

Eastwood[®]

DO THE JOB RIGHT.[®]

Item #31464, #31465, 31800

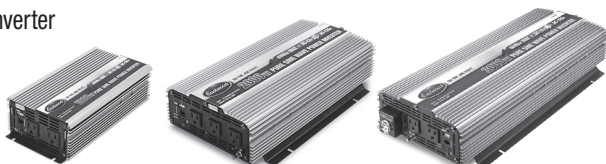
AUTOMOTIVE POWER INVERTERS INSTRUCTIONS



EASTWOOD AUTOMOTIVE POWER INVERTERS are heavy-duty professional grade pieces of equipment designed to bring 120 volt power to any automobile. They feature a true sine wave output that is capable of efficiently running a wide variety of devices. These Power Inverters are perfect for camping, the job site, and everywhere in between.

CONTENTS

- (1) Eastwood Automotive Power Inverter
- (1) Power Remote



SPECIFICATIONS

	#31464	#31465	#31800
Continuous Power	1000w	2000w	3000w
Surge Power	2000w	4000w	6000w
Input Voltage Range	9.5-16v DC		
Output Voltage	120v		
Output Frequency	60Hz		
Output Wave Form	Pure Sine Wave (THD<3%)		
Efficiency	90%		
USB Output	5v DC Max 1A	5v DC Max 2.1A	
Input Over-Voltage Shutdown	16v DC \pm 0.5v		
Input Under-Voltage Shutdown	9.5v DC \pm 0.5v		
Input Under-Voltage Alarm	9.8v DC \pm 0.3v		
Over-Temperature Protection	65°C \pm 5°C		
Overload Protection	1200w \pm 200w	2250w \pm 250w	3300w \pm 300w
Overload Backup Fuse	Yes		
No-Load Currents	0.8A	0.9A	1A
Dimension (L x W x H)	293 x 140 x 74mm	435 x 236 x 95mm	500 x 236 x 95mm
Weight	2.42Kg	5.15Kg	6.7Kg
Working Temperature	0°C - 40°C		
Storage Temperature	-10°C - 45°C		
Intelligent Cooling	Cooling fan will not run until case temperature reaches approx. 40°C		
Recommended Minimum Cable Size @ 10'	4 AWG	00 AWG	0000 AWG
Recommended Fuse Size	125 Amps	225 Amps	350 Amps

SAFETY INFORMATION

The following explanations are displayed in this manual, on the labeling, and on all other information provided with this product:

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.



READ INSTRUCTIONS

- Thoroughly read and understand these product instructions before using the power inverter.
- Keep these product instructions for future reference.



WARNING HEALTH AND INJURY HAZARD!

- Do not install this inverter into a building's electrical system. This inverter is an automotive accessory. It is not designed and has not been evaluated to be used with a building's electrical system. Improper application may create a fire or shock hazard.
- Install in a dry, well ventilated area indoors. This power inverter is not intended for marine or under-hood applications.
- Keep all combustible materials and gasses away from the power inverter. The power inverter produces sparks and heat during operation and can start a fire.
- Ensure that connection cables are rated for the current draw.
- Do not obstruct the ventilation openings
- Do not open housing. All service and repair must be done by a qualified repair person.
- This power inverter is intended for 12v DC negative ground applications only.



SAFETY INFORMATION



⚠ WARNING HEALTH AND INJURY HAZARD!

- Use only 12 Volt batteries with this inverter and install a properly rated fuse between the positive output and the inverter.
- To prevent damage, do not attempt to power a device, or a combination of devices, that will require more than the rated output of the inverter.
- Inverter must be grounded as outlined in the “Installation Guidelines” below.




⚠ WARNING EXPLOSION HAZARD!

- Do not use the Inverter in the presence of flammable fumes or gases, such as in the bilge of a gasoline power boat, or near propane tanks.
- Do not use the Inverter in an enclosure containing automotive-type, lead-acid batteries. These batteries, unlike sealed batteries, vent explosive hydrogen gas, which can be ignited by sparks from electrical connections.

⚠ NOTICE

- While this power inverter does output a true sine wave some sensitive electronic equipment, such as medical equipment, may not operate correctly. The end user is responsible for determining if the appliance is compatible with the power inverter.
- If the inverter is powered by a vehicles starting battery, be careful not to discharge the battery to a point that it will no longer start the engine. If necessary, operate power inverter while the vehicle is running.

