

Basic Operation

- Make sure that you choose the right operating voltage for both input and output of the Inverter.
- Insert the plug of your appliance into the AC socket at the front of the Inverter. Turn on the power switch which is located on the front of the Inverter, and the green LED light will confirm that AC power is present.
- Connections:
Connect to lighter for appliances 0-150W (Max) or connect directly to battery (clips included) for appliances of 0-400W.

Special Recommendations

- Unplug the AC Inverter when it is not in use.
- Unplug the AC Inverter when starting the vehicle's motor.
- If the AC Inverter makes a beeping sound, turn off your appliance, and unplug the Inverter, and restart the engine in your vehicle. The beeping sound is simply the low-battery warning which indicates that the voltage of your battery is getting low. If you do not re-start your engine and continue operating the Inverter, the Inverter will automatically shut off, leaving your vehicle's battery at about 10.5(21) VDC. This will enable you to start your engine and resume operation of the Inverter. It also eliminates the fear of being stranded with a dead battery.

Battery Use

- To avoid over-discharging your vehicle's battery, we recommend running your engine for 10-20 minutes to recharge the vehicle's battery after every 2-3 hours of operating the AC Inverter.
- If you choose to use an adapter to connect the AC Inverter directly to your battery terminals, it is important to connect the "+" wire to the "+" terminal and the "-" wire to the "-" terminal.

IF YOU CONNECT THE WIRES TO THE INCORRECT TERMINALS,

DC TO AC POWER INVERTER

INSTRUCTION MANUAL

and the maximum power available from the Inverter will be approximately 100 watts.

Measuring The AC Voltage

- The output waveform of the AC inverter is a MODIFIED SINEWAVE. If you choose to measure the AC output voltage, you must use a TURN RMS VOLT METER. Using any other type of voltage measuring device will result in an AC voltage reading of 20 to 30 volt lower than the rated value. When using a true RMS volt meter, you will get an accurate reading.

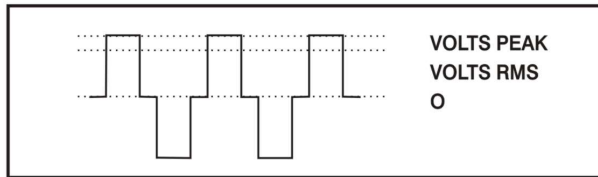


FIGURE 1: D/A INVERTER-MODIFIED SINEWAVE

Operating a TV Monitor or TV/VCR Combo

- Picture tubes have a degaussing coil which uses a high initial surge of power to light up the screen from a "cold start". If the TV does not start up on the first try, switch the TV on every 2-3 seconds until the screen comes on. Some screens may take 2-5 tries before starting.

SAFETY PRECAUTIONS

- Do not open the case of the Inverter. The high voltage inside the unit is the same type of power as your electrical outlets at home.
- Do not let cord of the Inverter or any appliance's cord get wet. If you are operating the Inverter in a moving vehicle, we recommend that

YOUR INVERTER, SO BE CAREFUL TO CONNECT YOUR INPUT WIRES PROPERLY.

- If you choose to operate a battery charger to replenish your battery's voltage, be sure to disconnect the AC Inverter first. Failure to disconnect the Inverter prior to connecting a charger may result in an input spike which will damage the Inverter.

CONNECTING THE INVERTER'S INPUT TO A BATTERY CHARGER WILL VOID THE WARRANTY, AND MAY DAMAGE THE INVERTER.

- Make sure that the battery's voltage does not exceed 15(30) volts DC.

CONNECTING THE INVERTER TO A DC POWER SOURCE GREATER THAN 15(30) VDC WILL VOID THE WARRANTY, AND MAY DAMAGE THE INVERTER.

