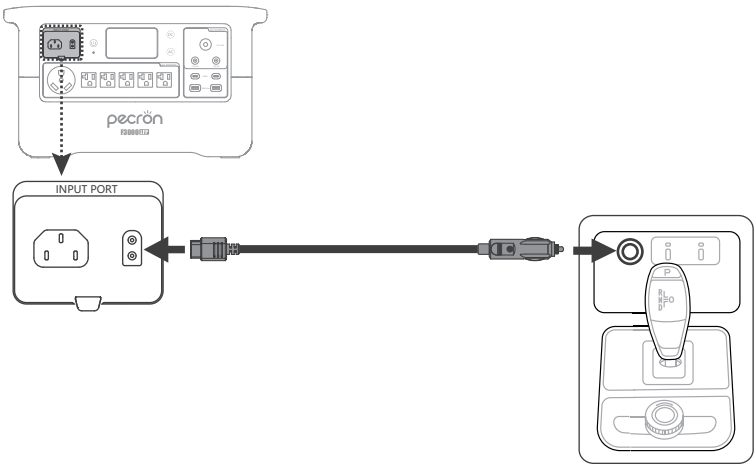


This parallel charging cable sold separately

1：Do not mix different types of solar panels, as it may damage the unit.
2：PECRON solar panels are recommended to avoid damage to the adapter module and power supply.
⚠ 3：When using solar charging, pay attention to avoid direct sunlight on the power supply and adapter module to prevent overheating and damage.
4：Be sure to clean the debris on the surface of the solar panel in time.
Partial shading on the solar panel will affect power generation efficiency.
5：Regularly clean the surface of the solar panel with a soft dry cloth dipped in water.

USING VEHICLE CHARGING

Connect the vehicle charging input interface (XT60) of the product
to the car's cigarette lighter interface using the vehicle charging cable.



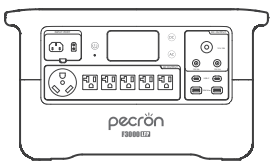
APP FUNCTION

You can connect to this product via the PECRON APP to view information, control the device, and make personalized settings.
Press and hold the power button for 5s while the device is off to reset the machine and enter pairing mode (for 3 minutes), at which point the Bluetooth/WIFI icon will flash.
iPhone users can search for PECRON in the Apple Store to download and use.
Android users can search for PECRON on Google Play to download and use.

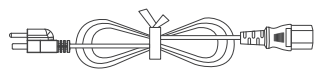
BATTERY EXPANSION PORT FUNCTION

Up to two 48V power packs can be cascaded through the cascade cable using the XT120 socket on the right hand side of the machine.
Do not use non-PECRON power packs, as it may damage the power supply!
Notes about cascade:
Cascading will be faster if there is only 10% difference between the main power station and the expansion battery pack.
Battery expansion port (XT120) can output battery voltage (44V~58V) up to 40A through PECRON special inducer cable.

PACKING LIST

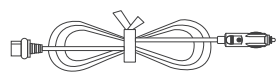


PECRON F3000 LFP *1



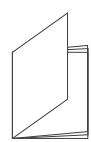
AC Cable *1

Single port XT60 to
MC4 solar charging cable *1



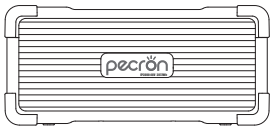
Cigarette lighter male head
to car charging cable XT60 * 1

Accessory bag * 1

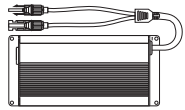


User Instruction *1

PRODUCT OPTIONAL ACCESSORIES



PECRON EP3000-48V



PECRON 500W
Smart Car Charger

PECRON XT120 Induction Output Cable

More accessories can be
found in PECRON official website

FAQS

1: What kind of battery is used in F3000 LFP? How long it can last?

F3000 LFP utilizes high quality UL certified automotive LiFePO4 battery, it can retain 80% of its original capacity at 3000 complete charge cycles.

2: What devices can F3000 LFP power?

Please note that the AC output port can only charge or power devices that operate at less than 3000W. DC output port can only charge or power that operate at less than 12V-10A.

3: Can the F3000 LFP be used as UPS?

F3000 LFP supports UPS function with an automatic switchover time of 8~20ms.

4: How to calculate the F3000 LFP running time?

To estimate the operation time of the F3000 LFP, consider the load you're applying:

Operation time = Battery Capacity (Wh) x DoD x n ÷ (Load Power + F3000 LFP Self-con-sumption)

Note: DoD is the depth of discharge. n is the conversion efficiency of the inverter, which is typically over 93% for the F3000 LFP. The self-consumption power of the F3000 LFP is approximately 30W.

Operation time =3072Wh x 95% x 93% ÷ (40W + 30W) ≈ 39 hours.

Please keep in mind that the estimated operation time provided is for referencepurposes and may vary based on actual usage conditions. Factors such as lowtemperature and excessive loads can sianificantly affect the battery capacity, leading toa reduction in the average operation time.

5: Can the F3000 LFP be charged while discharging?

Yes, It can be charged and discharged at the same time. Under the non-UPS state, if uninterrupted use is required, the average power of charging must be greater than the average power of electricity, otherwise the battery will eventually run out and shut down.

6: Does F3000 LFP have built-in MPPT charge controller?

Yes, there is one independent built-in MPPT controller; "XT60" port supports 25~120V (Max 600W) PV input.

7: How to store the F3000 LFP?

Please turn off the unit and then store it in a dry, ventilated place at normal room temperature. Do not place this unit near water sources or a wet/moist environment. For long-term storage, it is recommended to discharge the battery to 30% every three months and recharge it to 60% to sustain the battery life.

8: Other issues to be noted.

Pay attention to the ponit that the product is without waterproof function and prevent water getting into it.

Pay attention to ventilation and heat dissipation when using, and keep 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.)

MAINTENANCE AND UPKEEP/CARE

1: For long term storage, please discharge the product to about 60%. Low battery storage will easily cause the battery to be over-discharged.
2: It is imperative to store the power supply at the ambient temperature (-10°C to 45°C) specified herein. The storage environment should be kept cool, well-ventilated, dry, and protected from sunlight. Do not place the power supply under water or in a place where water may leak.
3: Never store the power supply for extended periods after fully discharging it, as this may cause the battery to enter an over-discharge state, resulting in damage to the battery core.
4: If the power port is dirty, wipe it clean with a dry cloth. Do not use alcohol or other flammable agents to clean.

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, 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 PECRON's current product literature.
In compliance with laws and regulations, PECRON 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 PECRON. Please visit our website www.pecron.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 accidently, 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 onbattery 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

PECRON’ s warranty does not apply to:
Misused, abused, modified, damaged by accident, or used for anything other than normal consumer use as authorized in PECRON’ s current product literature.

Follow the official brand public account for more information and services.

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