



Affordable. Reliable. Home Improvement.

Power inverter

**MODEL: TP-1500W / TP-4000W / TM-1000W /
TM-4000W / TP-3500W**

VEVOR Support Center

1	TP-1500W (US)		2	TP-1500W (EU)	
3	TP-4000W (US)		4	TP-4000W (EU)	
5	TM-1000W		6	TM-4000W	
7	TP-3500W				



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TM-4000W	TP-3500W	

This is the original instruction, please read all manual instructions carefully before operating. VEVOR reserves a clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there are any technology or software updates on our product.

	Warning-To reduce the risk of injury, user must read instructions manual carefully.
	This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1)This device may not cause harmful interference, and (2)this device must accept any interference received, including interference that may cause undesired operation.
	This product is subject to the provision of European Directive 2012/19/EC. The symbol showing a wheelie bin crossed through indicates that the product requires separate refuse collection in the European Union. This applies to the product and all accessories marked with this symbol. Products marked as such may not be discarded with normal domestic waste, but must be taken to a collection point for recycling electrical and electronic devices

INTRODUCTION

Thank you for purchasing the Power Inverter. This inverter has a compact housing, is well-designed, and highly portable, representing the new trend of high-frequency inverter technologies. It can efficiently and reliably power a wide variety of household AC products, such as TVs, computers, air-conditioners, etc., via the 12VDC outlet in your vehicle or boat, or directly from a dedicated 12VDC battery.

The inverter is equipped with perfect protection functions, made of super-quality components, and has sufficient power with a rational and safe design. When choosing an inverter, please check that it is properly suitable for your appliance and make sure that the total continuous power consumption of all your appliances is within the maximum power limit of the inverter.

SAFETY

Incorrect installation or misuse of the inverter may lead to danger to users or hazardous conditions. We strongly urge you to pay special attention to all CAUTION and warning statements. Caution statements indicate conditions that could result in personal injury or even loss of life.



WARNING! Risk of electric shock. Keep out of reach of children.

- The inverter generates AC power that is potentially lethal, just like a normal household wall outlet. Treat it with the same caution as you would any AC outlet.
- Do not insert foreign objects into the inverter's AC outlets, fan, or vent openings.
- Do not expose the inverter to water, rain, snow, or spray.
- Under no circumstances should the inverter be connected to utility power AC distribution wiring.



WARNING! Surface may become hot.

The inverter's housing may become uncomfortably warm, reaching 50°C during extended high-power operation. Ensure at least 5cm of air space is maintained on all sides of the inverter. During operation, keep it away from materials that may be affected by high temperatures.



WARNING! Explosion hazard.

- Do not use the inverter in the presence of flammable fumes or gases, such as in the bilge of a gasoline-powered boat or near propane tanks.
- Do not use the inverter in an enclosure containing automotive-type lead-acid batteries. Like sealed batteries, these batteries vent explosive hydrogen gas, which can be ignited by sparks from electrical connections.
- When working on electrical equipment, always ensure someone is nearby to assist you in an emergency.



CAUTION!

- Do not connect live AC power to the inverter's AC outlets. The inverter will be damaged even if it is switched off.
- Do not expose the inverter to temperatures exceeding 40°C.



CAUTION!

- Kindly note that the DC voltage of the battery should match the input DC voltage of the power inverter. (For example, a 12V DC battery should be connected to an inverter with a 12V input voltage.) An incorrect DC input will either fail to supply sufficient voltage or damage the inverter.



CAUTION!

Do not use the inverter with the following equipment:

- Certain battery chargers for battery packs used in hand-powered tools. These chargers will have warning labels indicating that dangerous voltages are present at the charger's battery terminals.
- Connect the inverter only to batteries with a nominal output of 12VDC. Ensure the connection matches the input DC voltage of your inverter.



CAUTION! Any internal adjustment of the inverter is prohibited!

