

Detailed Product Parameters

Model	BAP1000A	BAP1500A	BAP2000A	BAP3000A
Rated Power	1000W	1500W	2000W	3000W
Peak Power	2000W	3000W	4000W	6000W
AC Voltage	220~250Vac (Adjustable)			
Frequency	50Hz / 60Hz (Adjustable)			
Waveform	Pure Sine Wave			
Battery Voltage	12Vdc			
Voltage Range	9.5V ~ 15.5Vdc			
DC Current	85.2A	132.6A	189.4A	287.4A
No-load Loss	≤1	≤1.4A	≤1.7A	≤2.3A
Max Efficiency	92%		93%	
Shutdown Mode Current	≤1mA			
Fan Operation Mode	Temperature and Power Control Mode			
Protection Mode	Battery Low Voltage Protection, Battery High Voltage Protection, Over Temperature Protection, Short Circuit Protection, Over Load Protection			
USB	5Vdc / 2.1A			
Working Temperature, Humidity	0 ~ 40°C / 10 ~ 90%RH			
Net Weight	1.90kg	2.33kg	3.50kg	4.40kg
Gross Weight	2.42kg	2.87kg	4.30kg	5.52kg
Product Size L*W*H(mm)	280*158*90	310*158*90	375*196*99	433*196*99
Packing Size L*W*H(mm)	325*210*153	355*210*153	423*250*173	480*250*173
All specifications are measured under normal voltage 12Vdc in ambient temperature of 25°C.				

Model	BAP1000B	BAP1200B	BAP1500B	BAP2000B	BAP3000B	BAP4000B
Rated Power	1000W	1200W	1500W	2000W	3000W	4000W
Peak Power	2000W	2400W	3000W	4000W	6000W	8000W
AC Voltage	220~250Vac (Adjustable)					
Frequency	50Hz / 60Hz (Adjustable)					
Waveform	Pure Sine Wave					
Battery Voltage	24Vdc					
Voltage Range	19V ~ 31Vdc					
DC Current	50.8A	50.8A	69A	92A	138.5A	184A
No load Loss	≤0.5A	≤0.5A	≤0.6A	≤0.6A	≤1.5A	≤1.2A
Max Efficiency	94%	94%	94%	94.8%	93.25%	94.5%
Shutdown Mode Current	≤1mA					
Fan Operation Mode	Temperature and Power Control Mode					
Protection Mode	Battery Low Voltage Protection, Battery High Voltage Protection, Over Temperature Protection, Short Circuit Protection, Over Load Protection					
USB	5Vdc / 2.1A					
Working Temperature, Humidity	0 ~ 40°C / 10 ~ 90%RH					
Net Weight	1.88kg	1.88kg	2.41kg	2.41kg	3.50kg	4.40kg
Gross Weight	2.40kg	2.40kg	2.95kg	2.95kg	4.30kg	5.52kg
Product Size L*W*H(mm)	280*158*90	280*158*90	310*158*90	310*158*90	375*196*99	433*196*99
Packing Size L*W*H(mm)	325*210*153	325*210*153	355*210*153	355*210*153	423*250*173	480*250*173
All specifications are measured under normal voltage 24Vdc in ambient temperature of 25°C.						

This pure sine wave inverter is suitable for:

All kinds of household appliances, lighting, IT electronic products, office equipments, power tools, car electrical appliances, outdoor emergency power supply etc. The electrical equipments with power exceeding the output power of the inverter and some electrical equipments with high starting current may not be able to be driven.

Safety Precautions (These safety precautions must be read and memorized)

In order to avoid injury to you and others, the following safety precautions are listed and must be observed. Please refer to the instructions for the meanings of the various symbols.

WARNING Please read carefully, as the following may result in personal injury.

