TRAVELLER

1074455

500W
POWER INVERTER

User Manual


ON / OFF button
Power indicator
Fault indicators
Capacity indicator
Negative post
Positive post
12V cig. plug input power cable
Clamps input power cable

500W POWER INVERTER

1 SAFETY GUIDELINES

Important

- Before connecting or using your 500 watt inverter, please read and understand this User's Manual.
  Please keep this manual for future reference.

Safety Precautions

- Incorrect installation or misuse of your DC to AC inverter may result in damage or hazardous conditions to the user. Please pay special attention to the following instructions and warnings.

⚠ **Warning**!
Shock hazard! Keep away from children!
DO NOT open the case of the inverter.
DO NOT insert any foreign objects into the unit outlets, vents or fan openings.
DO NOT expose the unit to rain, water or any other liquid, it is not designed to be waterproof.
DO NOT operate the unit near flammable fumes or gases such as the cabin of a gasoline power boat, or near propane tanks.
DO NOT operate the unit in an enclosed area that contains automotive type lead-acid batteries. This type of battery emits explosive hydrogen gas which can be ignited by sparks.
DO NOT connect the unit to any utility power distribution systems or branch circuits.
DO NOT use the inverter in temperatures over 104℉(40℃) or under 32℉(0℃).

The case to the unit may become very hot under high power operation reaching 140℉(60℃). Be sure that there is at least 2in. (5cm) of unobstructed air space around the entire housing of the inverter at all times. During use, do not place materials that could be damaged by heat near the unit.

Failure to follow these safety guidelines will result in personal injury and/or the damage to the unit. It may also be void of the warranty.

⚠ **Caution**!
DO NOT connect the unit to live AC power circuits or there would be damage to the inverter.
DO NOT connect any AC device which has its neutral conductor connected to ground to the unit.
Connect the unit to batteries with a normal output of 12V DC only. Both 6V battery voltage and 24V battery voltage will damage the unit.
Know the voltage requirement of your appliances, the 115V 500W power inverter can properly supply the power of those appliances that do not exceed its capacity.
The wattage (WATT) or amperes (AMP) can normally be seen stamped or printed on most appliances and equipment or in the user's manual . To calculate the continuous load: Continuous load = AMP X 115 (AC voltage);
DO NOT operate the inverter if it has received a sharp blow, been dropped or otherwise damaged in any way.

2 OPERATING INSTRUCTIONS

The unit must be operated in an area that meets the following requirements in order to operate safely and provide optimum performance:

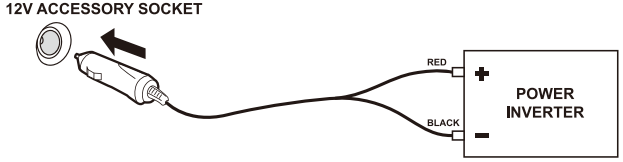
	Description
Dry	Don't allow water or other liquid to drop or splash on the unit.
Cool	Ambient air temperature should be 0℃~40℃ (the cooler the better within this range).
Ventilated	Leave at least 2in. (5cm) clearance around the unit for air flow. Ensure that the ventilation openings are not obstructed.
Safe	Do not operate the unit in the same compartment as batteries or in any compartment capable of storing flammable liquids like gasoline.
Clean	Do not operate the unit in an area that is prone to dirt, dust or debris. Especially important if used in a work environment.

Your Traveller Power Inverter supplies 500 watts max. power with 1000 watts of surge power. When you turn on an appliance or a tool that operates using a motor or tubes, it requires an initial surge of power to start up. This surge of power is referred to as the "starting load" or "peak load". Once started, the tool or appliance requires less power to continue to operate. This is referred to as the "continuous load" in terms of power requirements. You will need to determine how much power your tool or appliance requires to start up and its continued running power requirements.

The inverter should be connected to your vehicle's 12 Volt Cigarette socket or 12V battery or tailgate plug with the one of three sets of DC cables. We recommend that the equipment or appliance switch be in the "OFF" position prior to plugging into the AC receptacle of the inverter. The blue LED light will confirm that AC power is present.

⚠Caution!
Reverse the polarity will arouse blown fuse or damage to the inverter, which may also void the warranty.

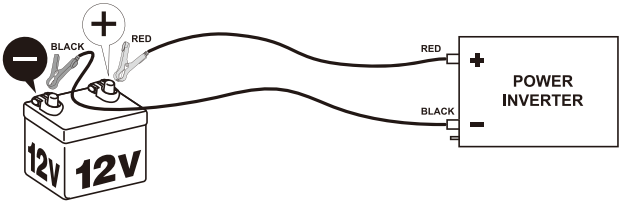
Using the DC cable with cigarette lighter plug, when load less than 100W only:
1) Attach the ring type connector marked with red to the positive (+) DC terminal on the power inverter, and attach the ring connector marked with black to the negative (-) DC terminal.
2) Tighten the nut on each DC terminal by hand until it is snug. **DO NOT** over-tighten.
3) Insert the plug of this cable into the 12V socket .
4) Turn on the inverter, the blue LED will turn on.
5) Plug the AC product(s) you wish to operate into the AC outlet(s) and switch them on, one at a time.
6) When the power inverter is not in use, disconnect the 12V cigarette lighter from 12V socket to prevent unintended battery discharge.



