

使用说明书

一. 安全措施

本设备的安装、调试，要由熟知本装置结构和操作危险的专业电气危险人员进行。不遵守此预防措施可能造成身体的伤害。

1. 不要把本设备连接在民用市电分线盒，比如家庭线路。
2. 逆变器要远离水，避免使水滴在机器上或者溅到上面，不要用湿手插或拔插头。
3. 使逆变器处于阴凉的环境，适宜温度应在10℃~50℃，避免阳光直射和热通风口。
4. 逆变器要远离易燃物质，或者堆积易燃气体的地方。
5. 长时间使用后，逆变器会发热，所以要避免接近对热敏感的物质。
6. 确保通风口畅顺及散热良好。
7. 高压危险，请不要打开本机器。
8. 使用合适型号的电线，避免因为逆变器电流过大造成电线熔断。
9. 确保逆变器连接正确的电池，否则会熔断逆变器的保险丝，机器不用的时候关掉开关。
10. 清洁前请先断开开关，用一块干布清洁。不要用湿布或者清洁剂。

二. 逆变器的使用

1. 电源的选择

必须由蓄电池或者汽车点烟器提供电源。根据产品的不同可选择12V、24V。

2. 连接逆变器到电源

关掉逆变器和所有装置的开关于“OFF”状态

电池供电:把电池的负极连接到逆变器的黑色接线端子(-), 电池的正极连接到逆变器的红色接线端子(+).

3. 连接逆变器到负载

确保负载电源是逆变器的标称电源，并启动电流不能超过逆变器的峰值容量。连接完逆变器和负载后，打开逆变器和负载。

三. 保护功能

1. 输入低电压保护

当电池电压小于标准参考值，交流输出会自动关闭，蜂鸣器长鸣，故障指示灯会被点亮(红色)。

2. 输入过压保护

当输入电压高于标准参数值，交流输出会自动关闭，故障指示灯会被点亮(红色)。

3. 短路保护

当短路发生时，输出被关闭，故障指示灯会被点亮(红色)。

4. 逆变器温度保护

当逆变器的温度超过90℃，交流输出将自动关闭，直到温度恢复到50℃后逆变器自动恢复正常。

5. 过载保护

当负载超过逆变器额定容量的110%以上，交流输出将自动关闭，负载恢复常值后逆变器恢复正常。

四. 常见问题及解决

> 受到外界干扰

逆变器可能会因使用场合中的一些强电磁波的干扰，如附近的马达、功率变频器、强磁场等。尽量远离类似上面的设备。

> 逆变器没有反应

1. 电池和逆变器没有接好，重新接好。
2. 电池的极接反了，保险丝熔断，更换保险丝。

> 输出电压低

1. 过载，负载电流超过标称电流，关掉部分负载重新启动。
2. 输入电压太低。确保输入电压在标称电压范围之内。

> 低电压报警

1. 电池没电了需要充电。
2. 电池电压太低或者接触不良，再充电，检查电池端子或者用干布清理端子。

> 逆变器无输出

1. 电池电压太低，重新充电或者更换电池。
2. 负载电流太高，关闭部分负载。
3. 逆变器过温保护。让逆变器降温一段时间，并放在通风的地方。
4. 逆变器启动失败，重新启动。
5. 端子接反，保险丝熔断，更换保险丝。

> 逆变器不工作

检查电压开关，保险丝和电池连接线或者点烟器。

User Manual

1. Safety instruction

The installation and debugging of the product must be done by professional electric worker.Or may cause danger.

1. Do not connect the product to civil use grid distribution box such as house electric wire route.
2. The product must be separated from water to avoid water dropping on inverter. Do not put plug in or pull out by wet hand.
3. Please put the product in cool environment where temperature 10℃ ~50℃ will be proper and avoid sunlight and hot air.
4. The product must be separated from inflammable material or place where piles inflammable gas.
5. The product will heat after long time working so that please separate from material sensitive to heat.
6. Please ensure the air inlet open and thermal function OK.
7. Do not open the product because of high voltage danger.
8. Please use proper size cable to avoid cable breaking caused by big current.
9. Please connect battery correctly, or will cause fuse breaking. Please switch off when not use.
- 10.Please switch off before cleaning. Please clean with dry rag but not wet ragor cleaning detergent.

2. Product Operation

1. Choose power resource

Must use battery or car cigarette lighter. Please choose 12V/24V/48V according to inverter requirement.

2. Connect product to power resource switch off inverter and keep every device “OFF”.

Battery: Connect battery negative pole to inverter black terminal(-), and connect positive pole to redterminal(+).

3. Connect inverter to load

Load must be accommodated with inverter’s rated power and start current not over inverter peak capacity. Switch on inverter and load after connection.

3. Protection

1. Low input voltage protection:

When battery input voltage lower than inverter standard parameter, AC output will be shut down automatically, buzzer will scream 3 times and fault signal light will be lighted (red) .

2. Over input voltage protection: When battery input voltage higher than inverter standard parameter , AC output will be shut. down automatically, buzzer will scream 4 times and fault signal light will be lighted (red).