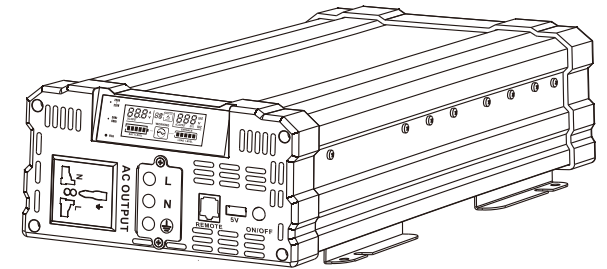
<p>Flammable Gas</p> <ul style="list-style-type: none"> Ensure that no flammable gases are present, as sparks may occur, before connecting the battery. Avoid storing them in areas where flammable gases may accumulate. 	<p>No parallel with Grid</p> <p>Do not connect the output in parallel with the grid, as may damage the inverter and even cause an electric shock.</p>	<p>Not for use by minors</p> <p>The inverter produces high voltage, creating a risk of electric shock.</p>
<p>No disassembly</p> <p>Unauthorized disassembling or modifying of the inverter may lead to safety incidents such as equipment failure, fire, or electrical shock.</p>	<p>No rods or other metal</p> <p>Do not put rods or metal in the openings or jacks of the inverter. This may cause electric shock and harm the inverter's internal parts.</p>	<p>Avoid wet hands</p> <p>No touch inverter with wet hands, a risk in electric shock and personal safety.</p>
<p>Keep out of fire and hot places</p> <p>Operation in fire and hot places can lead to fire and explosion.</p>	<p>No wrestling</p> <p>Dropping or hitting the inverter can cause harm and create safety risks.</p>	<p>Installation</p> <p>Have to evaluate the battery and cables before install.</p>
<p>Please ground the wire</p> <p>For the safety of electricity, please ground the wire or it may lead to safety accidents.</p>	<p>Waterproof and damp proof</p> <p>Please pay attention to moisture and waterproof, the inverter may cause short circuit, fire and electric shock.</p>	<p>Please insert fully</p> <p>Insert the plug of the load completely into the output of the inverter. Failure to insert the plug fully may result in electric shock and overheating, or even a fire accident. Do not use damaged plugs, power sockets, power cords.</p>

The product is with the following characteristics

- Cost-effective design, price and performance ratio to the extreme;
- This product is with CC BOOST function, default CC BOOST function, user can cancel by setting;
- With the new generation of high-frequency circuit design, the working efficiency is more than 91%;
- Output voltage and frequency can be set by users to meet different requests;
- LCD displays working parameters, alarms and fault codes, the working status is clear to users;
- The fans adopt dual control function including temperature and power control, it is to ensure the normal use of the product, no noise at low-power load;
- Conform to vehicle design, combining the use of vehicle and solar power generation;
- Product is with remote panel interface (this function needs to be used with optional remote control panel)

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BAP Series Pure Sine Wave Inverter Manual

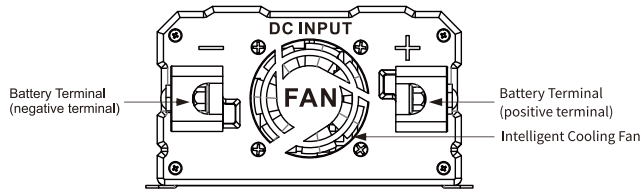
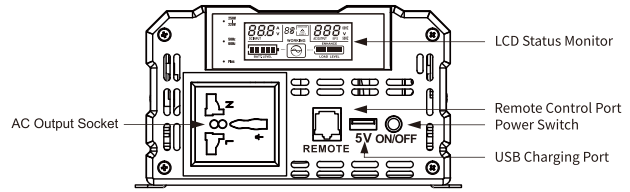


To ensure reliable service to you, the inverter must be installed and used properly. Please read the installation and operating instructions before installation and use. Please pay special attention to the warnings and warning instructions in this manual. Cautionary statements are made about certain usage conditions and practices that may cause damage to the inverter. Clear warnings are given about certain usage conditions and practices that may cause personal injury. Please read all instructions before using the inverter.

Please read this instruction manual carefully to facilitate correct use. Especially before use, please remember to read the details of "Safety Precautions" to ensure safe use. After reading the instruction manual, please keep it together with the warranty certificate for future reference.