Adding Extension Cords

- We recommend that you refrain from using an extension cord between the DC power source and the DC input of the Inverter. An extension cord on the DC input will create a voltage drop which results in a reduction of efficiency and output. Instead, we recommend the use of an extension cord between the AC output and AC appliance. You may use up to 100 ft. of high-quality extension cord. A longer cord may result in reduced output.
- The Inverter is supplied with two DC power leads : a light duty lead fitted with a cigarette lighter plug, and a heavier lead fitted with crocodile clips.
- The lead fitted with the cigarette lighter plug allows the Inverter to be easily connected to the cigarette lighter socket in a vehicle. However the current available from this socket is limited by the 15 amp fuse incorporated in the lighter plug, and by the vehicle fuse protecting the lighter socket. The fuse with the lower rating determines the maximum current that is available to run the Inverter. The maximum power that the Inverter can supply is approximately 10 times the current rating of the fuse with the lower rating. For example, if the fuse protecting the

Recharge your battery and resume operation.

MAINTENANCE

Very little maintenance is required to keep your Inverter operating properly. You should disconnect input power first and then clean the exterior of the unit periodically with a cloth to prevent accumulation of dust and dirt. At the same time, tighten the screws on the DC input terminals.

SPECIFICATIONS

AC Output voltage : 120V

Output frequency : 60Hz

MODEL NO :	PWRB 2500
DC Input Voltage	12V (10-15V)
Output Wave Form	Modified Sinewave
Output Power	2500W
Surge Power Capacity	5000W
Efficiency	Over 90%
No Load Current	< 3A
Battery Low Alarm	DC 10.5 ± 0.5V
Battery Low Shutdown	DC 10 ± 0.5V
Alarm And Thermal Shutdown	55 ± 5°C
Internal DC Fuse	Must be fitted, use 20A*16 maximum
Power Switch	DC Input ON/OFF control
Dimensions (LxWxH)	483x240x90mm
Net weight	5.5Kg

- Do not operate this Inverter in or around water. Water can damage the Inverter, and water damage is not covered under warranty. Also, do not operate the Inverter with wet hands. The AC voltage of the unit makes it an electrical shock hazard if operated with wet hands.
- Allow at least one inch of clearance around the Inverter for air flow. Ensure the ventilation openings on the rear and bottom of the unit are not obstructed.
- Do not connect the AC Inverter directly to another AC power source. Damage may result, and such damage will void the Inverter's warranty.
- Know the wattage requirements of your appliance. Use only those appliances which are limited by the capacity of this unit.
- Use common sense. This device produces power just like your wall outlets at home and should be treated seriously. Keep it away from children.
- Wrongly plugging AC power outlet LINE/NEUTRAL will void the warranty.
- If there is anything wrong with the Inverter, disconnect all of the power.

TROUBLESHOOTING

If the Inverter does not appear to be functioning properly, check the following possible causes.

(1) Poor contact

Clean contact parts thoroughly.

(2) Receptacle has no power

Check receptacle wiring. Repair if necessary.

(3) Battery voltage is too low

Start the engine to recharge the battery. Replace battery if needed.

(4) Shuts down on overload

Reduce the wattage of your load.

(5) Thermal shutdown

Under heavy loads for extended periods of time, the AC Inverter will shut down to prevent damage from excess heat. Simply reduce your load and allow the Inverter to cool down.

This product is designed using the most modern digital technology and under very strict quality control and testing guide lines. If however you feel this product is not performing as it should, please contact us:

techsupport@aimscorp.net or (775)762-5400

We will do our best to resolve your concerns. If the product needs repair or replacement, make sure to keep your receipt/invoice, as that will need to be sent back along with the package prepaid to AIMS. You have a full 1 year from date of purchase warranty.

This warranty is valid world wide with the exception that freight and duty charges incurred outside the contiguous 48 United States will be prepaid by customer.

Except as provided above, AIMS makes no warranty of any kind, express or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose. In no event shall AIMS be liable for indirect, special or consequential damages.

For additional products such as:

- Modified sine wave inverters
- Digital pure sine wave inverters
- Power controllers
- Automatic transfer switch controllers
- Custom cut cables

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