3. Short circuit protection: When short circuit happens, output will be shut down and fault signal light will be lighted (red).

4. Temperature protection: When inverter temperature over 90℃, AC output will be shut down automatically. It will recover normal automatically when temperature back to 50℃.

5. Over load is 110% or more over than inverter rated capacity, AC output will be shut down automatically. When load back to normal, inverter will recover normal.

4. Question and resolution

> Environment influence

- 1) Inverter may be influenced by strong electro magnetic wave, such as motor, frequency inverter and strong magnetic field etc.
- 2) Please try to srparate inverter from similar devices as above.

> Inverter fails to switch on

- 1) False connection between battery and inverter, please connect again.
- 2) Battery reverse connection and fuse broken, please replace fuse.

> Low output voltage

- 1) Overload and load current over rated current, please switch off some loads and restart inverter.
- 2) Low input voltage. Please assure that input voltage is within rated voltage.

> Low voltage alert

- 1) Battery low capacity, please charge battery.
- 2) Battery low voltage or improper connection, please charge battery, check battery terminalor clean terminal with dry rag.

> Inverter no output:

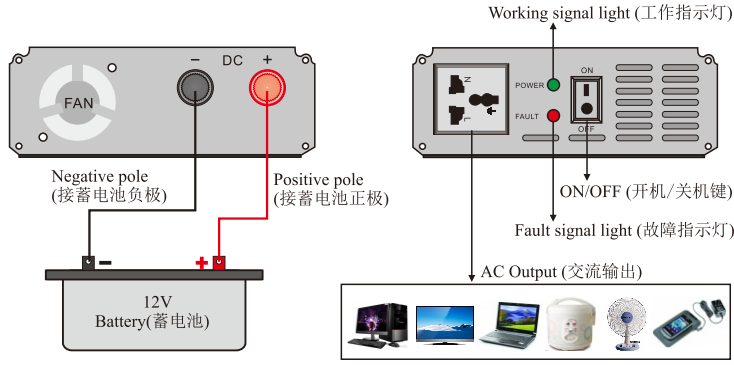
- 1) Battery low voltage, please charge battery or replace battery.
- 2) High load current, please switch off some loads.
- 3) Over temperature protection. Please put inverter on ventilated place to cool for a while.
- 4) Inverter starting failure, please restart.
- 5) Reverse connection and fuse breaking, please replace fuse.

> Inverter not work

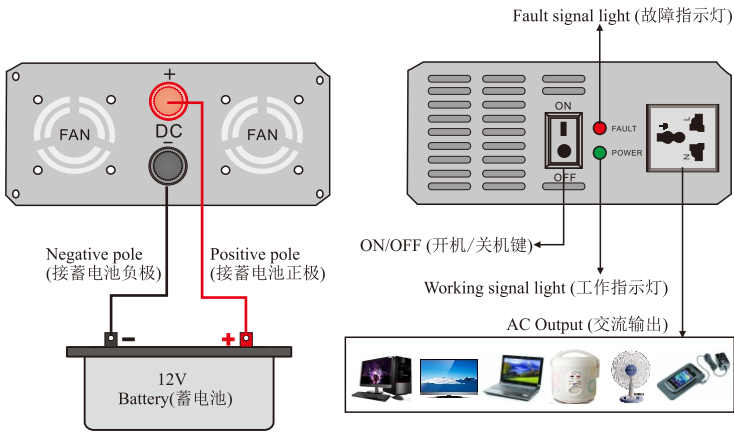
Please check power switch, fuse, battery connection or car cigarette lighter.