TECHNICAL PARAMETERS

Model	TP-1500W For US	TP-1500W For European	TP-4000W For US	TP-4000W For European
Continuous Power	1500W	1500W	4000W	4000W
Surge Power	3000W	3000W	8000W	8000W
Input	12VDC			
Output	120VAC 60Hz	230VAC 50Hz	120VAC 60Hz	230VAC 50Hz
Output Waveform	Pure Sine Wave			
USB-A Out	QC3.0 Quick Charging 18W			
USB-C Out	PD 30W			
Efficiency	87%-89%			
Working Temperatures	-20℃ to +50℃			

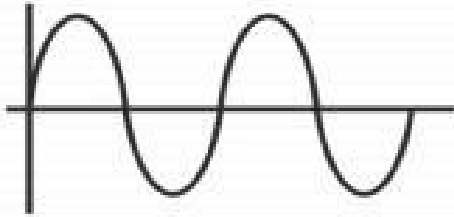
Model	TM-1000W	TM-4000W	TP-3500W
Continuous Power	1000W	4000W	3500W
Surge Power	2000W	8000W	7000W
Input	12VDC		
Output	120VAC 60Hz	120VAC 60Hz	230VAC 50Hz
Output Waveform	Modified Sine Wave		Pure Sine Wave
USB-A Out	QC3.0 Quick Charging 18W		
USB-C Out	PD 30W		
Efficiency	87%-89%		
Working Temperatures	-20℃ to +50℃		

INVERTER OUTPUT WAVEFORM

The inverter come in two types:

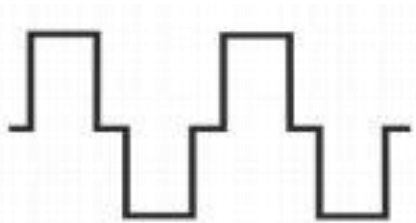
Pure sine wave and modified sine wave.

Pure Sine Wave:



Pure sine wave is a high-quality output waveform that harmonically follows a smooth sine wave and electrical current similar to utility standards, featuring lower power consumption and cleaner power delivery. It supports a wider range of appliances, even sensitive ones, eliminating concerns about the proper functioning of connected devices.

Modified Sine Wave:



Modified sine wave is more affordable. It applies to a limited range of devices, such as light bulbs, kitchen appliances, and other energy-consuming power tools.

PROTECTIVE FUNCTIONS

Power (Watts)	Protection Functions	
300W-1000W, with standard LCD display Type (1000W-8000 W)	Overload Protection	The inverter emits an alarm sound (judged as a continuous beeping: BIBIBIBIBI...), with the red LED flashing. It shuts down the output, attempts an automatic restart twice, and then requires a manual restart to resume operation.
	Short-Circuit Protection	The inverter emits an alarm sound (judged as continuous beeping: BIBIBIBIBI...) without damaging the inverter circuit. Modified sine wave products do not have an alarm sound but still retain the protection function.
	Over-temperature protection	The inverter triggers an alarm (characterized by three beeps: BIBIBI-BIBIBI-BIBIBI...), accompanied by a flashing red LED light. It then shuts down the output. Once the temperature returns to normal, it will automatically resume operation.
	Low voltage protection	The inverter emits an alarm sound (judged to be a single-beep pattern: BI-BI-BI-BI...), and the red LED flashes. If the voltage continues to drop, the inverter will shut down. When the voltage rises to the normal level, the inverter will automatically resume operation.
	Over voltage protection	The inverter emits an alarm sound (characterized by two beeps: BIBI-BIBI-BIBI...), with the red LED indicator flashing. The inverter will then stop and shut down the output. When the input voltage returns to normal, the inverter will automatically resume operation.
	Reverse connection protection	If a reverse connection occurs, the inverter's internal fuse will blow. In this case, please turn off the inverter, disconnect the power supply, and have a technician replace it with a new fuse.
	LCD display	If an inverter with a color LCD screen is selected, when the protection function is activated, the intelligent LCD screen will display the operating status of the inverter and provide error codes.
	Cooling Fan	The inverter is equipped with an intelligent fan, which operates according to temperature and load conditions, helping to maintain cleanliness and reduce temperature.

Our products are updated continuously. The above information is for reference only. For any further questions, please feel free to contact us.

