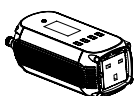


Product detail parameters

| Model | | BEF300H | BEF500H |
|--------------------------|---------------------------------|---|--------------------|
| Output | Rated power | 300W | 500W |
| | Peak power | 600W | 1000W |
| | Ac voltage | 230V | |
| | Frequency | 50Hz | |
| | Waveform | Modified sine wave | Modified sine wave |
| Input | Battery voltage | 12V | 12V |
| | Voltage range | 10V-15.5V | 10V-15.5V |
| | Dc current | 30A | 50A |
| | No-load loss | 0.2A | 0.25A |
| | Shutdown mode static current | 20mA | |
| | Maximum efficiency | 89% | |
| | Battery type | Lead-acid batteries / lithium battery | |
| | | | |
| Battery input protection | Fuse | 40A*1 | 40A*2 |
| | Battery low voltage protection | 10V | 10V |
| | Battery high voltage protection | 15.5V | 15.5V |
| | Reverse battery protection | Yes | Yes |
| Output protection | Over temperature | LCD display shows high temperature protection, turn off the inverter output, automatically restore the inverter output when the temperature decreases | |
| | Output short circuit | LCD display shows short circuit protection, remove the short circuit and restart the inverter to restore output | |
| | Overload | 350W | 550W |
| | | LCD display shows overload protection, restart the inverter to restore output | |
| 5V | Output voltage | 5V | |
| | Current | 2.1A | |
| Quick charge | Output voltage | 5V/9V/12V | |
| | Output current | 2.1A | |
| Environment | Working temperature | 0-40°C | |
| | Working humidity | 20-90%RH | |
| | Storage temperature, humidity | -30°C-+70°C,10-95%RH | |
| Other | Net weight | 800g | 910g |
| | Size(L*W*H) | 190*101*82mm | 230*101*82mm |

PACKING LIST



A host



A car cigarette lighter line



A pair of battery clamp wires



WARNING

To avoid harm to you and others, here are some of the following security considerations. Be sure to follow the meanings of the various flags. See the following.



Inflammable gas

- When connected to a battery, sparks are produced. Make sure there is no flammable gas before connecting.
- The battery will produce flammable gas when charging and discharging. It should be well ventilated and should not be stored in other places where it is flammable



No parallel with city power

- The output can not be paralleled with the power supply, it will damage the inverter and cause the danger of electric shock.



Minors are prohibited from using them

- Can not be used by minors, inverter output is high voltage, may lead to electric shock risk.



No disassembly or assembly

- Do not disassemble or modify the inverter without permission. Unauthorized removal or modification of the inverter may result in a safety accident such as a malfunction, fire or electric shock.



Bar contacts are prohibited

- Do not place bars or other metal objects at the opening or socket of the inverter. This may touch the internal parts and cause electric shock and inverter damage



Wet hands, do not touch

- Do not touch the body and plug with wet hands, which may cause electric shock and personal safety



Keep away from fire and high temperatures

- Fire and explosion can occur in inverter and battery when running in flame and high temperature region.



No throwing

- Bumping the inverter can cause damage and other safety hazards.



Medical equipment disabled

- This inverter has not been tested and can not be used in medical equipment



Please connect the ground wire.

- In order to ensure the safety of use, please connect the ground wire.



Moisture proof and waterproof

- Please pay attention to moisture proof and waterproof. The inverter may cause short circuit, fire and electric shock due to humidity or water inflow.



Please insert completely

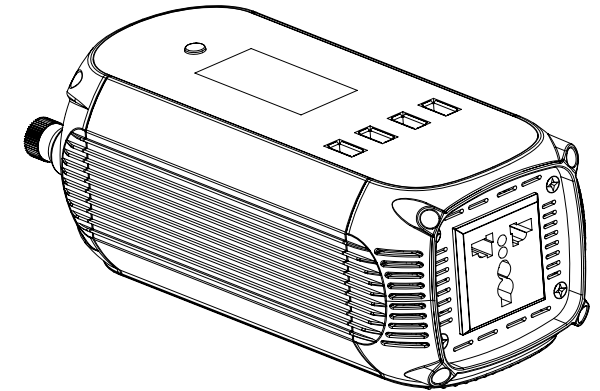
- Please insert the load device plug into the inverter socket completely. If the plug is fully inserted at the end, it may lead to electric shock and overheating, and even cause a fire accident. Do not use damaged plugs, power outlets, electrical wires.