Inverter appearance and function introduction

BAP1000A/BAP1500A/BAP1000B/BAP1200B/BAP1500B/BAP2000B
Front and rear panels



BAP2000A/BAP3000A/BAP3000B/BAP4000B Front and rear panels

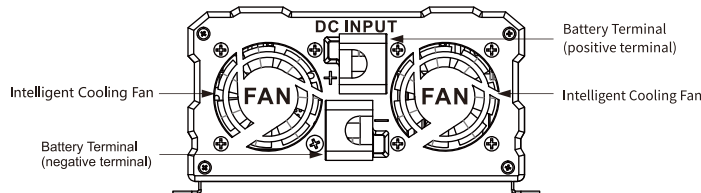
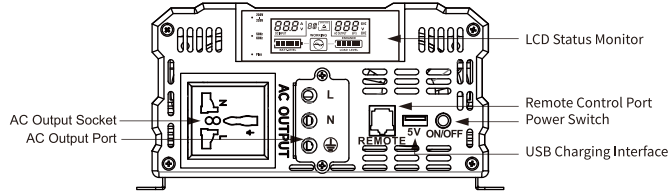
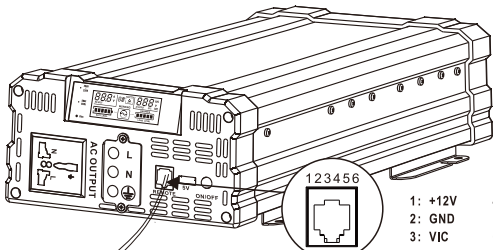


Diagram of connecting the remote control panel



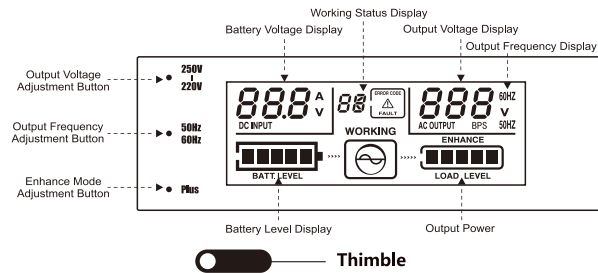
Note: Add a switch between pin3&pin4, can be used to control the inverter on/off.

Remote control panel (optional)

BAP series inverters support remote control panel connection, and the connecting cable can be up to 7 meters long. The inverter can be turned on and off through the remote control panel, and the working status of the inverter can be understood through the monitor of the remote controller.

The product panel is for reference only, please refer to the actual product.

LCD status monitor and press function introduction



1. Use the thimble to press and hold the output voltage adjustment button (there are "220V~250V" next to the button) for 5 seconds to enter the output voltage setting. The output voltage can be set to 220~250Vac. Each press increases 5Vac, automatically saved in 3 seconds, the default voltage depends on the sales area;
2. Use the thimble to press and hold the "50Hz-60Hz" button for 5 seconds to enter the output frequency setting. The output frequency can be set to 50/60Hz. It will be automatically saved in 3 seconds. The default frequency depends on the sales area;
3. Use the thimble to press and hold the "Plus" button for 5 seconds to enter the mode setting. You can set the normal mode and ENHANCE (enhanced) mode. It will be automatically saved in 3 seconds and the default enhanced mode.

Installation and connection steps

1. Turn off the power switch of the inverter.
2. Connect the negative terminal of the battery to the black terminal of the inverter with the black DC cable.
3. Connect the positive terminal of the battery to the red terminal of the inverter with the red DC cable.
4. Plug the power supply of the load appliance into the output socket of the inverter.
5. Turn on the power switch of the inverter to use.

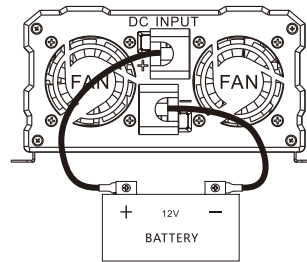


Diagram of 12V inverter connected to battery

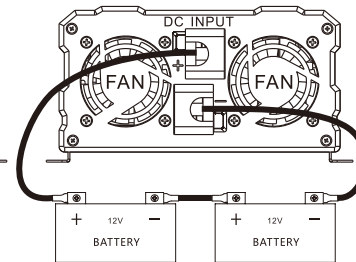
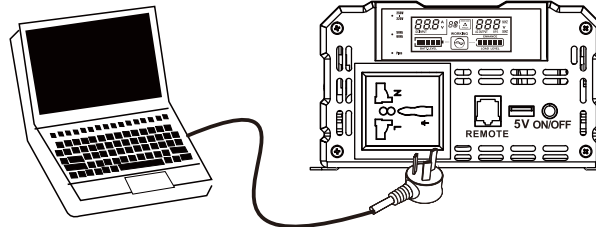


