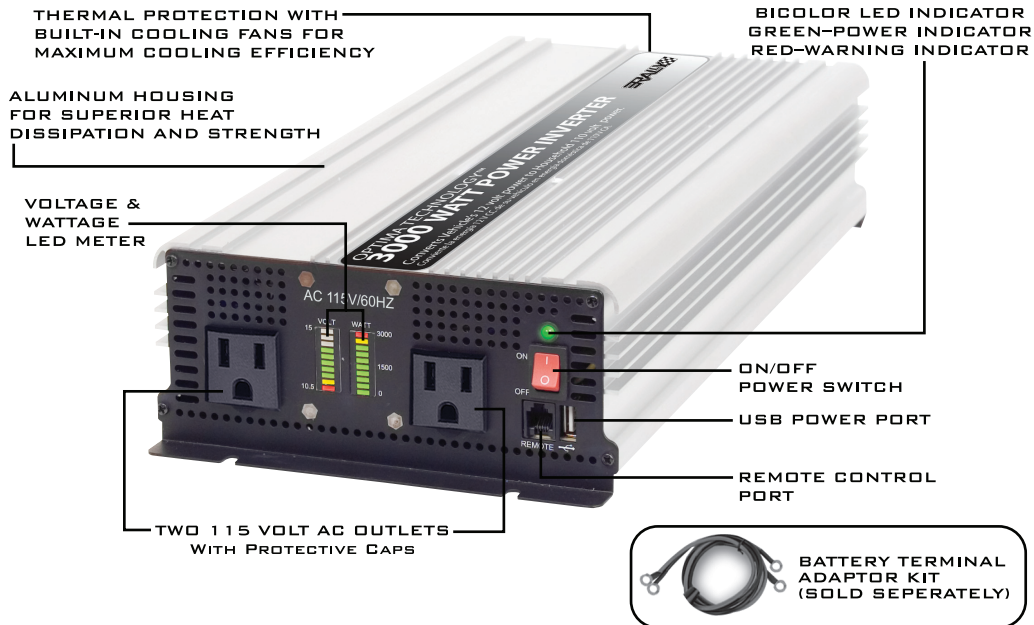


# 3000 WATT POWER INVERTER



## IMPORTANT SAFETY INSTRUCTIONS

### ⚠ WARNINGS

- READ AND UNDERSTAND ALL WARNINGS AND INSTRUCTIONS INCLUDED IN INSTRUCTION MANUAL PRIOR TO USE.
- This inverter must be connected only to a 12 Volt DC Negative Ground ignition system. Most vehicles are Negative Ground systems. Do not use this inverter with Positive Ground vehicle ignition systems. Consult your vehicle owner's manual for ignition system identification.
- To avoid damage to inverter, power source or device connected to the inverter, read and understand all operating instructions in this manual prior to operating this inverter.
- Risk of electric shock! DO NOT open the inverter casing!
- Improper use of this inverter can cause personal injury, property damage, and or possible loss of life.
- Do not use this inverter with device(s) which use more than 3000 Watt power consumption. Make certain the wattage requirements are within the capacity of this inverter power range.
- Do not connect inverter to household or RV, AC distributing circuit. Do not connect inverter to AC load circuit in which the neutral wire is connected to ground (-) or to negative of the battery power source.
- Do not connect to a 6 Volt or 24 Volt DC battery
- Do not exceed the maximum input voltage of 15 Volt DC (direct current).
- Do not use or place this inverter near flammable materials or any location which accumulate flammable fumes.
- Do not operate this inverter in or near water. Do not operate inverter using wet hands.
- Do not allow inverter cord or any operating device cord to restrict driving.
- Disconnect power to the inverter when it is not in use.
- KEEP OUT OF REACH OF CHILDREN!
- To avoid potential property damage, do not leave this inverter or any device operating unattended in vehicle.
- EXPLOSIVE GAS DANGER! ONLY make battery and ground connections in a well ventilated area.
- BATTERY ARC/SPARK DANGER! DO NOT connect the inverter black cable directly to the battery negative terminal. Ground inverter as far away from the battery as possible.
- Save these instructions for future reference.