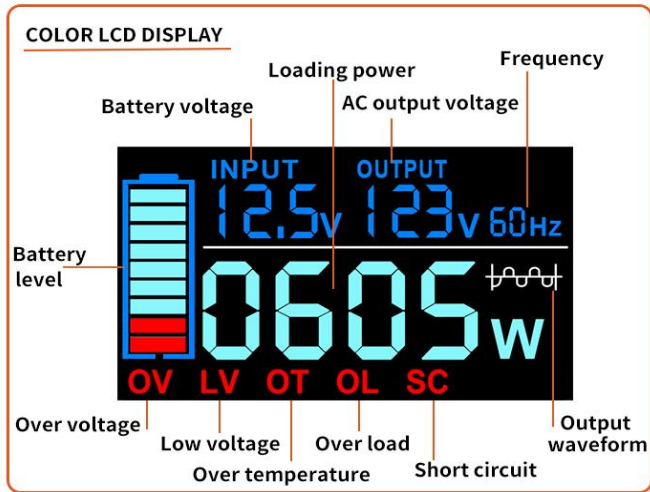
Power (Watts)	Protection Functions	
Models with Color LCD Display (1000W - 8000W)	Overload Protection	The inverter emits an alarm sound (the alarm sound is judged to be four beeps BIBIBIBI-BIBIBIBI-BIBIBIBI...), and the red LED light lights up. It then shuts down the output, attempts to automatically restart twice, and then requires manual restart to resume operation.
	Short-Circuit Protection	Alarm Sound Emission Without Damaging the Inverter Circuit (Continuous Alarm, BIBIBIBIBI...)
	Over-Temperature Protection	The inverter triggers an alarm (characterized by three beeps: BIBIBI-BIBIBI-BIBIBI...), accompanied by a flashing red LED light. It then shuts down the output. Once the temperature returns to normal, it will automatically resume operation.
	Low Voltage Protection	The inverter emits an alarm sound (judged to be a single-beep pattern: BI-BI-BI-BI...), and the red LED flashes. If the voltage continues to drop, the inverter will shut down. When the voltage rises to the normal level, the inverter will automatically resume operation.
	Over voltage Protection	The inverter emits an alarm sound (characterized by two beeps: BIBI-BIBI-BIBI...), with the red LED indicator flashing. The inverter will then stop and shut down the output. When the input voltage returns to normal, the inverter will automatically resume operation.
	Reverse Connection Protection	If a reverse connection occurs, the inverter's internal fuse will blow. In this case, please turn off the inverter, disconnect the power supply, and have a technician replace it with a new fuse.
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Our products are constantly updated. The above form is for reference only. If you have any further questions, please feel free to contact us.		



REVERSE CONNECTION IS STRICTLY PROHIBITED.

LCD DISPLAY(OPTIONAL)

Model: TP-4000W / TM-4000W / TP-3500W



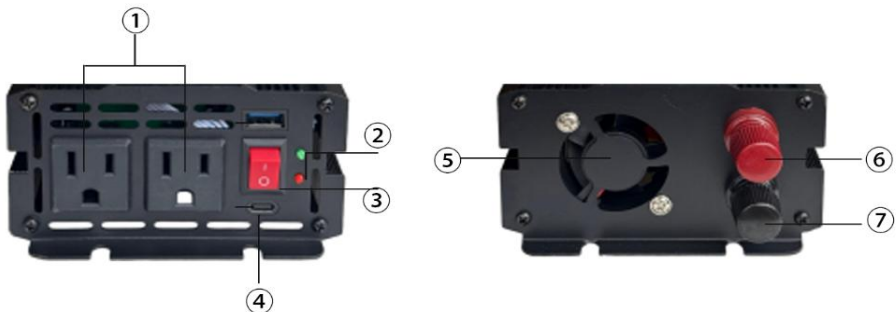
NOTE: ERROR CODES: OV, LV, OT, OL, SC. It is easy to identify the type of protection via these codes. An LCD display is optional, and the displayed values are for reference only.

