



# 1000 W PURE SINE WAVE



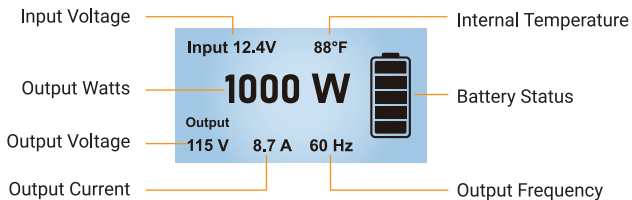
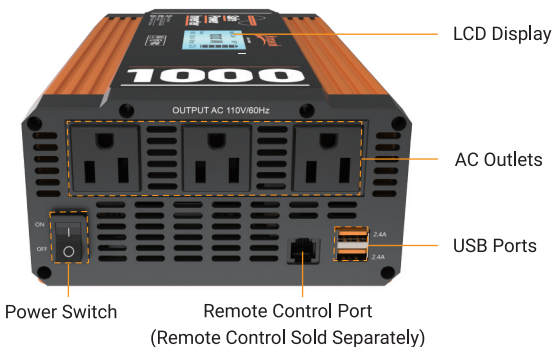
## Safe Power Inverter



Intertek  
3142026

# Instruction Manual

12-Volt DC to 115-Volt AC with Three AC Outlets,  
Dual USB Ports, One Cigarette Lighter



## What Is Included?



**1x** Pure Sine Wave Power Inverter

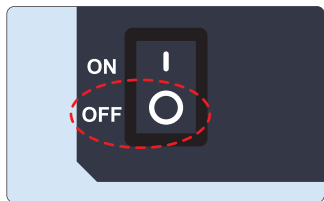


**1x** Instruction Manual

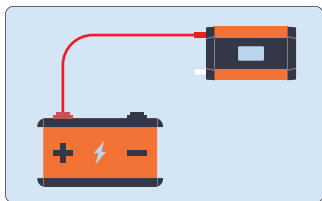


**2x** Ring Terminal Cables

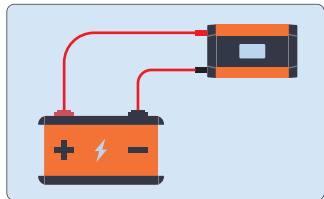
## Easy Operation Steps



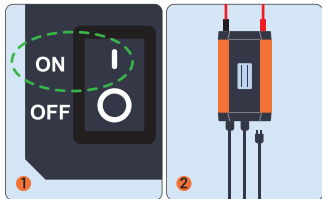
1. Make sure the inverter power switch is **OFF**.



2. Connect the red positive **+** ring terminal cable to the red positive **+** terminals of the battery and inverter.



3. Connect the black negative **-** ring terminal cable to the black negative **-** terminals of the battery and inverter.



4. Turn on the inverter power switch and plug in your appliance.



- You must turn the inverter ON before connecting AC loads one by one. Never connect the AC loads first and then turn on the inverter to ON. This may trigger an overload since some electronic devices have an initial high power surge to start.
- When switching off the inverter, turn off the electronic devices first. Although the inverter is off, the terminal capacitors will still have a charge, so the DC and AC terminals must be disconnected if altering the circuitry.
- This product has a rated power of 1000W, but inverter products typically have a conversion efficiency value. We recommend that the cumulative rated power of the connected AC load should not exceed 900W.

*[Inverter Conversion Efficiency: 90% x Rated Power 1000W = 900W]*

# Specifications

## Battery Input:

1	Continuous Input Voltage: 12V
2	DC Voltage Input Range: DC 11V~15V
3	DC Input Low Voltage Shutdown: 9.5V±0.5V
4	DC Input Overvoltage Protection: 16V±0.5V
5	Input DC Fuse: 4*40A