Diagram of 24V inverter connected to the battery

Inverter connected to electrical load equipment



Load equipment

Disassembly steps

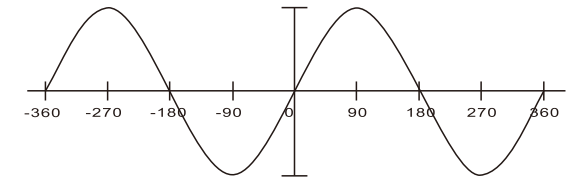
1. First turn off the power switch of the inverter;
2. Pull out the power plug of the load.
3. Remove the red DC cable;
4. Remove the black DC cable.

Operating Status Display and Troubleshooting

Display	Working Status Of Display	Status Description	Method of exclusion
OK	Normal	Normal operation
01	Battery low voltage protection	Battery voltage is too low, the inverter automatically turns off the output.	Check for loose battery link cables or check for low battery capacity
02	Battery high voltage protection	Battery voltage is too high, the inverter automatically turns off the output.	Check the battery voltage or determine if there is an external charger connected that is causing the voltage to be too high
03	Output short circuit protection	Inverter output short circuit, inverter automatically shut down output.	Check for shorted AC output link wires. Disconnect or reduce the electrical load and turn the inverter back on.
04	High temperature protection	The inverter automatically turns off the output if the internal temperature of the machine is too high.	Check if the machine is well ventilated and if the working environment temperature is too high. Wait for the machine to cool down and resume output automatically.
05	Overload protection	Overloaded inverter output, inverter automatically shut down output.	Check if the power load is too large, disconnect or reduce the power load, turn on the inverter again.
06	Battery Low Voltage Alarm	Low battery voltage, machine alarm.	Turn off the load and charge the battery.
07	High temperature alarm	Machine internal temperature is high, close to the limit of the machine.	Reduce the electrical load, check if the machine is well ventilated and if the ambient temperature is too high.

Performance Introduction

An inverter is a power supply that converts direct current (batteries, solar cells, wind turbines, etc.) into alternating current. Because of the high frequency inverter used in power conversion technology, ferrite transformer to replace the old bulky silicon steel transformer. This is why the inverter of our company is lighter weight and less bulky than other inverters that have similar rated power. While inverting mode, inverter will output pure sine wave which is really same as public power supply. If the power of the appliances is not exceed the power of the inverter it can drive those basically.



Pure sine wave

Operating Environment

For best results, place the inverter on a flat surface such as the ground, car floor, or other solid surfaces. Allow the inverter power cord to be easily secured. The working place should meet the following criteria:

1. Keep dry do not let the inverter contact with water or other liquids, and make sure that the inverter away from moisture or water.
2. Keep the inverter in a cool environment with a temperature between 0 °C (non-condensing) and 40 °C. Do not place the inverter next to heating vents or other heat generating equipment. Keep the inverter out of direct sunlight as much as possible.
3. Keeping the surrounding area free from objects blocking it ensures the free flow of air. Do not put anything on the inverter while it is working. The inverter's fan is used to help dissipate heat.
4. Do not use the inverter near flammable materials or in places where flammable gases can gather.
5. The battery must not only provide the DC voltage required by the inverter, but must also provide enough current to run the load. The power source should be a fully charged, good battery. For a rough estimate of the current required by a load, divide the power of the load by.

Nominal current and actual equipment in use

The nominal current or power of most of power tools, household appliances and audio-visual equipment is within or much less than the nominal power of the inverter, but overload protection occurs when starting them. Inverter is the easiest to drive resistive loads and the hardest to start capacitive loads. It is because resistive loads are linear loads and can operate at full load. Such as electric stoves, rice cookers, LCD TVs etc.

Some audio-visual equipment and power tools require a greater power than resistive loads to work properly, asynchronous motors, CRT TVs, compressors, pumps etc.. Two to six times the operating current is required for startup. The ability to run the specific loads is subject to the use of the electrical equipments.



The fuse will not blow under normal circumstances unless there is a serious circuit failure. When the inverter malfunctions, please do not try to repair by yourself and contact a professional technician to deal with it, there is a danger of electric shock from the high voltage inside the machine.