PRODUCT CHARACTERISTIC

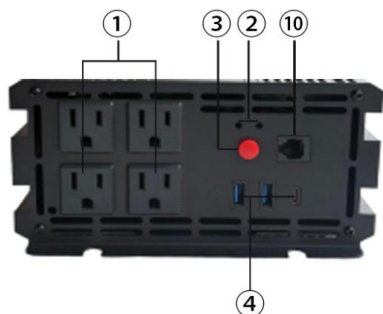
Please make sure you have known the basic characteristics of this power inverter before use.

Note: For more information, please feel free to contact us.

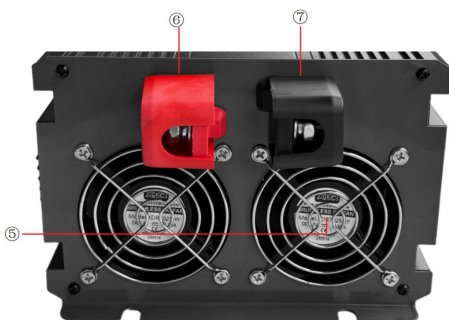
TM-1000W (Modified sine wave)



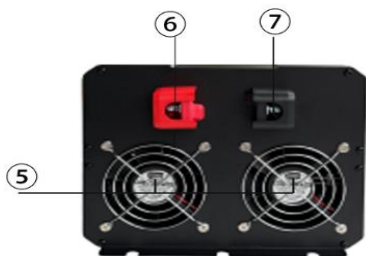
TP-1500W (Pure sine wave)



TM-4000W (Modified sine wave)



TP-3500W、TP-4000W (Pure sine wave)



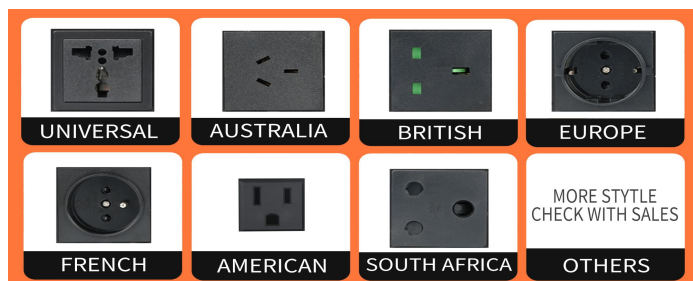
① AC OUTLET: Please select the socket type when purchasing (Universal, Australia, British, Europe, French, American, South Africa, etc.). For more styles, please check with the sales team.

② LED LIGHTS: Green: Indicates that AC power is present at the AC outlets and the inverter is operating normally. Red: Indicates that the inverter is in protection mode.

- ③ AC POWER SWITCH: Turns the AC output power on/off.
- ④ USB OUTPUT: QC3.0 quick charging, 18W.
- ⑤ FAN: Lowers the temperature of the inverter. Please keep it clean while the inverter is in operation.
- ⑥ POSITIVE TERMINAL: Connect to the positive (+) side of the battery.
- ⑦ NEGATIVE TERMINAL: Connect to the negative (-) side of the battery.
- ⑧ LCD DISPLAY: Can show the working status of the inverter.
- ⑨ AC OUTPUT JUNCTION BOX: Can connect high-power appliances as required.
- ⑩ REMOTE PORT: Connect to a wired remote controller to control the inverter's ON/OFF function.
- ⑪ USB-C: Type-C PD30 for charging electronics. (Optional)

NOTE: Protection fuses are located inside the inverter cabinet.

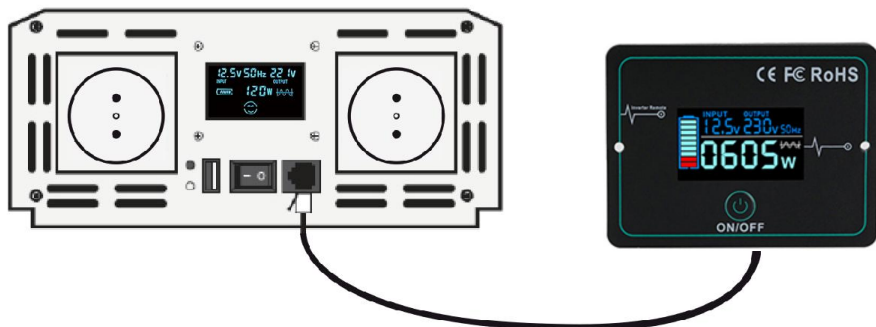
Choose socket:



REMOTE CONTROL(OPTIONAL)

①WIRED REMOTE CONTROL

Model: TP-1500W / TP-4000W / TP-3500W



NOTE:

When using the remote control, please ensure the inverter switch is turned off.