## Inverter Output:

1	AC Output Voltage: AC 105V~125V
2	Output Continuous Power: 1000 Watts
3	Output Overload Power: 1000 Watts
4	Output Surge Power: 2000 Watts
5	AC Output Frequency: 60±1Hz
6	Output Voltage Waveform: Pure Sine Wave
7	Full Load Efficiency: ≥90%
8	Inverter Overheat Protection: Internal Electronic Components of Inverter Temperature > 105°C/221°F
9	USB Output Voltage: 5V
10	USB Output Current: Dual 2.4A
11	Operating Temperature: -10°C/14°F ~ 40°C/104°F
12	Advice Storage Temperature: -20°C/-4°F~65°C/149°F

## Troubleshooting

Problem	Cause	Solution
No Power, Led screen no indicator, Fans no run	Battery is defective	Replace the battery
	The inverter did not turn on	Turn on the inverter
	Loose cable connection	Check the connection and tighten as required
Alarm is sounding (Led screen display protections)	BATLOW VOLTAGE	Charge the battery
	BATOVER VOLTAGE	Replace 12V battery
	OVERLOAD	Reduce loads, decrease wattages
	OVER CURRENT	
	SHORT CIRCUIT	Restart Inverter
	OVER HEAT	Cool down inverter
	OVERCOOL	Put inverter in working temperature
	COMMWARN	Restart Inverter
	VCCLOW VOLTAGE	Check the connection and tighten as required
	DC OVERLOAD	Reduce loads, decrease wattages
	DC OVER CURRENT	
Water entered the unit	Water entered the unit	Disconnect the inverter and wipe immediately
Battery run time is less than expected	AC product power consumption is higher	The total watts needed by the AC products should be no more than the inverter's watt rating
	Battery is old or defective	Replace the battery
	Battery is not being properly charged	Some chargers are not able to fully recharge a battery, Make sure you use a powerful charger
	Battery does not have enough capacity	Use a battery with a higher amp-hour rating

# Questions & Answers

## 1. Can I use the inverter with a 24V system?

No, This model can only work with a 12V battery system.

## 2. Can I use this inverter to charge my batteries?

No, The Ampeak 12V DC to 120V AC inverter can only convert DC power to AC power.

## 3. What upgrades have been made to the Ampeak 1000W sine wave inverter?

- The output voltage of  $110V \pm 10\%$  has been changed to an output voltage of  $115V \pm 5V$ .
- Two cooling fans have been replaced with silent cooling fans, and the fans will start running when the internal temperature reaches  $40^{\circ}\text{C}/104^{\circ}\text{F}$ .
- The precision of the LCD display has been adjusted.
- The feature that would automatically shut down the inverter if there was no load for 5 minutes or if the load was less than 10 watts has been removed.
- The mold for the external casing's mounting screw holes has been modified to make it easier for customers to install the screws.

## 4. Can this inverter work with lithium batteries?









Yes, as long as the lithium battery is rated for 12V applications.










## 5. Does the inverter come with remote?

No, the inverter remote is sold separately, you can search Ampeak inverter remote.

## 6. Does this inverter have shutdown feature?

No, it does not have.

1	<b>BUSOVER VOLTAGE</b> 	<b>Busover Voltage Protection</b>	Internal control voltage at 250V, when the DC busvoltage is higher than 310V Inverter stops working Screen display BUSOVER VOLTAGE Intermittent alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s
2	<b>BUSLOW VOLTAGE</b> 	<b>Buslow Voltage Protection</b>	DC output busvoltage will be above 120V, when the DC busvoltage is below 80V Inverter stops working Screen display BUSLOW VOLTAGE Intermittent alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s
3	<b>VCLOW VOLTAGE</b> 	<b>VCC Power Down Protection</b>	Inverter power down Inverter stops working Screen display VCLOW VOLTAGE Intermittent alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s
4	<b>BATOVER VOLTAGE</b> 	<b>Battery Over Voltage Protection</b>	Input voltage $\geq$ 16V Inverter stops working Screen display BATOVER VOLTAGE Continuous alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s
5	<b>BATLOW VOLTAGE</b> 	<b>Battery Low Voltage Protection</b>	Input voltage $\leq$ 9.5V Inverter stops working Screen display BATLOW VOLTAGE Continuous alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s
6	<b>OVER CURRENT</b> 	<b>Output Over Current Protection</b>	Output electric current $>$ 16 Amps Inverter stops working Screen display OVER CURRENT Continuous alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s
7	<b>INVTER OVERCOOL</b> 	<b>Output of Inverter Overcool Protection</b>	Internal output electronic components of inverter temperature $\leq$ -11°C/12.2°F Inverter stops working Screen display OVERCOOL Intermittent alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s
8	<b>INVTER OVERHEAT</b> 	<b>Output of Inverter Overheat Protection</b>	Internal output electronic components of inverter temperature $>$ 105°C/221°F Inverter stops working Screen display OVERHEAT Intermittent alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s