Product characteristics

- Our company's modified sine wave series inverter has perfect protection circuit, provide high temperature protection, overpressure protection, low voltage protection, short circuit protection, overload protection and other functions to prevent damage to your inverter;
- Advanced circuit design, high conversion efficiency, rich interface, stable output voltage;
- The inverter is made of metal shell, which has reasonable design and good heat dissipation performance;
- The inverter has advanced anti-jamming technology, fully functional protection circuit, soft start circuit and convenient operation mode.
- The soft start circuit increases the output voltage step by step at startup in order to eliminate cold start failure, and also has the instantaneous drop of the output voltage and the quick recovery function, which reduces load on startup instantly overload.

BELTTT®

BEF300H / BEF500H Inverter Manual

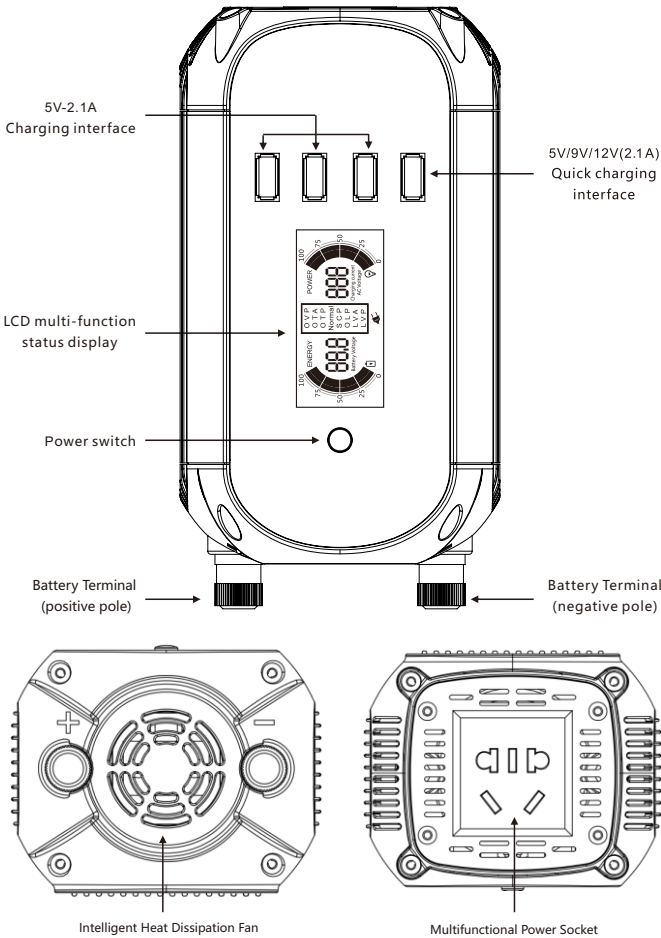


To ensure reliable service, the inverter must be used properly. Please read the instruction manual before use. Particular attention should be paid to the warning and attention of this brochure. Caution for certain conditions and practices that may cause damage to the inverter. Make clear warning statements about certain conditions and practices that may cause bodily harm. Please read all instructions before using the inverter.

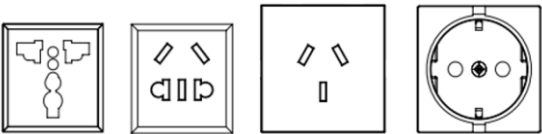
Please read this instruction manual carefully so that it can be used correctly. Remember to read the "safety precautions" section before you use it to make sure it's safe to use. After reading the instructions, please complete the warranty card for safekeeping, to keep on for reference.

The inverter can be suitable to various kinds of household appliances, lighting electricity, IT electronics products, office equipment, on-board appliances, outdoor emergency power supply, etc. The power of the inductive load and the electrical equipment exceeds the output power of the inverter and some start-up current of large power equipment may not be driven.