### ⚠ CAUTIONS

- Do not place this inverter in confined spaces or inside battery compartment of vehicle or boat. Use only in properly ventilated areas.
- Do not place item(s) over the inverter. Make sure that air is allowed to circulate freely around it.
- Do not place the inverter in direct sunlight or near any device which is generating heat above room temperature.
- Do not operate inverter in ambient air temperature below -10°F or above 110°F.
- Secure the inverter and device(s) being operated to prevent them from moving while the vehicle is in motion.
- Do not use an AC (115 Volt) extension cord longer than 25 feet.
- Do not use a 12 Volt DC extension cord of any type or length.
- Start and run your vehicle hourly to prevent battery discharge. IMPORTANT: Turn off the inverter and device(s) being used before engine start up.
- Regularly check that all connections are secure and tight. A loose connection can create high electrical resistance and generate excessive heat which will damage the inverter.
- Not approved for use in conjunction with medical equipment.
- Reverse polarity connection will damage the inverter and possibly any connected equipment.

## TYPICAL USE AND WATTAGE

This listing is for reference purpose only. Some devices exceed the wattages listed. Before using device, refer to device owner's manual for actual wattage required.

Paper Shredder .....	50 Watt
Halogen Desk Lamp .....	100 Watt
Fax Machine .....	170 Watt
Desktop Computer w/ 17 in. LCD monitor .....	200 Watt
Laser Jet Copier .....	650 Watt
Task Lighting .....	1180 Watt
4 cu. ft. Refrigerator .....	500 Watt
Food Processor .....	450 Watt
Professional Blender .....	480 Watt
60 in. Color TV .....	1300 Watt
Toaster .....	700 Watt
Vacuum Cleaner .....	900 Watt
Hi Fi Stereo .....	1000 Watt
12 Cup Coffee Maker .....	1050 Watt
Espresso Coffee Machine .....	1100 Watt
Double Burner Electric Stove.....	2300 Watt
Bench Top Saw .....	550 Watt
Round Sander .....	660 Watt
Circular Saw.....	1800 Watt
Electric Shears .....	780 Watt
1/2 in. Impact Wrench .....	900 Watt
Drill .....	940 Watt
Belt Sander .....	980 Watt
Angle Sander/Polisher .....	960 Watt
Right Angle Drill .....	1020 Watt
Grinder .....	1080 Watt
10 Gal. Wet/Dry Vac .....	1100 Watt
Coring Rig.....	2400 Watt



## POWER SOURCE

This inverter must be connected to a 12 Volt DC Negative Ground ignition system battery in good condition. Most vehicles are negative ground systems (see vehicle owner's manual for ignition system identification).

### ⚠ CAUTIONS

- Do not connect this inverter to a 6 Volt or 24 Volt DC battery system.
- Do not use this inverter with positive ground vehicle to avoid damage to the inverter.

## DETERMINE POWER REQUIREMENT

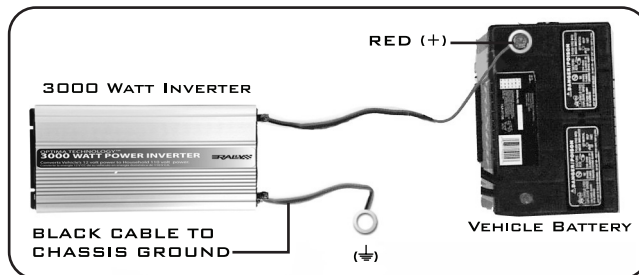
To determine maximum power required, add up the wattage of all appliances to be operated with this inverter simultaneously. If the wattage of the appliance(s) is not available, but the current draw (amp) is given, simply convert to wattage using this formula:

$$\text{Volt (V)} \times \text{AMP (A)} = \text{WATT (W)}$$

EXAMPLE: 115 VOLT X 26 AMP = 2990 WATT

### A. BATTERY TERMINAL CONNECTION

**⚠ WARNING:** Explosive GAS DANGER! Only make battery and ground connections in a well ventilated area.



- Prior to connecting inverter, ensure the inverter POWER switch is in the OFF position.



