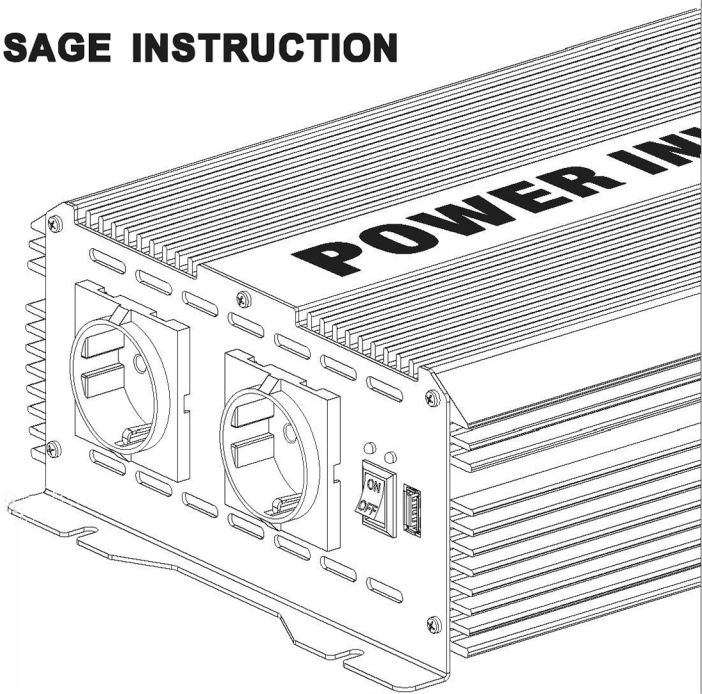


DC TO AC

POWER INVERTER

USAGE INSTRUCTION



Applicable for: 2000W.2500W.3000W

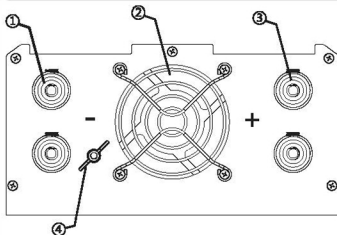
I . Description:

Power Inverters is a kind of product which change the DC electricity to AC electricity then offer power to small electrical equipment and digital products. It has been widely used in cars, steamboats, mobile office, post and telecommunications, public security, emergency and so on.

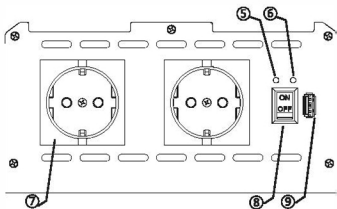
This power inverter adopted the international lead circuit design, with the advantage of small size, light, stable, and high conversion efficiency. It own five protect function such as: input low voltage protection, input over voltage protection, overload protection, over temperature protection, output short circuit protection. These five functions can protect the electrical equipment and the circuit of the car.

Please read this manual carefully before using, it's applicable to 2000W,2500W,3000W series of products.

II.Products and Wiring Diagram:



- ① DC input "-" terminal;
- ② Fan;
- ③ DC input "+" terminal;
- ④ Earth stud;



- ⑤ Power light (green light);
- ⑥ Fault light (red light);
- ⑦ AC output socket;
- ⑧ ON/OFF Switch;
- ⑨ USB port (If have);

(The above pictures just for references ,may have a little difference from the real products)

III. Connection Explanation:

Connecting in a wrong way will destroy the power inverter as well as the electrical equipment, please follow the following steps and sequence and make sure to use the products in a right way.

1. There are two red cables and two black cables for battery, screw tightly red cable with inverter's "+" and battery's "+" terminal; screw tightly black cable with inverter's "-" and battery's "-" terminal; please don't reverse polarity, or it will damage inverter and battery.

◆ **Warning:** if loading exceed 1000W, all of these four cables must be connected as above way.

2. Turn on the inverter switch, green light on; then insert the plug of electrical appliance into the AC output socket of inverter inverter.

◆ **Warning:** for safety, we recommend consumer to load less than 2000W for single AC socket, try to share to all socket.

3. For better operation, we recommend consumer to use with battery that exceed 200AH.

IV. Scope of Application and Related Matters:

1. Scope of application:

a. Only use for class II appliance

b. Scope of electric appliance that inapplicable:

◆ All electric appliances that exceed the rated power of the inverter.

◆ Generally capacitive load and perceptual load appliances are inapplicability: Air condition, high

power electric drill, fridge, microwave oven, blender.

- ◆ We do not recommend using this inverter with appliances which have strict requirement on power supply, such as precise equipments, if use ordinary power inverters with this kind of equipment will affect the measuring data.

c. Scope of electric appliance that inapplicable with the USB (Only for inverters with USB port) :

- ◆ USB is only for charging , do not have data exchange function.
- ◆ Before charging, please check carefully if the charging current of the appliance is under the inverters current, if it exceed the charging current of the inverter, please do not use, or it may destroy the USB port.
- ◆ Some appliances must charge with original charger, please don't charge with USB port.