Using the tailgate cable to plug in trailer lighting port, when load less than 80W only:
1) Attach the ring type connector marked with red to the positive (+) DC terminal on the power inverter, and attach the ring connector marked with black to the negative (-) DC terminal.
2) Tighten the nut on each DC terminal by hand until it is snug. **DO NOT** over-tighten.
3) Insert the plug of this cable into trailer lighting port at the back of the trailer.
4) Turn on the inverter, the blue LED will turn on.
5) Plug the AC product(s) you wish to operate into the AC outlet(s) and switch them on, one at a time.
6) When the power inverter is not in use, disconnect the cables to prevent unintended battery discharge.

Using the DC clamp cables when loads 0-500W:
1) Attach the ring type connector marked with red to the positive (+) DC terminal on the power inverter, and attach the ring connector marked with black to the negative (-) DC terminal.
2) Tighten the nut on each DC terminal by hand until it is snug. **DO NOT** over-tighten.
3) Attach the positive (red) clip to the positive (+) battery terminal. Make sure both clips are securely connected to the battery terminals, as a loose connection will cause the voltage to drop and may cause the cables to overheat, resulting in equipment damage or fire.
4) Attach the negative (black) clip to the negative (-) battery terminal.
5) Turn on the inverter, the blue LED will turn on.
6) Plug the AC product(s) you wish to operate into the AC outlet(s) and switch them on, one at a time.

7) When the power inverter is not in use, disconnect the DC cable clips from the battery to prevent slight discharge of battery.



⚠ **Caution!**
If there are more than one AC products connecting to the inverter, turn on the larger power product first.

3 FEATURES

500W inverter has been tested and to be in line with requirement of ETL certificate.
This inverter is equipped with two standard Northern American AC power receptacles, through which, the inverter is capable of powering most 115V products that use 500 watts or less.
Make sure the total loads of your equipments **DO NOT** exceed 500 watts.

The inverter is designed with automatic shutdown features in abnormal conditions for safe operation. Please refer to below chart for details.

Protection of the inverter and trouble shooting

Indication	Protection type	Possible cause	Solution
Appliances are working, but alarming	Low input voltage alarm	The input voltage is getting low, dropped to 11+/-0.3V	Remove all appliances, turn off the unit and recharge battery
The low voltage indicator is on, no output, alarming	Low input voltage shut off	The input voltage is low, dropped to 10.5+/-0.3V	
The over voltage indicator is on, no output, alarming	High input voltage shut off	The input voltage is too high, over 15V	Remove all appliances , turn off the unit and check the battery voltage, make sure it is within 11-15V
The over load indicator is on, no output, alarming	Over load shut off	Appliances connected are more than inverter's output capacity 500W or short circuit	Remove all appliances , turn off the unit and reduce the loads within 500W. Check if short circuit occurred.
The overlheat indicator is on, no output, alarming	Over heat shut off	The inverter is over heated	Remove all appliances , turn off the unit and remove objects covering inverter if any, cool down for 15 minutes, restart.
No indicator, no output	/	Battery is defective	Replace battery
		Loose connection	check cable connection, tighten as required
		Inverter is damaged	Ask for technician's help

⚠ Caution!
Most vehicle batteries are designed to provide short period of very high current for starting the engine. They are not designed for a constant “deep discharge”. Constantly operating the unit from a vehicle battery until the low voltage shut off will affect the life of the battery. If you are operating electrical products for extended periods of time, you should consider connecting the unit to a separate deep discharge battery.

⚠ Caution!
Although the inverter incorporates protection against over-voltage, it may still be damaged if the input voltage exceeds 16 volts.

Battery Operating Time
Operating time will vary depending on the charge level of the battery, its capacity and the power level drawn by the particular AC load.
When using a vehicle battery as a power source, it is strongly recommended to start the vehicle every one hour or two to recharge the battery before its capacity drops too low. The inverter can operate while the engine is running, but the normal voltage dropping during starting of the engine may trigger the inverter’s low voltage shutdown feature.

Interference with Electronic Equipment
Generally, most AC products operate with the inverter just as they would with household AC power. Below is the information concerning two possible exceptions.
Buzzing in audio systems and radios
Some stereo systems and AM-FM radios have inadequate internal power supply filtering and “buzz” slightly when powered by the inverter. Generally, the only solution is an audio product with a higher quality filter.

Television interference
The inverter is shielded to minimize its interference with TV signals. However, with weak TV signals interference may be visible in the form of lines scrolling across the screen. The following should minimize or eliminate the problem:
- Increase the distance between the inverter and the TV, antenna and cables.
- Adjust the orientation of the inverter television, antenna and cables.
- Maximize TV signal strength by using a better antenna and use shielded antenna cable where possible.

4 SPECIFICATIONS

Max. Continuous Power……..……..500W
Surge Capacity(Peak Power)……..…….. 1000W
Input Voltage Range……...……..……11-15V DC
Output Voltage Range…… 104-125V AC
Output Frequency……..60+/- 2Hz
USB Output……5V 2.1A
Wave Form…….……..Modify Sine Wave

Distributed by: TRACTOR SUPPLY COMPANY
5401 VIRGINIA WAY, BRENTWOOD, TN 37027
For customer support, call: 1-888-376-9601
www.TractorSupply.com
MADE IN CHINA