9	<b>SAFER CONNECTION</b> 	<b>A Safer Way Of Connection</b>	A safer and more convenient connection method to protect the connecting terminal from exposure
10	<b>FRONT OVERCOOL</b> 	<b>Front Overcool Protection</b>	Internal Input electronic components of inverter temperature <math>-11^{\circ}\text{C}/12.2^{\circ}\text{F}</math> Inverter stops working Screen display OVERCOOL Intermittent alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s
11	<b>FRONT OVERHEAT</b> 	<b>Front Overheat Protection</b>	Internal Input electronic components of inverter temperature $>105^{\circ}\text{C}/221^{\circ}\text{F}$ Inverter stops working Screen display FRONT OVERHEAT Intermittent alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s
12	<b>SHORT CIRCUIT</b> 	<b>Output Short Circuit Protection</b>	Inverter stops working Screen display SHORT CIRCUIT Continuous alarm for 60 seconds
13	<b>INVOVER VOLTAGE</b> 	<b>Inverter Overvoltage Protection</b>	Output voltage $\geq 130\text{V}$ Inverter stops working Screen display INVOVER VOLTAGE Intermittent alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s
14	<b>INVLOW VOLTAGE</b> 	<b>Inverter Low Voltage Protection</b>	Output voltage $\geq 90\text{V}$ Inverter stops working Screen display INVLOW VOLTAGE Intermittent alarm for 60 seconds Inverter will auto-shut down if the error is not processed in 60s
15	<b>COMMWARN</b> 	<b>Communication Error Protection</b>	Communication error Inverter stops working Screen display COMMWARN Intermittent alarm for 60 seconds
16	<b>OVERLOAD</b> 	<b>Output Overload Protection</b>	Output wattage $>1000\text{W}$ Inverter stops working Screen display OVERLOAD Intermittent alarm for 60 seconds Allow Two Restores Program locked Permanently in the Third Time Need to power off and restart
17		<b>Anti-Sparks</b>	The positive and negative terminals of the inverter or battery are reversed No sparking during connect

# Limited Warranty

## **18-Month Limited Warranty Policy**

18-Month Limited Warranty Policy is the only one that applies to this unit, and it sets forth all the responsibilities of Ampeak. There is no other warranty, other than those described herein. Any implied warranty of merchant ability or fitness for a particular purpose on this unit is limited in duration to the duration of this warranty. This unit is warranted to the original purchaser only to be free of defects in materials and workmanship for 18-month from the date of purchase without additional charge. The warranty does not extend to subsequent purchasers or users.

Ampeak will not be responsible for any amount of damage in excess of the retail purchase price of the unit under any circumstances. Incidental and consequential damages are specifically excluded from coverage under this warranty. This unit is not intended for commercial use. This warranty does not apply to damage to units from misuse or incorrect installation/connection. Misuse includes wiring or connecting to improper polarity power sources.

## **Return/Repair Policy**

If you are experiencing any problems with your unit, please contact Ampeak Customer Service Department at: [customer.services@ampeak.com](mailto:customer.services@ampeak.com) returning the product . After speaking to a customer service representative, if products are deemed non-working or malfunctioning, the product may be returned within 30 days of original purchase. Any defective unit that is returned within 30 days of the date of purchase will be replaced free of charge or fully refunded at the buyer's option.