2. Please check the voltage carefully before use:

inverter's input voltage must be same as battery's voltage; appliance's working voltage must be same as inverter's output voltage; once all are same, connect them in right way based on "**Connection Explanation**" in the manual.

3. Please use the inverter in ventilate condition and make sure the fan is not blocked. Do not put the inverter under rain or in humid place, keep it dry. In order to keep a long lifespan of the inverter, please keep it work under 85% of the related power.

4. The inverter has input low voltage protect function, input over voltage protect function, over load protection function, over temperature protect function and short circuit protect function. If these happened, the inverter

will stop work, if you want it start to work again please turn off the swift and turn it on again.

5. To save energy, the fan will not work unless the following two situations:
 - a. The fan will work when the load is exceed 30% of the related power of the inverter.
 - b. When the inside temperature of the inverter exceed 60 degree, the fan will work.

6. About use extended cable:
 - a. We do not recommend use extended cable between the inverter and the battery, because it will cause loss of DC electricity and affect the performance of the inverter.
 - b. If must use extended we suggest you use high quality cable to reduce the loss of electricity.

7. Other matters:
 - a. This is modified sine wave inverter; When measuring the voltage, please use precise equipment. (RMS)
 - b. When supply power to audio system, radio or TV, the appliance may have interference and this is normal phenomenon.
 - c. When use with vehicle's battery, please stop using the inverter while the engine stopped.
 - d. Please do not disassemble the inverter, if need to maintenance, please ask professional person to mend it.

V. Security Matters:

1. Please do not operate the inverter while your hand is wet, Keep it away from the touch of children.
2. The temperature of the shell will be high after longtime working, so do not touch it in case of scalded.
3. Do not put metal into the inverter in case of electric shock.
4. Do not touch the metal of the plug while insert the plug to the socket of the inverter.
5. Keep the inverter away from explosives.
6. Keep all AC electricity away from the inverter, it will damage the inverter and also may cause electric shock.

VI. Protect Function and Restart Work Method:

Function	Stata description			Restart work method
	LED light	Alarm	AC output	
Input low voltage alarm	Green on Red off	Yes	Yes	When the voltage of battery return to related range, alarm stop automatically.
Input low voltage shut down	Green on Red on	No	No	When the voltage of the battery return to related range, turn off the inverter for 3-5 seconds, then turn on to restart: green light on, red light off. Restart voltage of 12V battery: DC11.7V-12.3V Restart voltage of 24V battery: DC23.4V-24.6V
Input over voltage shut down	Green on Red on	No	No	When the voltage of the battery return to related range, turn off the inverter for 3-5 seconds, then turn on to restart: green light on, red light off.
Over load shut down	Green on Red on	No	No	Reduce the load to related range, turn off the inverter for 3-5 seconds, then turn on to restart: green light on, red light off.
Over temperature shut down	Green on Red on	Yes	No	When the inside temperature return to related range, turn off the inverter for 3-5 seconds, then turn on to restart: green light on, red light off.
Output short circuit	Green on Red off	No	No	When short circuit stopped, inverter restart to work automatically.

(PS: If with USB port ,the USB port can work normally under all kinds of protection condition.)

VII. Waste Dispose:

Please do not discard the products when it is useless, and dispose it properly according to local laws, otherwise it will cause pollution to the environment.

VIII. Specification:

Model	8104U	8105U	8108U	
DC input	DC 12V (DC 11-15V) / DC 24V (DC 22-30V)			
AC output	AC 230V ±10%			
Output frequency	50 ± 3Hz			
USB output (if have)	DC 5V MAX 2100mA			
Max power	2000W	2500W	3000W(30min)	
Continuous power	2000W	2500W	2800W	
Peak power	4000W	5000W	6000W	
Output wave	Modified sine wave			
Efficiency	>80%			
No load current	12V Input	< 0.6A		
	24V input	< 0.4A		
Input low voltage alarm	12V input	DC 10.2 – 10.8V		
	24V input	DC 20.4 – 21.6V		
Input low voltage shut down	12V input	DC 9.2 – 9.8V		
	24V input	DC 18.4 – 19.6V		
Input over voltage shut down	12V input	DC 15 – 16V		
	24V input	DC 30 – 32V		
Overload shut down	2300W ~ 2800W	2800W ~ 3000W	3300W~3800W	
Fuse	12V input	25A×10	20A×12	30A×12
	24V Input	15A×10	15A×12	15A×12
The best working temperature	5 ~ 35℃			
Cooling method	Fan			
Accessories	Battery cable , Earth wire			