- Locate the inverter positive and negative terminal connectors (3000 Watt Inverter rear panel)

**Note:** a. The Positive Terminal Connector has a RED insulation block.  
b. The Negative Terminal Connector has a Black insulation block.



- Insert the terminal blocks plastic covers into the power cables (Red cover into the Positive (RED) cable and Black cover into the Negative (BLACK) cable).
- With a cross-head (Phillips) screw-driver or a hex-wrench, loosen and remove the Terminal Blocks Hex-Bolts.
- Connect the Negative (BLACK) and Positive (RED) cables to the Inverter Terminal Blocks and fasten with the Hex-Bolts (Positive (RED) cable to the Red Terminal Block and Negative (BLACK) cable to the Black Terminal block).
- Slide the RED and BLACK terminal plastic covers over the inverter terminal blocks.
- Connect the Positive (RED) cable to the (+) terminal of the vehicle battery. Connect the Negative (BLACK) cable to the vehicle chassis, engine block or a non-moving grounded metal part of the vehicle as far away from the battery as possible.

**B. EARTH GROUND CONNECTIONS**

- ▲ CAUTION:** Ensure the Ground-Rod is properly buried according to local electric codes.
1. Locate the Inverter Earth Ground Terminal (3000 Watt Inverter rear panel.)
  2. Loosen the Earth Ground Terminal Hex-nut by turning the Hex-nut counter-clockwise
  3. Connect one bare-end of a ground (GREEN) wire (#10 AWG) onto the Ground Terminal and tighten the Hex-nut.
  4. Connect the other bare-end of the ground (GREEN) wire to the Ground-Rod.

SYSTEM NORMAL OPERATION ..... GREEN LED INDICATOR  
 OVER VOLTAGE ..... RED LED INDICATOR  
 OVER LOAD ..... RED LED INDICATOR  
 LOW BATTERY ..... RED LED INDICATOR

**C. INVERTER OPERATION**

1. Prior to plugging in appliance(s), make sure the appliance(s) is OFF.
2. Connect the appliance(s) electrical plug into the inverter receptacle(s).
3. Turn the inverter POWER switch, to the ON position. If the inverter is working properly, a GREEN LED indicator on the front panel will light. Now turn ON the appliance(s). If the green indicator remains ON, then the system is operating properly. If inverter alarm sounds or RED LED indicator light turns ON, turn OFF the appliance(s) then turn OFF the inverter immediately. See the trouble shooting guide. The inverter may have been over loaded or the input voltage may be too low.

**DIGITAL LED DISPLAY**

The LED display shows the input voltage from the battery and the output wattage from all the loads connected to the power inverter.

**OUTPUT POWER RANGE BARS**

The load wattage bars range between 0 and 3000 Watt; once all the bars for the wattage output are lit, its an indication that the inverter is at the maximum capacity of 3000 Watt. Reducing the load will make the power meter go down accordingly.

**INPUT VOLTAGE RANGE BARS**

The input voltage bars range between 10.5 & 15 Volt, which is the operational range of the inverter; the bars will light up according to the input voltage; for a better performance it is recommended to keep the input voltage between 12.8 - 13.8 Volt DC.

**REMOTE CONTROL PORT**

The remote control port is designed to connect an external remote switch (sold separately) It allows the user to control the inverter ON/OFF power function remotely. Simply connect the remote power switch into the inverter remote control port and use the ON/OFF switch function of the remote.