5. Wiring diagram(接线示意图)

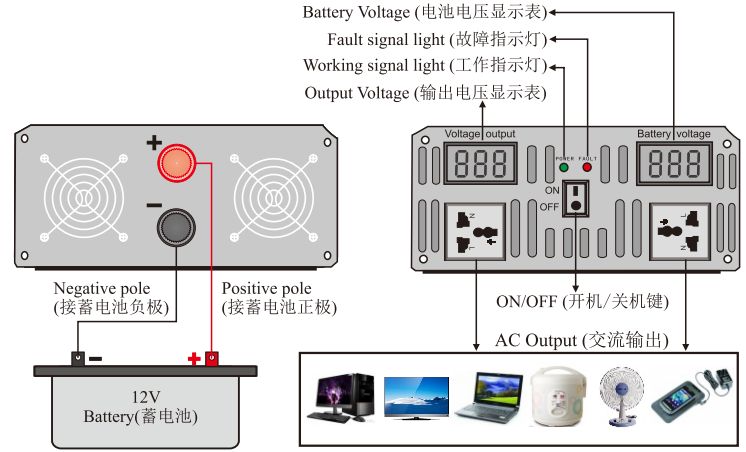
5-1. 300W~600W



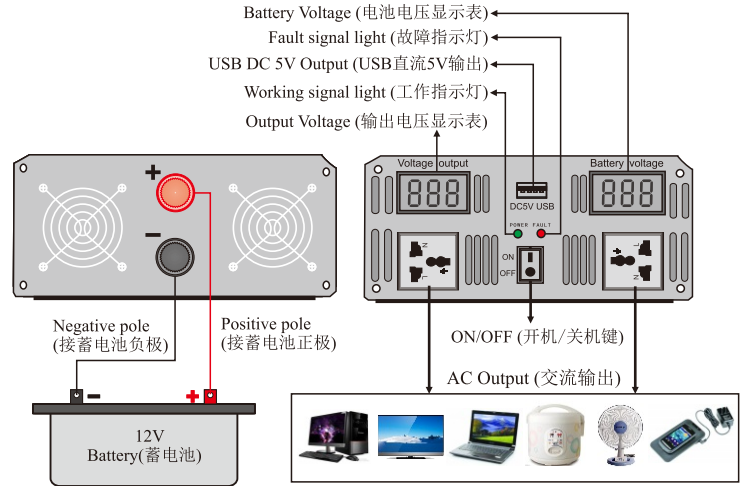
5-2. 1000W



5-3. 1500W~2000W



5-4. 3000W



六. 型号与参数

产品型号: GP-C	30112/24	50112/24	60112/24	10212/24	15212/24	20212/24	30212/24
额定功率	300W	500W	600W	1000W	1500W	2000W	3000W
电池电压	12/24VDC						
机器尺寸(L*W*Hmm)	197*55*150		350*150*63		407*198*90		470*222*90
包装尺寸(L*W*Hmm)	210*80*175		370*105*185		432*125*233		520*138*272
净重(kg)	1	1.2	1.3	2.2	4.2	4.5	7.2
毛重(kg)	1.5	1.7	1.8	2.5	4.7	5	8
输入	直流输入电压范围	10.5-15VDC (单节电池电压)					
	电池恢复自动开机电压	≥11V (单节电池电压)					
输出	逆变输出电压	110VAC±2%/120VAC±2%/220VAC±2%/230VAC±2%/240VAC±2%					
	逆变输出频率	50/60HZ±1%					
	逆变输出效率	≥85%					
	逆变输出波形	正弦波					
保护	电池欠压保护	9.5VDC±0.5V (单节电池电压)					
	电池过压保护	15VDC±0.5V (单节电池电压)					
	逆变输出欠压保护	≤187VAC 关闭输出					
	逆变输出短路保护	关闭整机输出, 断开电池电流					
	过载功率保护	额定功率110%以上					
	温度保护	≥90°C 关闭整机					
面板显示	发光二极管/LED. 红灯: 电池故障时灯亮. 绿灯: 正常通电时亮起			发光二极管/LED. 红灯: 电池故障时灯亮. 绿灯: 正常通电时亮起+数码管电压表			
散热方式	智能风扇控制						
开关	锁式开关						
环境	使用温度	-10°C~40°C					
	储存温度	-15°C~60°C					
	噪音	≤60dB					
	海拔高度	2000m(超过需降额使用)					
	相对湿度	0%~95%, 无凝露					

注: 以上内容如有变更, 恕不另行通知!

6. Specification

Model: GP-C	30112/24	50112/24	60112/24	10212/24	15212/24	20212/24	30212/24
Rated Power	300W	500W	600W	1000W	1500W	2000W	3000W
Battery Voltage	12/24VDC						
Machine Size(L*W*Hmm)	197x55x150		350x63x150		407x90x198		470x90x222
Package Size(L*W*Hmm)	210x80x175		370x105x185		432x125x233		520x138x272
N.W(kg)	1	1.2	1.3	2.2	4.2	4.5	7.2
G.W(kg)	1.5	1.7	1.8	2.5	4.7	5	8
Input	DC input voltage range	10.5-15VDC (single battery voltage)					
	Voltage of the battery switched on automatically	≥11V (single battery voltage)					
Output	Output voltage (battery mode)	110VAC±2%/120VAC±2%/220VAC±2%/230VAC±2%/240VAC±2%					
	Output frequency (battery mode)	50/60Hz±1%					
	Efficiency	≥85%					
	Output wave form	Pure Sine Wave					
Protection	Battery low voltage alarm	9.5VDC±0.5V (single battery voltage)					
	Battery over voltage protection	15VDC±0.5V (single battery voltage)					
	Output under voltage protection (Battery mode)	≤187VAC Turn off the output					
	Output short circuit protection (Battery mode)	machine shut off, battery cut off					
	Over power protection	110% more than rated capacity					
	Temperature protection	≥90°C machine shut off					
Display	LED. Red light: battery fault; Green light: Normal electricity			LED. Red light: battery fault; Green light: Normal electricity+ Digital tube voltmeter			
Thermal method	Cooling fan in intelligent control						
On-off	locking-type						
Environment	Operating temperature	-10°C~40°C					
	Storage temperature	-15°C~60°C					
	Noise	≤60dB					
	Highest altitude	2000m(More than derating)					
	Humidity	0%~95%(no condensation)					

Notice: Above information is subject to change without prior notice.