

AIMS Operating Corp., Inc. dba AIMS Power Warranty Instructions:

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)359-6703

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 and RA# 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. This warranty only applies to AIMS Power branded products. All other name brand products are warranted by and according to their respective manufacturer. Please do not attempt to return non-AIMS Power branded products to AIMS Power.

For additional products such as:

- Modified sine wave inverters
- Pure sine wave inverters
- Low Frequency Inverters
- Solar Charge Controllers
- On Grid Inverters
- Inverter Chargers and Automatic transfer switches
- Custom cut cables
- Batteries
- Solar Panels

Please visit our web site: [www.aimscorp.net](http://www.aimscorp.net)

To find out where to buy any of our products, you may also e-mail: [sales@aimscorp.net](mailto:sales@aimscorp.net) or call (775)359-6703.

#### **Product Registration Instructions**

Please visit our website at [www.AIMSCorp.net](http://www.AIMSCorp.net) and click on the product registration link at the top of the page.

This will validate your warranty with AIMS Power and ensure that you get fast, expedited customer service if you need to repair or exchange your product.

Thank you for choosing



# DC TO AC POWER INVERTER

## INSTRUCTION MANUAL

## INSTRUCTIONS FOR OPERATION

### Basic Operation

- Make sure that you choose the right operating voltage for both input and output of the Inverter. (12Vdc to 120Vac)
- **Connections:**  
Connect to lighter for appliances 0-150W (Max) or connect directly to battery (clips included) for appliances of 0-250W.
- 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.

### 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 10.5VDC. This may enable you to start your engine and resume operation of the Inverter. It also reduces 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,

### Disputes and Resolution:

6.10. Dispute Resolution. All disputes arising under or in connection with the Agreement will initially be referred to the senior executives of each party. The senior executives will use their best efforts to resolve the dispute informally and amicably. If, after negotiating for thirty (30) days (or for some longer period if the parties agree), no resolution of the dispute is reached by the senior executives, the parties will submit the dispute to binding arbitration in Reno, Nevada pursuant to the Commercial Arbitration Rules of the American Arbitration Association (AAA) and the procedures set forth in paragraph 6.11.

6.11. Arbitration; Injunction. All disputes that cannot be resolved pursuant to the internal issue resolution process identified above will be submitted to and settled by final and binding arbitration. The arbitration will take place in Reno, Nevada, and will apply the governing law of this Agreement. The final and binding arbitration will be performed by a panel of three arbitrators in accordance with and subject to the Commercial Arbitration Rules of the AAA then in effect. Following notice of a party's election to require arbitration, each party will, within thirty (30) days, select one arbitrator; and those two arbitrators will, within thirty (30) days thereafter, select a third arbitrator. If the two arbitrators are unable to agree on a third arbitrator within thirty (30) days, the AAA will, within thirty (30) days thereafter, select the third arbitrator. The decision of the arbitrators will be final and binding, and judgment on the award may be entered in any court of competent jurisdiction. The arbitrators will be bound by the warranties, limitations of liability, and other provisions of this Agreement. Notwithstanding the foregoing, each party may seek injunctive relief in a court of competent jurisdiction, where appropriate, to protect its rights pending the outcome of the arbitration.

6.12. Jurisdiction; Venue; Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Nevada (irrespective of its choice of law principles). The parties hereby agree that any suit to enforce any provision of this Agreement or arising out of or based upon this Agreement or the business relationship between the parties hereto shall be brought in federal or state court in Reno, Nevada. Each party hereby agrees that such courts shall have co-exclusive personal jurisdiction and venue with respect to such party, and each party hereby submits to the co-exclusive personal jurisdiction and venue of such courts.

(6)Low-battery shutdown

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. When reconnecting, tighten the screws on the DC input terminals.

**SPECIFICATIONS**

- MODEL NO :  PWRINV250W                       PWRINV150R
- PWRINV400W                       PWRINV400R
- PWRINV800W                       PWRINV800R

AC Output voltage: 120V

Output frequency: 60Hz

MODEL NO :	PWRINV250W
DC Input Voltage	12V (10-16V)
Output Wave Form	Modified Sinewave
Output Power	250W
Surge Power Capacity	500W
Efficiency	Over 90%
No Load Current	±0.4A
Battery Low Alarm	DC 10.5 ± 0.5V
Battery Low Shutdown	DC 10 ± 0.5V
Alarm And Thermal Shutdown (Automatic Recovery)	65 ± 5°C
External DC Input Fuse	Must Be Fitted, Use 30A Maximum
Power Switch	DC Input ON/OFF Control
Dimensions(LxWxH)	109x95x55mm
Net Weight	0.44kg
USB output	5V 500mA

YOU WILL REVERSE THE POLARITY AND DAMAGE THE INVERTER. REVERSED POLARITY WILL INSTANTLY VOID THE WARRANTY OF 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 AVOID THE WARRANTY, AND MAY DAMAGE THE INVERTER.

- Make sure that the battery's voltage does not exceed 16 volts DC. CONNECTING THE INVERTER TO A DC POWER SOURCE GREATER THAN 16 VDC WILL AVOID 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 100ft. 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 10 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

lighter circuit in the vehicle is rated at 10 amps, this fuse, and not the 10A fuse in the cigarette lighter plug determines the maximum current, 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 TRUE 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.

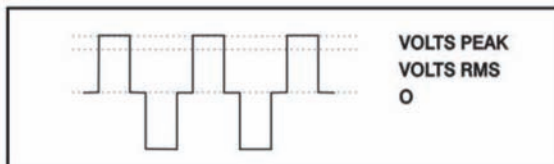


FIGURE 1: D/A INVERTER-MODIFIED SINEWAVE

### 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

you secure the Inverter to prevent it from shifting around while the vehicle is moving.

- 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 will 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.