**NOTE: Ensure the inverter ON/OFF power switch is at the ON position.**

**IMPORTANT:** To achieve inverter maximum power output, user must run vehicle while the inverter is in use.

**▲ CAUTION:**

Some rechargeable devices are equipped with a separate charger, which can be connected into this inverter AC receptacle(s). Rally inverters are engineered to be used with these products. However, certain rechargeable devices are manufactured with built-in chargers (see device owner's manual). This category of devices may cause internal damage to inverters and should not be used with this inverter. The temperature of device(s) must be monitored for first 15 minutes of operation. Abnormally elevated temperature of device(s) is an indication that they should not be used with this inverter.

**USB PORT OPERATION**

1. Connect your Cell Phone, PSP, MP3 Player or any other battery powered device that can be charged or powered via a USB terminal, into the 3000 Watt inverter USB power port. Make sure the device USB connector plug is properly seated into the 3000 Watt inverter USB power port.
2. Press the inverter power switch to the 'ON' position.
3. Your USB powered device with built-in battery (s) will start charging automatically.
4. Power ON and operate your device as needed
5. To stop charging or powering your USB powered device, switch OFF the USB power device and press the inverter power switch to the 'OFF' position.
6. Disconnect your device from the 3000 Watt inverter USB power port.

**NOTE: The USB port does not support data transfer, It will only power and /or recharge USB personal device(s).**

**TROUBLESHOOTING GUIDE**

TROUBLE	CAUSE	REMEDY
<b>Lack of power output</b>	<ol style="list-style-type: none"> <li>1. Power source voltage below 11 Volt.</li> <li>2. Excessive current drawn by appliance(s) being operated</li> <li>3. Inverter not completely warmed up.</li> <li>4. Inverter fuse(s) blown.</li> </ol>	<ol style="list-style-type: none"> <li>1. Recharge battery or replace power supply.</li> <li>2. Reduce load to maximum 3000 Watt.</li> <li>3. Turn OFF the appliance(s) and inverter Disconnect appliance(s) connected to the inverter. Turn the inverter ON and leave running for a minimum of 2 minutes. Turn OFF the inverter, quickly plug in appliance(s) to inverter making sure appliance(s) is OFF. Turn ON the inverter and the appliance(s).</li> <li>4. Replace blown fuse(s) with blade fuse(s) 360 AMP (12 x 30 AMP) rated fuse(s). IMPORTANT: HAVE INVERTER PROFESSIONALLY SERVICED NOT USER SERVICEABLE.</li> </ol>
<b>Low Battery Alarm ON all the time</b>	<ol style="list-style-type: none"> <li>1. Poor battery condition</li> </ol>	<ol style="list-style-type: none"> <li>1. Start the engine to recharge the battery. Ensure inverter is turned OFF before starting engine. Replace battery if required.</li> </ol>
<b>Red light ON</b>	<ol style="list-style-type: none"> <li>1. Inverter is overloaded.</li> <li>2. Inverter voltage below 11 Volt.</li> <li>3. AC Voltage Ground Fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce load to maximum of 3000 Watt.</li> <li>2. Charge or replace battery.</li> <li>3. Turn "OFF" the inverter and AC appliance. Disconnect the AC appliance and have the AC appliance serviced.</li> </ol>
<b>Television/power tool will not start</b>	<ol style="list-style-type: none"> <li>1. High surge wattage requirement to start-up.</li> </ol>	<ol style="list-style-type: none"> <li>1. Toggle the inverter POWER switch in succession a total of 5 times in order to generate the necessary power to start the device. If the device does not turn ON or start up in 5 cycles of ON/OFF trials. This inverter will not work with the device.</li> </ol>
<b>Television Interference</b>	<ol style="list-style-type: none"> <li>1. Picture breaking up (snow)</li> </ol>	<ol style="list-style-type: none"> <li>1. Place the inverter as far as possible from TV, the antenna and the coaxial cable.</li> <li>2. TV station may be out of range.</li> </ol>
<b>Static/Noise interference</b>	<ol style="list-style-type: none"> <li>1. Sound system has weak alternating current shielding.</li> </ol>	<ol style="list-style-type: none"> <li>1. Do not use inverter with low quality audio system AC current shielding.</li> <li>2. Replace audio system with high quality noise filtering.</li> </ol>

