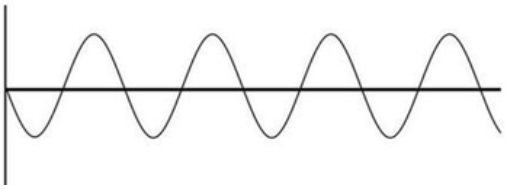
INSTRUCTIONAL MANUAL



PURE SINE WAVE

POWER INVERTER 300 WATT

SURGE POWER:600 WATT

SOFT START TECHNOLOGY

Welcome

Please read this manual thoroughly before installing and operating your 300W Power Inverter. This manual contains information you need to obtain the performance required for your application. Keep this manual for future reference.

The Inverter converts low voltage, direct current (DC) to 120volt pure sine wave (PSW) alternating current (AC). The inverter draws power from 12 volt, deep-cycle batteries such as those used for car, truck, and marine or from other high current 12 sources.

WARNINGS:

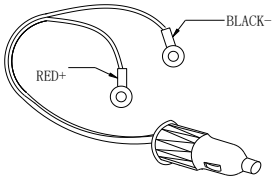
- *This is not a toy. Keep out of reach from children*
- *DO NOT install near flammable materials*
- *DO NOT use or make connections in mark or designated as IGNITION PROTECTED*
- *DO NOT expose to rain, snow, water, or any other liquids*
- *DO NOT use with positive ground electrical systems*
- *NEVER connect the inverter to AC distribution wiring*
- *DO NOT plug foreign objects into the receptacles*
- *DO NOT open, there are no user serviceable parts inside*

CAUTION: SERIOUS SHOCK HAZARD. The inverter should only be serviced by qualified personnel.

This pure sine wave power inverter converts 12V(10-15V) DC battery power into AC power of 110-120V /60Hz. You can use the inverter in your vehicle, boat or at home to operate almost any type of appliances that use AC power such as TVs, VCRs, portable computers, lights or other small rated power appliances for emergency use，or camping use.

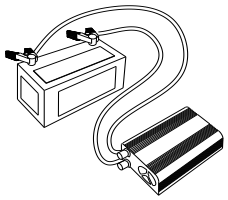
BASIC OPERATION

- Use the right operating voltage for both input and output of the inverter.
- Powering devices with power rating:
  - Less than 150 Watts by connecting the cigarette lighter plug into the vehicle's cigarette lighter socket.



(picture for reference only)

- More than 150 Watts by connecting RED terminal from inverter to + of battery terminal and connect BLACK terminal from inverter to – of battery terminal.



（picture is just for your ref. real product may be different）

- Insert the plug of your appliances into AC socket at the front of the inverter.
- Turn ON the power switch that is located at the front of the inverter, and the green LED light will light as indicator that the unit at work.

CAUTION:

- *Do not power more than 150 watts when the power inverter is connected to the car cigarette lighter socket power supply. Doing so might damage your car's fuse.*

RECOMMENDATION

- If the power inverter makes beeping sound, turn OFF the power inverter and disconnect all appliances from inverter and disconnect the inverter from the power supply. The beeping sound is simply the low battery warning, which indicates that the voltage of the battery power supply is getting low. Please restart the vehicle engine before operating the power inverter.

Note:

The audible alarm may make a momentary "chirp" when the inverter is turned OFF. This same alarm may also sound when the inverter is being connected to or disconnected from the battery bank.

- When you are not using the inverter, turn the switch to OFF and disconnect the inverter from the power supply.
- Disconnect the inverter when starting the vehicle's engine.

BATTERY USE

TO avoid over-discharging your vehicle's battery, you should run your engine for 10-20 minutes to recharge the vehicle's battery after 2-3 hours of operating the inverter.

If you choose to connect the vehicle directly to your battery terminals, it is important to connect with right polarity (Connect RED from inverter to + of battery terminal and connect BLACK from inverter to – of battery terminal)

CAUTION:

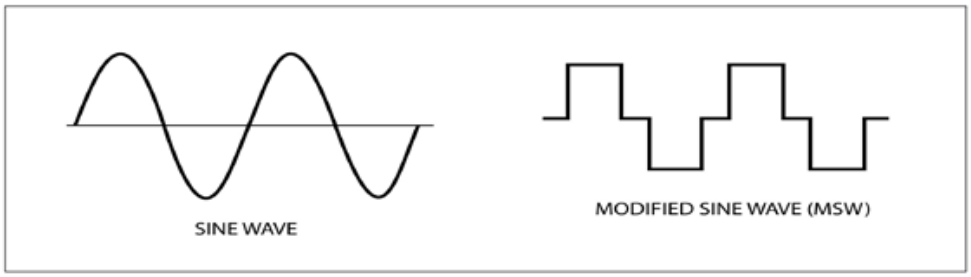
the followings operation will damage the unit:

- ***reverse polarity by connecting the wires to the incorrect terminals.***
- ***operating the inverter and battery in or around water.***

MEASURING THE AC VOLTAGE

If you plan to measure the true output R.M.S. voltage of the inverter, a meter such as FLUKE 87A, BACKMAN4410 or TRIPLETT 4200 must be used.

Waveform comparison



TROUBLE SHOOTING

TROUBLE/INDICATION	POSSIBLE CAUSE	SUGGESTED REMEDY
No AC output-the Red LED is ON	DC input below 10 Volts Excessive load	•Recharge or replace battery Reducing load
No AC output --inverter is cold	Poor connect with the battery.	•Disconnect load from inverter. Reconnect the unit to power source.
Motorized appliance will not start	Inadequate DC power supply Bad wiring or connection Appliance is excessive	Use battery of adequate size Use appropriate DC input cables Check all DC connection
Shut down after operating for a long time	•Over-temperature	•Disconnect the inverter and put aside for while to cool down the unit.
Shut down after operating short time, inverter is cold	Over-Load	Reduce the wattage of the inverter’s load

MAINTENANCE

Very little maintenance is required to keep the inverter operating properly.

PROTECTION FEATURES

Low Battery alarm and shutdown - the inverter sounds an audible alarm then turns itself off if the source battery becomes too low.

Auto shutdown/reset protection--- the inverter temporarily shuts itself down to protect itself from overheating.

Overload/Short Circuit Protection--- the inverter automatically turns itself off if the connected load is too high or if it shorts.

HEAT DISPERSAL

The inverter generates heat while it is working. This is not a malfunction. However, if the inverter gets too hot while working, it will turn off by itself.

Position the inverter where air flows freely around it to allow the heat to disperse.

The inverter’s thermal protection prevents it from operating when its temperature exceeds 60+/-5 °C.

SPECIFICATION

Name	Description
Output waveform	Pure Sine Wave
THD	less than 4%
Continuous power	300W
Surge power	600W
AC Output	110-120V 60Hz
Best efficiency	Approx. 85%
Battery low shutdown	10+/-0.5VDC
Battery low alarm	10.5+/-0.5VDC
High voltage shutdown	15.5+/-0.5VDC
Thermal shutdown	140+/-9°F (60+/--5°C)
With DC 5V USB output	YES DC5V 1Amp
AC output sockets	Dual American sockets