



1. The load (appliances) power aka the output of the inverter shall not be greater than the rated power, which could lead the inverter out of work.
2. Please ensure the input voltage of the inverter of the battery shall comply with the rated voltage, the inverter would be damaged, if the input voltage would be greater than 1.6 times the rated voltage.
3. When connected with an inductive or capacitive load, please reverse the allowance 3-5 times of load power. (aka 4-6 x Appliance power)
4. Red to the positive pole, Black to the negative pole, please connect it properly. Reversely connection would melt the fuse, it could work normally after replacing the fuse and connecting properly.
5. Forbidden to plug the inverter in mains power.

# High frequency inverter

## Instructions for use

Please read this manual carefully before using products.

Thank you for choosing the vehicle inverter provided by us. We hope our products can bring you the most satisfied service.

### 1) Product Description

This high frequency inverter has adapted SPWM technology, and it's highly efficient and reliable. Product has passed ISO9001:2000. However, improper operation or misuse may still cause injury or loss, instruction and information provided in this manual must be followed all the time.

### 2) Technical Parameters

Model	1000W	1500W	2000W-2500 W	3000W	4000W	5000W-6000 W
Input output	DC12V/24V/48V/60V(not automatically)					
Output voltage	AC220V±10% -120V±10% (not automatically)					
Loss when no load	<1A		<1.2A		<1.8A	
Output wave	Pure sine wave - Modified wave					
Surge Power	≤2000 W	≤3000 W	≤4000W-500 0W	≤6000 W	≤8000 W	≤10KW-12K W
Output frequency	50Hz±0.5Hz or 60Hz±0.5Hz					
Efficiency	≥85%					
Over voltage	≥16V - ≥30V - ≥60V - ≥75V					
Low voltage shutting	≤9.5V - ≤20V - ≤40V - ≤50V					
Over temperature shutting	>80℃					
Ambient temperature	-10℃ - +45℃					

Note: Keep the power supply around the ventilation dry, within 1 meter must not have flammable items, strictly preventing the cause of fire.

### 3) Protective Functions

Overload protection: when overloading 125%, the inverter will send an alarm, and stop working after 20 seconds.

1. Loads are reduced to the accepted level, the inverter will resume working.
2. Short circuit protection: inverter is with short circuit protection.
3. Over-temperature protection: when the inside temperature of the inverter reaches 80°C, the RED indication light will be on. The inverter will stop working, once the temperature drops to accepted level, the inverter will automatically resume working.
4. Low voltage protection: when the battery voltage is below the setting level, the inverter will send an alarm by beeping. When the battery voltage keeps dropping to its shutting level, the inverter will beep, and the RED LED will light, the inverter will stop working, when the battery voltage is increased to its restart level, the inverter will automatically resume working.
5. Over voltage protection: when the input voltage is higher than the setting level, the inverter will stop working, when the input voltage is normal, it will automatically resume working.
6. Reverse connection protection: once there is a reverse connection, the inverter fuse will be burnt. In this case, please switch off the inverter, disconnect the power source, and change the fuse.  
REVERSE CONNECT IS STRICTLY PROHIBITED.
7. LCD display: Inverter display as LCD LCD screen, display a variety of states, the following drawings detailed introduction.

#### **4) Installation**

1. The function of inverter is to convert the DC 12v/24v/48v/60v voltage into AC 110v/220V, before connection, please make sure the inverter is switched off.
2. When connecting the inverter to the battery, make sure that the battery voltage is consistent with the inverter reference voltage! !
3. Connect the Red cable of the inverter to the Positive pole of battery, Connect the Black cable of the inverter to the Negative pole of battery. Do not connect the cable reversely, otherwise, the inverter fuse will be burnt.
4. Turn on the inverter power switch, at which point the green (blue) indicator light is on, indicating that the inverter is working properly.
5. Please connect the loads to the AC output of the inverter, please do not overload. in the case of overloading, the inverter will send an alarm and stop working. To restart the inverter, please firstly switch off the inverter for 5 seconds, reduce the load, and switch it on again.

#### **5) Precautions**

The inverters are designed, manufactured and tested as per safety standards. However, as an electrical and electric product, it must be installed, operated and maintained strictly according to the related safety instructions as follows:

1. Reverse connection between the inverter and battery is strictly prohibited, it will burn the fuse of the inverter.
2. Please double check if the voltage of the battery matches the inverter input DC voltage, a mismatch connection between the inverter and battery can cause serious damage.
3. Double check if the connections are correct, make sure the connections are tight and firm.
4. Do not extend the inverter power cable.
5. When the inverter is not in use, please switch it off and disconnect inverter from the system.
6. Avoid contacting of any foreign objects or fluid. Do not touch the inverter with a wet hand. Keep the product away from children. Avoid using it in damp, dusty, high-temperature area. Do not use this product in flammable and combustible areas.
7. Install the product in a well-ventilated place, avoid using this product on or nearby hot objects such as electrical heaters, etc. Do not cover the inverter, avoid direct sunshine, moisture, and water.
8. This inverter can not be parallel connected.
9. It's strictly prohibited to connect this product to the city grid.
10. Do not try to repair the inverter, Once the inverter is opened, warranty is void.