INSTALLATION GUIDELINES

- Place the Inverter on a dry, level, nonflammable stable surface. Ensure that it has adequate ventilation and will not overheat. Ambient air temperature should be between 30°F and 105°F.
- There should be at least two inches of clearance around the inverter for proper airflow.
- Select DC Power Input Cables that meet or exceed the requirements listed in the “Specifications Table” of this Instruction Manual. Route the DC Cables in a safe manner and attach them to the Lugs on the back of the Inverter.
- Connect the Negative DC Power Cable to the 12V power source.
- Connect the Positive DC Cable to the 12V power source. A fuse must be installed on the Positive Cable as close to the DC power source as possible. See the “Specifications Table” in this Instruction Manual for the fuse size.
- The Power Inverter has a Ground Terminal on the Rear Panel marked . The Ground Terminal must be connected to the ground, which will vary depending on where the Power Inverter is installed. In a vehicle, connect the Ground Terminal to the chassis of the vehicle. In a boat, connect it to the boat’s ground system. In a fixed location, connect the Ground Terminal to earth.
- The optional remote switch can be connected to the remote jack.

DETERMINING POWER CONSUMPTION

Required wattage can be determined by multiplying voltage and current draw. Certain appliances, such as those with electrical motors, require additional current during startup. The Chart below provides running and starting power consumption for some common appliances. Running wattage + additional starting wattage = total wattage needed to operate device.

Product	Running Wattage	Additional Starting Wattage
Air Compressor 1/4 HP	975	1600
AM/FM Radio	100	0
Box Fan	200	0
60w Light Bulb	60	0
75w Light Bulb	75	0
Sump Pump 1/3 HP	800	1300
Sump Pump 1/2 HP	1050	2200
Well Pump 1/3 HP	1000	2200
Halogen Work Light	500	0
Reciprocating Saw	960	960
Electric Drill 3/8"	440	600
Electric Drill 1/2"	600	900
Hammer Drill	1000	3000
Circular Saw 7-1/4"	1400	2300
Miter Saw 10"	1800	1800
Belt Sander	1200	2400
Air Compressor 1/4 HP	970	1600
Outdoor Light String	250	0
Cell Phone Charger	25	0
Inflator Pump	50	150
Microwave 1000w	1000	1000
Coffee Maker	1000	0
Mini Fridge	350	1100
Refrigerator	700	2200
Flat Screen TV	200	0

OPERATION

⚠ WARNING

To prevent damage, do not attempt to power a device, or a combination of devices, that require more than the rated output of the inverter.

- With the device(s) switched off, plug device(s) into the inverter receptacle.
- Turn inverter switch on and look for the green LED to illuminate.
- Turn device one at a time as needed while listening for the overload and/or low voltage alarm to beep.

⚠ NOTICE

If the Inverter is powered by a vehicle's starting battery, be careful not to discharge the battery to a point that it will no longer start the engine. If necessary, operate Power Inverter while the vehicle is running.

- Turn off power inverter after each use.

MAINTENANCE

IMPORTANT NOTE: The following maintenance should be performed before each use.

- Check tightness of all connections
- Check power cables and ensure that they are in good shape.
- Ensure all 120 volt devices are turned off before turning on inverter.
- After each use, wipe inverter clean with a dry cloth to prevent dust build up.

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Inverter Turns Off While in Use	Overload	Turn off all devices and determine which device is causing the overload situation. Reduce load to less than rated power.
	Internal Overheating	Allow Inverter to cool for a minimum of 30 minutes. Ensure the cooling fan is not blocked and the Inverter has ventilation.
No Output Voltage	Low / High Input Voltage	Ensure input voltage is within the specified range.
	Loose / Improper Connections	Ensure all connections are correct and tight.
Incorrect Output Voltage	Incorrect Input Voltage	Ensure input voltage is within the specified range.
Inverter Cannot Power Load	Excessive Load	Reduce load level.
	Power Cable Undersized	Ensure power cables are appropriately sized.
	Starting Wattage of Appliance is Too High	Reduce load from other devices or change appliance.

If you have any questions about the use of this product, please contact

The Eastwood Technical Assistance Service Department: 800.343.9353 >> email: techhelp@eastwood.com

PDF version of this manual is available at eastwood.com

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