BEF300H / BEF500H Appearance diagram



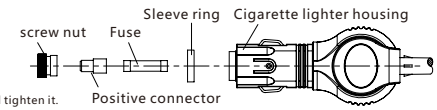
The appearance of the product is for reference only. Please prevail in kind



Note: AC socket may be different in different countries and regions. Please prevail in kind

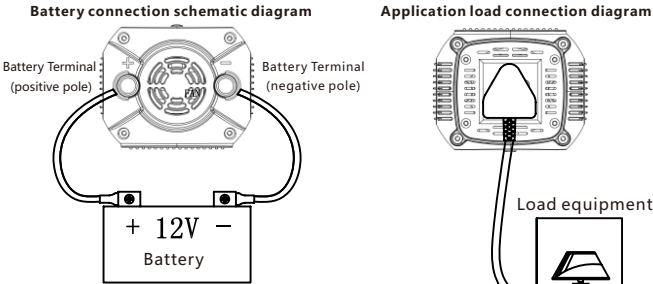
Replace signal of inverter insurance

- Assembly instructions:
- 1. Install the sleeve ring on the cigarette lighter shell;
 - 2. Put the insurance into the shell;
 - 3. Install positive joint;
 - 4. Insert the nut into the positive joint and tighten it.



If the inverter is plugged into the cigarette lighter socket and there is no reaction, it may be that the fuse in the cigarette butt is blown. Please check the cigarette butt insurance. Replacement method as above

Install the connection step:



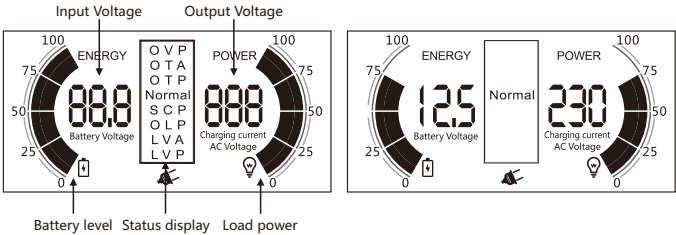
Refer to the above connection diagram:

- 1. First turn off the power switch of the inverter.
- 2. Use a black DC cable to connect the negative terminal of the battery to the black terminal of the inverter.
- 3. Connect the positive terminal of the battery to the red terminal of the inverter with a red DC cable.
- 4. Plug the power supply plug of the power equipment into the output socket of the inverter.
- 5. Open the inverter power switch can be used.

Disassembly steps:

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

Inverter display function introduction



Warning 1. When the alarm warning is detected, the buzzer will alarm for 5 times and then turn off for 10 seconds; then the buzzer will alarm for 5 times and turn off for 10 seconds; after the cycle, the buzzer will not alarm for 1 minute, and the alarm information will still be displayed on the LCD screen. 2. When the protection warning is detected, the buzzer will alarm for 30 seconds, and the protection information will appear on the display screen. After 30 seconds, the machine will automatically shut down.

Installation method

- Warning** 1. Wiring diagram is only for basic reference, please contact professional technical personnel for actual installation. One or more batteries can be used in inverters. One or more batteries can be used in inverters. It's better to use 150AH or batteries with bigger capacity.
- 2. Since it may be necessary to connect the battery for these operations, make sure there is no flammable gas around before connecting.

Connect the inverter and the battery with the cables supplied with the inverter (excluding the high-power mode cable). The red cable is connected to the red terminal of the inverter input terminal and the positive terminal of the battery. The black cable is connected to the inverter Input terminal black and battery negative. Please ensure that all cables are stable and reliable. Improper connection may result in overheating of the cable, damage to terminals and lugs. At the same time will cut down the battery power supply time. Turn the inverter mode to ON, if your battery is fully charged, the light of inverter will display green. The inverter is protected if the light displays red, so try to solve it before using. (Check whether the battery voltage is too high or too low, the inverter output is overload or short circuit)

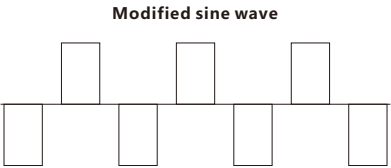
- The power source for the 12V inverter can be used with a 12V battery or several 12V batteries in parallel to increase the battery's power supply time.
- 3. Inverter must be connected to the same nominal voltage of the battery, 12V inverter connected to the 12V battery, 24V inverter connected to the 24V battery
- 4. Before you plug in all your power devices, make sure all devices are shut down.

