

DC TO AC Power Inverter

CAUTIONS:

- 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. There are no user serviceable parts. Discharge capacitors before servicing.

INTRODUCTION:

Now you can operate most AC appliances such as camcorders, computers, fax machines, TVs, and power tools from the 12VDC current from your vehicles battery. This fully portable unit gives you a standard AC outlet anywhere your vehicle is.

FEATURES:

- Low Battery Automatic Shutdown
 - Overload and Short Circuit Protection
 - Reverse Polarity Protection
 - Compact Size, Light Weight, and High Efficiency
 - High Surge Current Capability to Start TVs, Motors and Other Inductive Loads
 - Thermal Protection
 - Built-in Cooling Fans
 - Soft Start Technology
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INSTALLATION AND OPERATION:

1. Using the included cables, directly connect the inverters (-) and (+) terminals to your automotive batteries respective (-) and (+) terminals, (See Figure 1 below). The cables should be bolted to the battery clamps for a solid connection (do not use jumper cables for installation). We recommend using an ANL inline fuse or circuit breaker (not included).

The ANL fuse or breaker should be as close to the battery as possible, installed on the positive (+) cable.

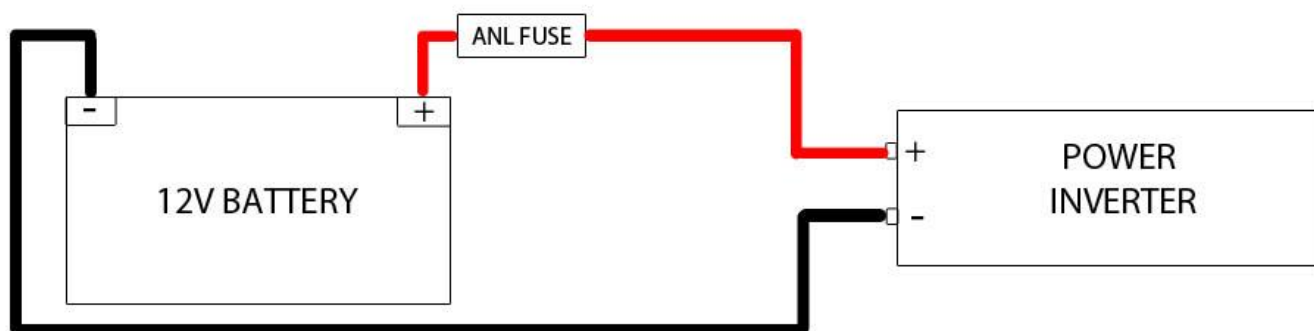


Figure 1

2. With the inverter switched “OFF” plug the AC appliance into the inverter.
3. Turn the inverter on.

OPERATION NOTES:

1. EQUIPMENT LOAD

The unit has a built-in overload protection circuit. If the inverter is overloaded the output will cut off. In order to resume output the load will need to be removed and the inverter will need to be turned off then back on. Inductive loads may draw 3-5X or more than their normal current in order to start and while under heavy load.

2. BATTERY POLAITY

The black (-) negative post on the inverter MUST be hooked to the (-) terminal of the battery. The red (+) post on the inverter MUST be hooked to the (+) terminal of the battery.

3. DISPERSION OF HEAT

During normal operation the inverter will get warm. The amount of heat generated will vary with the power draw of the equipment being operated. The inverter MUST be installed in a manner that allows air to circulate freely around the inverter.

4. USE OF CAR BATTERY

To prevent a vehicle battery from discharging below the voltage required to start the motor, we recommend that the operator start the vehicle every 2-3 hours or as needed to recharge the battery system. The unit may be used while the engine is running or turned off. However, do not start a vehicle's engine while the inverter is in use.

5. LOW VOLTAGE AND OVERVOLTAGE CONDITIONS

When input voltage decreases to ~10.5V, the output will cut off.

When the input voltage increases to ~15.5V, the output will cut off.

6. EXTENSION CORDS

The use of extension cords from the AC outlet will not significantly decrease the power supplied by the unit. However, for the best operating results, an extension cord of less than 60 feet is recommended.

TROUBLESHOOTING:

Problem	Possible Causes	Suggested Solutions
No AC output & Red LED lit	<ul style="list-style-type: none">▪ The DC input is too low▪ Appliance load is excessive	<ul style="list-style-type: none">▪ Check input connections▪ Recharge Battery▪ Replace Battery▪ Turn unit off, remove load, turn unit on
No AC output & Green LED lit	<ul style="list-style-type: none">▪ Internal Fuses	<ul style="list-style-type: none">▪ Check input connections▪ Test and replace fuses if necessary
Motorized appliance will not start	<ul style="list-style-type: none">▪ Inadequate DC power supply▪ Bad wiring or connection▪ Appliance load is excessive	<ul style="list-style-type: none">▪ Use battery of adequate size▪ Use appropriate DC input cables▪ Check all DC connections

SPECIFICATIONS:

	EL-300	EL-600	EL-1000
Max Continuous Output	300W	600W	1000W
Peak/Surge Capacity	600W	1200W	2000W
Normal Input Voltage	12VDC		
Input Voltage Range	10-15VDC		
Max Efficiency	90%		
Output Voltage	220-240VAC		
Output Frequency	50Hz \pm 2Hz		
Output Waveform	Modified Sine Wave		
Low Voltage Shutdown	10.5 \pm 0.5V		
Over Voltage Shutdown	15.5 \pm 0.5V		
No Load Current Draw	<0.3A	<0.5A	<0.7A
cigarette lighter cord	Yes	No	No
Clip cable or cable with Terminal nuts	Yes	Yes	Yes
USB Port 5V 1000mA	Yes	Yes	Yes
Cooling Fan	Yes	Yes	Yes
Thermal controlled Fan	run at 40 Celsius degree	run at 40 Celsius degree	run at 40 Celsius degree
Reverse polarity protect	By fuse	By fuse	By fuse
Spare fuse	35A*1	30A*2	35A*3
Dimension(mm)	190X95X55	225X95X55	300X190X100
Net weight not incl. cables(g)	850	1100	3900