NOTE:

When using the remote control, please ensure the inverter switch is turned off.

②WIRELESS REMOTE CONTROL

Model: TM-4000W



NOTE:

When using the remote control, please ensure the inverter switch is turned off. For more information on remote controls and their functions, please feel free to contact us.

INVERTER TO BATTERY CONNECTION

BLACK-NEGATIVE RED-POSITIVE

12V inverter connection



INSTALLATION GUIDELINES

Selecting a Suitable Location

For safe and optimum performance, install the inverter in a location that meets the following conditions:

- **Dry** Do not expose it to water drips or sprays.
- **Cool** It is better to use the inverter in ambient temperatures between 32°F (0°C) and 104°F (40°C). Keep it away from furnace heating vents or other heat producing equipment.
- **Well - Ventilated** Allow at least 5 cm of clearance above and on all sides of the unit for proper cooling.
- **Safe** Do not install the inverter in a compartment with non - sealed batteries, flammable liquids (such as gasoline), or explosive vapors.
- **Clean and Free of Dust and Dirt** This is especially important if the inverter is used in a work environment.

Function of the Inverter

The inverter is used to convert 12VDC voltages into 120VAC or 230VAC voltages.

Connecting the Inverter to a Battery

Please follow these steps:

1. Before connecting, visually inspect the inverter to ensure no visible damage was caused during shipping. Then, make sure the inverter is switched off.
2. When connecting the inverter to the battery, ensure the battery voltage matches the inverter's rated voltage.
3. Connect the inverter's red cable to the battery's positive pole (+), and the inverter's black cable to the battery's negative pole (-).



CAUTION! Reverse polarity connection (positive to negative) may damage the inverter.

4. Tighten the nut on each DC terminal by hand until it is snug. If the DC terminal is large, use tools to tighten the screw.
5. Turn on the inverter's power switch. If the green indicator light is on, it indicates that the inverter is working properly.

6. Connect the loads to the inverter's AC output. Do not overload the inverter. In case of overloading, the inverter will sound an alarm and stop working. To restart the inverter, first switch it off for 5 seconds, reduce the load, then switch it on again.

Precautions:

The inverters are designed, manufactured and tested in accordance with safety standards. However, as an electrical product, it must be installed, operated and maintained strictly in accordance with the following safety instructions:

1. Reverse connection between the inverter and the battery is strictly prohibited, as it will burn out the inverter's fuse.
2. Please double-check that the battery voltage matches the inverter's input DC voltage. Mismatched connection between the inverter and the battery may cause serious damage.
3. Double-check that the connections are correct, and ensure they are tight and secure.
4. Do not extend the inverter's power cable.
 5. When the inverter is not in use, switch it off and unplug it from the 12VDC outlet to prevent slight discharge of the battery.
6. Avoid contact with any foreign objects or fluids. Do not touch the inverter with wet hands. Keep the product out of reach of children. Do not use it in damp, dusty, or high-temperature areas, nor in flammable or combustible environments.
7. Install the product in a well-ventilated location. Do not use it on or near hot objects such as electric heaters. Do not cover the inverter, and keep it away from direct sunlight, moisture, and water.
8. This inverter cannot be connected in parallel.
9. It is strictly prohibited to connect this product to the city grid.
10. Do not attempt to repair the inverter. We recommend using a deep-cycle battery. If you hear the low-voltage alarm, stop using the inverter immediately. The inverter can be used again once the battery is fully charged.

USING THE INVERTER

Using the DC Cable Clips or Direct Connect Cables

By directly connecting the inverter to a 12VDC battery using the DC cable clips, you can power devices with power requirements up to the inverter's rated continuous output power.