If such a unit is returned more than 30 days but less than 18-month from the purchase date, the manufacturer will repair the unit or at its option, replace it, free of charge. If the unit is repaired, new or reconditioned replacement parts may be used, at the manufacturer's option. A unit may be replaced with a new or reconditioned unit of the same or comparable design. The repaired or replaced unit will then be warranted under the terms of the remainder of the warranty period.

## **Limitations**

This warranty does not cover accessories, such as adapters and batteries, damage or defects resulting from normal wear and tear(including chips, scratches, abrasions, discoloration, or fading due to usage or exposure to sunlight), accidents, damage during shipping to our service facility, alterations, unauthorized use or repair, neglect, misuse, abuse, failure to follow instructions for care and maintenance, fire and flood.

# Important Safety Information

## Safety Statement

It is the responsibility of the owner to make sure all personnel read this manual prior to using the device. It is also the responsibility of the device owner to keep this manual intact and in a convenient location for all to see and read. If the manual or product labels are lost or not legible, contact AMPEAK for replacements or an electronic edition. If the operator is not fluent in English, the product and safety instructions shall be read and discussed with the operator in the operator's native language by the purchaser or his designee, making sure that the operator comprehends its contents.



READ ALL WARNINGS AND FOLLOW ALL INSTRUCTIONS  
BEFORE OPERATING THIS PRODUCT!

## Warning: Risk Of Shock, Fire, And Explosion.

The inverter produces the same potentially lethal AC power as normal household outlets. It is suggested that you treat it as a normal AC outlet.

- DO NOT insert foreign objects into the AC outlet, the USB port, or the ventilation hole.
- DO NOT use this product where there are flammable fumes or gases, such as in the bilge of a gasoline-powered boat, or near propane tanks.
- NEVER smoke or allow a spark or flame in the vicinity of the engine or batteries.
- Make sure the inverter wiring is of proper size and rating and in good condition. Operating the inverter with damaged wiring may void warranty.



Caution: Personal Safety & Equipment Damage.  
Keep Away From Children, This Is Not A Toy.

- DO NOT attempt to fix the unit by disassembling or modification. You can cause self-injury and disassemble and modifying the unit will void your warranty.
- Disconnect DC power source from the inverter, before attempting to service, clean, or operate on any circuits connected to the inverter. Simply turning OFF the switch of the inverter will not disconnect the power, thereby causing electric shock.
- Never connect the inverter to any power distribution systems or branch circuits.

- DO NOT make any electrical connections or disconnections in areas designated as ignition protected. This unit is NOT approved for ignition-protected areas.
- Connect the unit to a power source with a normal output of 12v DC ONLY. 6V battery voltages are too low and 24V battery voltages are too high, which will damage the unit.
- DO NOT use the inverter in temperatures above 14°F (-10°C) - 104°F (40°C).
- DO NOT expose this product to water, rain, snow, condensation, or spray.
- DO NOT connect the unit to live AC power circuits or there will be damage to the inverter.
- DO NOT connect any AC device which has its neutral conductor connected to the ground to the unit.
- DO NOT use the inverter with medical devices since it is not approved for medical applications.
- DO NOT permanently install the unit in the engine compartment. Certain chargers for small nickel-cadmium batteries can be damaged if connected to the inverter.
- DO NOT use the inverter beyond its rated wattage capacity. Add the total watts of all connected appliances and be sure the total is less than the inverter's capacity.



This product may contain one or more chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. Wash hands thoroughly after handling.

## **NOTE:**

If you are unsure about using your rechargeable appliance with the inverter, contact the Ampeak: [customer.services@ampeak.com](mailto:customer.services@ampeak.com) to determine the rechargeable appliances' compatibility with the inverter.

## Help Center

Thank you for choosing **Ampeak 1000 Watts Pure Sine Wave Safe Power Inverter**. Please read this instruction carefully as they contain important information, and safety requirements. If you have trouble understanding the instructions, or have any questions regarding its operation, please contact our friendly customer support team, via [customer.services@ampeak.com](mailto:customer.services@ampeak.com)



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