## SPECIFICATIONS

A. OUTPUT VOLTAGE .....	Approx. 115 VOLT AC RMS
B. MAX. CONTINUOUS POWER .....	3000 WATT
C. SURGE CAPABILITY (PEAK POWER) .....	6000 WATT
D. OPTIMUM EFFICIENCY .....	≥ 82%
E. NO LOAD CURRENT DRAW .....	≤ 400 mA
F. WAVE FORM .....	MODIFIED SINE WAVE
G. INPUT VOLTAGE RANGE .....	10.5 -15 VOLT DC
H. OUTPUT FREQUENCY (Hz) .....	60 Hz (+/- 3Hz)
I. AUTOMATIC ELECTRONIC CIRCUIT FEATURES:	
a. HIGH INPUT VOLTAGE SHUTDOWN .....	> 15 VOLT DC
b. LOW INPUT VOLTAGE AUDIBLE ALARM .....	≤ 10.5 ± 0.5 VOLT DC
c. LOW INPUT VOLTAGE SHUTDOWN .....	≤ 10.0 ± 0.5 VOLT DC
d. OVERLOAD SHUTDOWN .....	≥ 3400 WATT
J. SYSTEM DISPLAY:	
a. SYSTEM NORMAL OPERATION .....	GREEN LED INDICATOR
b. OVER VOLTAGE .....	RED LED INDICATOR
c. OVER LOAD .....	RED LED INDICATOR
d. LOW BATTERY .....	RED LED INDICATOR
K. ENVIRONMENT OPERATIONAL CONDITIONS:	
a. ELEVATION (ft.) .....	0 TO 10,000 FEET ABOVE SEA LEVEL
(m.) .....	0 TO 3,048 METERS ABOVE SEA LEVEL
b. OPERATING (°F) .....	-10°F TO 110°F
(°C) .....	-23.3°C TO 43.3°C
c. STORAGE (°F) .....	5°F TO 140°F
(°C) .....	-15°C TO 60°C
L. PHYSICAL:	
a. NET WEIGHT (lb.) .....	11.2 lb.
(kg.) .....	5.1 kg.
b. DIMENSIONS (in.) .....	7.5 in. W X 17.3 in. D X 3.26 in. H
(cm.) .....	19.1 cm. W X 43.9 cm. D X 8.3 cm. H
M. INTERNAL FUSE .....	360 AMP (12 X 30 AMP) (NOT USER SERVICEABLE)
N. USB PORT .....	5 VOLT DC/500 mA

### TWO YEAR LIMITED WARRANTY

Rally Manufacturing is dedicated to making high quality products for every consumer. We are so confident in the quality of our merchandise that we offer a two year limited warranty with this product. That means should you find any defects with the item you purchased, we will repair it or replace it. Please mail all defective products to Rally Manufacturing Inc., 7600 Corporate Center Drive, Suite 400, Miami, FL 33126. Attn: Customer Service.

REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT OR COMPONENT PROVIDED UNDER THIS WARRANTY SHALL NOT APPLY IF THE PRODUCT: (a) IS USED FOR COMMERCIAL PURPOSES AND/OR FROM IMPROPER USE IN AN UNSUITABLE ENVIRONMENT (b) IS MODIFIED OR TAMPERED WITH EITHER INTERNALLY OR EXTERNALLY; (c) IS DAMAGED RESULTING FROM MISUSE, NEGLIGENCE, LACK OF REASONABLE MAINTENANCE AND CARE, OR BY OTHER CAUSES UNRELATED TO DEFECTIVE MATERIAL OR WORKMANSHIP; (d) IF THE PRODUCT HAS BEEN SUBJECTED TO FIRE, WATER, OR GENERAL CORROSION. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State in the U.S.A. or province to province in Canada.

**CUSTOMER SERVICE Monday-Friday 9:00am-5:00pm Eastern Standard Time**  
**For Questions or comments contact us at: [www.rallymfg.com](http://www.rallymfg.com) or call 1-800-965-4407**