The power (or "wattage") rating of AC devices refers to the average power they consume during normal operation. However, when many AC devices are first turned on, they initially draw more power than their rated wattage.

For loads such as motor rectifiers, there is a surge current during startup.

Please note that the starting current must not exceed the inverter's maximum rated current. (The starting current of a motor may be 7–12 times its rated current.)



CAUTION!

Modified sine wave inverter cannot handle the aforementioned loads.

It is normal for the output voltage to drop when a heavy load is applied.

However, you must take action under the following condition:

When the DC voltage of the battery drops below.

Solution:

- Increase the battery capacity.
- Reduce the load on the inverter.

When the output AC voltage drops below the acceptable levels—210VAC (for 230VAC inverters) or 105VAC (for 120VAC inverters)—action must be taken.

Solution:

- Increase the battery capacity.
- Reduce the load.

Although the inverter can supply momentary surge power, some devices with a rated power lower than the inverter's continuous output rating may occasionally exceed its surge capacity, triggering its safety overload shutdown function. If this happens when multiple AC devices are connected, try the following: first, switch on the inverter with all AC devices turned off. Then, switch them on one by one, starting with the device that has the highest surge power requirement.

Inverter Operation

1. When the inverter is correctly connected to the battery, turning the ON/OFF (I/O) switch to the ON (I) position will illuminate the green light and deliver AC power to the outlets.
2. Plug the AC device(s) you wish to operate into the AC outlet(s) and switch them on one at a time.
3. As the battery depletes, its voltage will start to drop. When the inverter detects that the DC input voltage has fallen to $9.5 \pm 0.5V$ (for 12V inverters) an audible alarm will sound. This provides time to shut down computers or other sensitive devices.
4. The inverter will continue to alarm and automatically shut down when the battery voltage drops to $9 \pm 0.5V$ (for 12V inverters) this prevents battery damage caused by excessive discharge. After automatic shutdown, the red FAULT light will illuminate.



IMPORTANT:

Vehicle batteries are designed to provide brief periods of very high current required for engine starting. They are not intended for constant deep discharge. Regularly using the inverter with a vehicle battery until the low-voltage alarm sounds will shorten the battery's lifespan. If you frequently need to run electrical devices for extended periods, consider connecting the inverter to a separate deep-cycle battery.

5. If an AC device with a rated power higher than the inverter's continuous output power (or one that draws excessive surge power) is connected, the inverter will shut down, and the red FAULT light will illuminate.
6. If the inverter exceeds a safe operating temperature—due to insufficient ventilation or a high-temperature environment—it will automatically shut down. The red LED light will turn on, and an audio warning will sound.
7. If a faulty battery charging system causes the battery voltage to rise to dangerously high levels, the inverter will automatically shut down.



CAUTION!

Although the inverter is equipped with over-voltage protection, it may still be damaged if the input voltage exceeds 15.5V DC (for 12V inverters)

8. The cooling fan is designed to operate only when the temperature exceeds approximately $45^{\circ}C$.
9. In the event of an overload, low battery voltage, or overheating, the inverter will automatically shut down.

10.If the inverter shuts down due to an overload, it will need to be reset manually.

Battery Operating Time

The operating time of the inverter depends on the battery's charge level, its capacity, and the power drawn by the connected AC load.

When using a vehicle as the power source, it is strongly recommended to start the vehicle every one or two hours to recharge the battery before its capacity drops too low. The inverter can operate while the engine is running, but the normal voltage drop that occurs during engine startup may trigger the inverter's low-voltage shutdown function.

With the ON/OFF ("—"/"O") switch in the ON ("—") position and no AC devices connected, the inverter draws less than the no-load current. As a result, it has minimal impact on the battery's operating time.

Interference with Electronic Equipment

In general, most AC devices operate with the inverter just as they do with household AC power. However, there are two possible exceptions, as outlined below:

Buzzing Sound in Audio Systems and Radios

Some inexpensive stereos, boomboxes, and AM-FM radios have inadequate internal power supply filtering, which may cause a slight buzzing sound when powered by the inverter. Typically, the only solution is to use audio equipment with a higher-quality filter.

