

Slim Line 700 Watt USB Inverter



User's Manual

Slim Line 700 Watt USB Inverter by Wagan Tech

Your 700 Watt USB Power Inverter converts 12V DC battery power to 110V AC household electrical power. You use the inverter in your vehicle to operate many types of appliances that use AC or USB power, such as TVs, VCRs, portable computers, power tools and lights for emergency or camping use.

The inverter works with your vehicle's engine turned on or off (accessory mode). It provides a continuous output of up to 700 Watts.

DESCRIPTION

1800W Peak Power: Allows you to power appliances that require a large amount of initial (peak) power to work (such as many televisions or motorized equipment).

Low Battery Alarm: The inverter sounds an audible alarm, then turns itself off if the source battery becomes too low.

Auto Shutdown / Reset Protection: The inverter temporarily shuts itself down to protect itself from overheating.

Overload / Short Circuit Protection: The inverter automatically turns itself off if the connected load is too high or if it shorts.

Fuse: The inverter comes with fuse(s) already installed and easily changed if damaged. The blade fuses (similar to those in a vehicle) are located inside the unit. Please turn off and disconnect all the cable connections. Open one side of the unit by unscrewing them and slide the metal cover. Check the condition of each of the blade fuses. If it is burnt, please change it according to the Amp indicated on the blade fuse. These can be purchased at your local automotive parts store.

Dual AC Outlets: Allows you to power up to two AC appliances.

Dual USB Outlets: Allows you to power up to 2 USB appliances.



CAUTION

- **DO NOT USE THE INVERTER IN A POSITIVELY GROUNDED VEHICLE.**
- THE ELECTRICITY GENERATED BY THE INVERTER IS MODIFIED SINE WAVE. Do not use the inverter to power the following devices:
 - Small appliances such as rechargeable flashlights, some razors, and some rechargeable night lights that plug into a wall outlet for recharge.
 - Some battery chargers for rechargeable tools.
- Before using the inverter, please check the equipment manufacturer's manual and specifications to check if the equipment is capable of being charged properly without damaging it.

WARNINGS

- **Shock hazard: The Inverter generates the same AC power as a normal household wall outlet.**
- Do not attempt to open or disassemble (no user-servicable parts inside).
- Do not insert foreign objects into the outlet.
- Do not expose to water, rain or snow.
- Do not connect to power utility AC distribution wiring.
- Heated surface: The inverter housing may become uncomfortably warm, reaching 65°C (150°F) under extended high power operation.
- During operation, keep the inverter from materials that may be affected by high temperatures.
- Failure to follow the above may result in personal injury or damage to the inverter.

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BASIC OPERATION

1. Use the right operating voltage for both input and output of the inverter.
2. For use with your vehicle's 12V DC cigarette lighter outlet:
 - a. Unscrew the red cover for the positive (+) input terminal of the inverter.
 - b. Attach the red, positive output of the included DC plug to the terminal.
 - c. Secure the terminal with the cover.
 - d. Repeat the process with the black, negative (-) terminal and matching DC plug output.
 - e. Plug the inverter into your vehicle's lighter socket. The green LED will light up.
1. For use connected directly to a 12V DC battery:
 - a. Unscrew the red and black terminal covers of the inverter.
 - b. Attach the red, positive (+) wire to the positive terminal. Secure the wire with the terminal cover.
 - c. Attach the other end of the wire to the red, positive (+) terminal of the battery.
 - d. Repeat the previous 2 steps with the black, negative (-) terminal and matching black wire.
 - e. Plug the inverter into your vehicle's lighter socket. The green LED will light up.
1. Plug an AC product into the three prong AC receptacle a USB powered appliance into one of the USB power sockets and turn it on. Ensure the total power of all your products draws 700 watts or less of continuous AC power.
2. To avoid discharging the battery power source, always turn the power



inverter off and disconnect the inverter from the power supply when not in use.

3. Disconnect the inverter from a vehicle when starting the engine.
4. If the inverter makes a beeping sound, turn off the inverter and disconnect all appliances from the inverter. Disconnect the inverter from the power supply. The beeping sound is a low battery warning, indicating the voltage of the battery power supply is getting low. Please restart the vehicle engine and charge the battery before operating it with the power inverter again.

TIPS

Measuring the AC Voltage

The output waveform of the AC inverter is a modified sinewave. To measure the AC output voltage you must use a true RMS voltmeter.

Adding an Extension Cord

If you need an extension cord, we recommend the use of an extension cord between the AC output of the inverter and AC appliances. You may use up to 100 feet of high quality extension cord. A long cord will result in reduced output power.