Turn on the power switch of the inverter, the LED on the POWER edge emits green light. Then you can turn on your device one by one. Before using the electric equipment, please check whether the power of the appliance is within the power range of the inverter. If the power of the inverter is exceeded, the inverter will have overload protection. The red indicator lights are flashing, so you need to reduce the load and troubleshoot. If the indicator is red, it is overloaded, so you need to reduce the load and restart before working.

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. When the inverter works in the inverter mode, the output waveform is modified sine wave. It is a practical wave which waveform characteristic is similar to pure sine wave. This waveform is most suitable for linear load and switching power supply of electronic equipment, such as light bulbs, rice cookers, energy saving lamps, etc.. It can also be applied to inductive loads, such as transformers, motors, etc.

The inverter output is the effective value voltage of the modified sine wave is 110V, which is the same as the standard household power supply, and its output calibration is calibrated under the RMS voltage. If use the voltmeter with average value to measure, the phenomenon of low output voltage may appear. In order to measure the accuracy, please use the voltmeter that can measure the RMS value.



Using environment

- In order to achieve the best use effect, please put the inverter in the surface of the smooth place, such as the ground, the floor of the car, or other solid surface. Let the inverter power line can be fixed easily. The working place should meet the following standards:
- 1. Do not allow the inverter to contact with water or other liquid to keep the inverter away from moisture or water.
- 2. In a cool environment, the temperature is 0 degrees (without condensation) to 40 degrees. Don't put the inverter next to the heating vents or other heating devices. Keep the inverter out of the sun as much as possible.
- 3. Keeping the ventilation and the absence of obstructions around it ensures that air is free to circulate. When the inverter is working, do not put something on the inverter. The inverter fan is used to help dissipate the heat.
- 4. Be careful not to use inverters near flammable materials or places where flammable gases can be gathered.
- 5. The battery must provide the load with sufficient current and voltage. The power supply should be a good battery full of electricity. To estimate roughly the current required for a load, it can be estimated by dividing the power of the load by 10.

Rated current and actual use of equipment

The nominal current or power of most power tools, household appliances and video and audio equipment is much smaller than the nominal power range of the inverter, but overload protection occurs when they are started. Inverter are the easiest to drive resistive loads and the hardest to start capacitive loads. Because the resistive load is a linear load, it can work full load. Such as electric stove, rice cooker, LCD TV and other equipment. Some audio-visual equipment and electric tools to a greater level than resistive load power can work normally, such as asynchronous motor, CRT TV, compressor, water pump etc. 2 to 6 times the working current is required to start. Whether a particular load can be run depends on the electrical equipment used by the user.

Warning Continuous frequently open and close inverters can cause damage. Non-professional technicians, do not open inverter shell

Common problem

Electric tools and microwave ovens cannot start

Carefully read the information on each power tool and accurately determine the input power of the tool. Whether the output power is enough to run the tools and microwave ovens, remember that power tools may need 2 to 6 times power requirements.

Television interference

The inverter has little interference with the television signal. However, in some cases, some disturbances are still visible, especially when the television signal is weak.

- Please try the following methods:
- 1. Try to keep the inverter away from the TV antenna or lengthen the TV antenna cable;
- 2. Adjust the direction of the inverter.
- 3. Ensure that the antenna provides strong signal strength to the TV set, and use high quality antenna cable with good shielding effect.
- 4. When you watch TV, do not run high power electrical equipment or tools.
- 5. There is no way to completely disappear some of the old TV interference.

Warning Normally the fuse will not burn out unless serious circuit failure occurs. When the inverter fails, please do not try to repair it yourself. Please contact a professional technician to deal with the machine, there will be high voltage electric shock hazard.