Television Interference

The inverter is shielded to minimize interference with TV signals. However, if the TV signal is weak, interference may appear as scrolling lines on the screen. The following steps can help minimize or eliminate this issue:

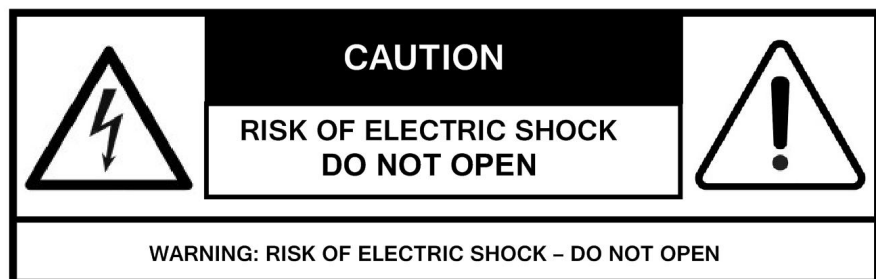
- Use an extension cord to increase the distance between the inverter and the TV, antenna, and cables.
- Adjust the orientation of the inverter, television, antenna, and cables. Maximize TV signal strength by using a better antenna and, where possible, shielded antenna cables.
- Try a different TV, as different models vary significantly in their susceptibility to interference.

TROUBLESHOOTING INITIAL STEP

If you encounter any issues with the inverter, the first step is to disconnect all connected loads, turn off the inverter using the ON/OFF switch, and disconnect it from the battery. The summary table below will help identify the cause of the problem.

Possible Cause	Suggested Solution
PROBLEM: AC appliances do not work, and the green power indicator does not ON.	
Battery is defective	Check the battery and replace it if necessary.
The inverter has been connected with reversed DC input polarity.	Check the connection to the battery. If the inverter is likely damaged, have the unit repaired.
Loose cable connections	Check the cables and connections, and tighten them as required.
PROBLEM: The inverter runs small loads but fails with larger ones	
Voltage drop across DC cables.	Reduce the cable and use bolder one
PROBLEM: Measured inverter output is too low.	
The measuring range of the common ammeter is too small	Inverter's 'pure sine wave' or 'modified sine wave' with a real effective value multi meter to get the accurate data
Battery voltage is too low	Recharge battery or change battery
PROBLEM: Alarm is sounding	
Low voltage alarm	Shorten cables or use heavier cables. Charge the battery.
Over temperature alarm	Allow unit to cool. Improve air circulation around unit. Locate unit to a cooler environment. Reduce load if continuous operation is required, restart.
PROBLEM: Battery run time is less than expected	
AC product power consumption is higher than rated.	Use a large battery to make up for increased power requirements

Battery is old or defective.	Replace battery.
Battery is not being properly charged.	Many simple chargers are unable to charge a battery fully. Replace charger with better charger Use shorter/heavier DC cables.
PROBLEM: AC electric appliances does not work, and red FAULT light ON.	
Overload shut off due to rated power of appliances exceeding the inverter's rated power.	Use appliances have power below the inverter's rated continuous output power.
AC product is rated less than the rated continuous output power high starting surge has caused overload shutdown.	Product exceeds inverter's surge capability Use a product with starting surge power within the inverter's capability.
Battery is discharged (alarm is sounding).	Recharge battery.
Inverter has overheated due to poor ventilation and has caused over temperature shutdown.	Switch inverter OFF and allow to cool for 15 minutes Clear blocked fan or remove objects covering unit. Locate unit to a cooler environment. Reduce load if continuous operation is required, restart
Input voltage is greater than 16.0V	Verify charging system is properly regulated and battery is 12VDC nominal.



Manufacturer: Shanghaimuxinmuyeyouxiangongsi

Address: Shuangchenglu 803nong11hao1602A-1609shi, baoshanqu, shanghai 200000 CN.

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Imported to USA: Sanven Technology Ltd. Suite 250, 9166 Anaheim Place, Rancho Cucamonga, CA 91730

UK	REP
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EC	REP
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