## **6) Trouble Shooting**

When there is no output, please check the follows:

1. Excessive use of electrical appliances, too heavy load. Solution: Reduce electrical appliances, the use of electrical total power should be less than the inverter rated power.
2. Overheat protection. WORKAROUND: Reduce load cooling and restart after 15 minutes. (Summer temperature is high or the heat dissipation conditions are poor, should be appropriately reduced the use of the total power of electrical appliances.)
3. It must replace the fuse with the same capacity after fusing
4. Loose connection of the cable: make sure the cable is firmly and tightly connected.
5. Low voltage of battery; please charge the battery.
6. Battery exhausted: Please change battery, battery can be exhausted over the years.

## **7) Warranty**

1. The company provides a free warranty period of one year. Please note that the dealer is in contact with the warranty and repair business.

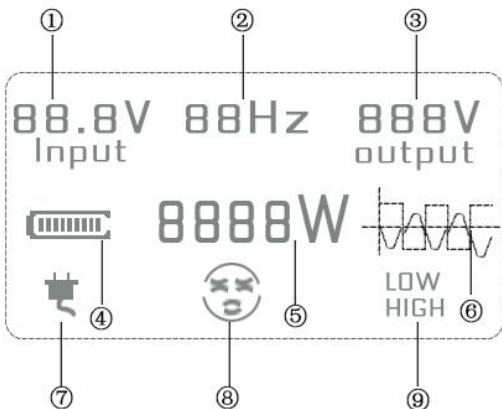
2. The failure range of this insurance clause does not include damage caused by external factors: incorrect installation, misuse or improper operation, unauthorized private maintenance, damage during transportation, etc.

## 8) Random Accessories

Products are carefully tested and inspected prior to shipment, but it is still possible to receive damage in transit, please carefully check the equipment before installation. If there is any damage, contact the distributor in time.

1. Portable Inverter power supply One
2. Power Cable Pair
3. A copy of the product instruction manual
4. A copy of the car spare fuse
5. Desiccant Bag
6. External screen set (including cable one)

## 9) Panel diagram



- ①: Product Input Voltage ②: Frequency ③: Product Output Voltage  
④: Battery power ⑤: Product power ⑥: Product Waveform  
⑦: Mains connection (with charging function) ⑧: Working status  
⑨: High voltage/low voltage protection

## 10) Instructions for external wired remote control equipment

Equipment introduction: The inverter can be remotely controlled to turn on and off.

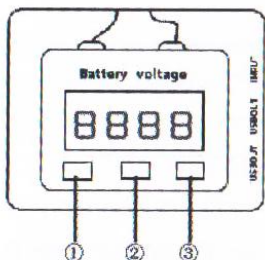
Digital display battery voltage value. The equipment adopts a wall switch design scheme, which can be installed in RVs and homes according to user needs. Comes with convenient stickers, which can be pasted at will.



- ①: Battery power
- ②: Fault indicator
- ③: Input voltage
- ④: Work indicator
- ⑤: Inverter switch key

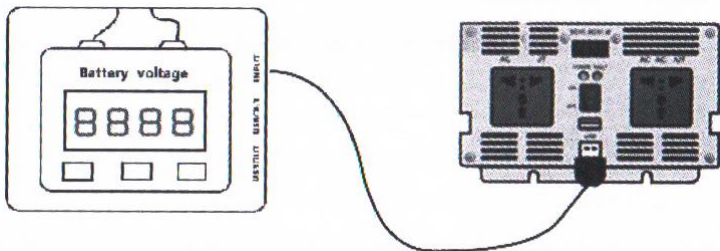
### Remote Control Connection Diagram





- ①: Backlight On/Of
- ②: Lead-acid / Lithium
- ③: Inverter switch key

### Remote Control Connection Diagram





Packing list		
Inverter		1
Input wiring		2
Remote control		1
Remote control cable		1
Fuse		1
Instructions		1
Inverter basic fault and troubleshooting method		
fault	Fault embodiment	Exclusions
The battery is low	Start by making an alarm sound (judge the alarm sound as one, BI-BI-BI...), the LED red light flashes, The voltage continues to decrease and the machine shuts down.	The battery is fully charged
The battery voltage is high	Alarm sound first (judge alarm sound is two, BIBI - BIBI - BIBI...) THE LED red light flashes, The voltage continues to rise and the machine shuts down.	The battery is fully charged or replaced in line with the nominal voltage of the inverter
Too much load	First issue an alarm sound (judge the alarm sound as a continuous alarm, BIBIBIBIBI...), the LED flashes red and the machine shuts down.	Reduce the load
The temperature is too high	Alarm sound first (judge alarm sound is three, BIBIBI - BIBIBI - BIBIBI...), the LED flashes red, the temperature continues to rise, and the machine shuts down.	Subtract the load and wait for the inverter to cool down
The output is shorted	Alarm sound without damaging the circuit (judge alarm sound as continuous alarm, BIBIBIBI...)	Just disconnect the short circuit
The battery is turned back	The built-in fuse is blown and the machine is powered on and unresponsive.	Replace the new fuse