Buzz in Audio Systems

Some stereo systems will emit a buzzing noise from their loudspeakers when operated from the power inverter because the power supply in the device does not adequately filter the modified sine wave produced by the power inverter. The only solution is to use a sound system that incorporates a higher quality power supply.

Operating a Television

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Picture tubes have a degaussing coil that uses a high initial surge of power to light up the screen from a "cold start." If the television does not start up on the first try, I switch on the TV every 2 to 3 seconds until the screen comes on. Sometimes it may take 2 to 5 tries before starting.

Television Interference

Operating the power inverter can interfere with television reception on some channels. If this situation occurs, the following steps may help to alleviate the problem:

- a. Make sure the chassis ground lug on the back of the power inverter is solidly connected to the ground system of the vehicle.
- b. Do not operate high power loads with the power inverter while watching television.
- c. Make sure the antenna feeding your television provides an adequate, "snow free" signal and that you are using good quality cable between the antenna and the television.
- d. Move the television as far away from the power inverter as possible.
- e. Keep the cables between the battery and the power inverter as short as possible and twist them together with about 2 to 3 twists per foot. This minimizes the radiated interference from the cables.



TROUBLESHOOTING

Problem: AC product does not operate, green light does not light

Probable Cause	Suggested Remedy
AC product connected is rated at more than 100 watts; overload shutdown occurs.	Use product with a power rating of less than 100 watts.
High starting surge has caused overload shutdown even though AC product connected is rated at less than 225 watts.	Product exceeds inverter's surge capability. Use a product with starting surge power of less than 225 watts.
Lighter socket or 12 volt outlet may require ignition to be switched on.	Turn ignition key to accessory position.
Poor contact with lighter socket or 12 volt outlet.	Press inverter firmly into the lighter socket. Make sure the socket is clean.
Battery is discharged.	Recharge battery.
Fuse blown by heavy load.	Replace the 8A slow blow fuse by unscrewing the fitting in the positive connector.

Problem: Buzzing sound in audio systems

Inexpensive stereo systems have an inadequate internal power supply filtering which causes a buzzing sound. A system with a high quality filter is the only solution.

For additional technical support please e-mail customerservice@wagan.com

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SPECIFICATIONS

Continuous Power	700 Watts (for 24 hours)
Peak Surge Power	1800 Watts
AC Output Voltage	115V AC RMS
AC Output Frequency	60 Hz
AC Output Waveform	Modified Sine Wave
DC Input Voltage Range	12V DC (10–15V) DC
Optimum Efficiency	90%
No Load Battery Drain	< 0.3A DC
Low Battery Alarm	10.5 ± 0.5V DC
Low Battery Automatic Shutdown	9.5V ± 0.5V DC
Thermal Alarm and Automatic Shutdown	130°F ± 10° (55°C ± 5°)
Input Short Circuit Protection	Yes
AC Receptacles	2 Three-prong Outlets
USB Power Sockets	2 Outlets
Internal Fuse	30A
Net Weight	2.5 lbs



WAGAN CORP. LIMITED WARRANTY

All WAGAN Corporation products are warranted to the original purchaser of this product.

Warranty Duration: This product is warranted to the original purchaser for a period of one (1) Year from the original purchase date, to be free of defects in material and workmanship. WAGAN Corporation disclaims any liability for consequential damages. In no event will WAGAN Corporation be responsible for any amount of damages beyond the amount paid for the product at retail. In the event of a defective item, please contact WAGAN Corporation at (800) 231-5806 to obtain a Returned Merchandise Authorization number (RMA#), and return instructions. Each item returned will require a separate RMA#. After you have received the RMA# and the return instructions from WAGAN Corporation, please follow the instructions and send the item with PREPAID SHIPPING, along with all of the required documentation, a complete explanation of the problem, your name, address and daytime phone number. WAGAN Corporation will, at its option, replace or repair the defective part.

A Returned Merchandise Authorization number (RMA#) is REQUIRED when sending in any defective item. WAGAN Corporation is not responsible for any item(s) returned without an official Returned Merchandise Authorization number. The item(s) must be returned with prepaid shipping. WAGAN Corporation is not responsible for any shipping charges incurred in returning the item(s) back to the company for repair or replacement. This warranty is void if the product has been damaged by accident, in shipment, unreasonable use, misuse, neglect, improper service, commercial use, repairs by unauthorized personnel or other causes not arising out of defects in materials or workmanship. This warranty is effective only if the product is purchased and operated in the USA and does not extend to any units which have been used in violation of written instructions furnished.

Warranty Disclaimers: This warranty is in lieu of all warranties expressed or implied and no representative or person is authorized to assume any other liability in connection with the sale of our products. There shall be no claims for defects or failure of performance or product failure under any theory of tort, contract or commercial law including, but not limited to negligence, gross negligence, strict liability, breach of warranty and breach of contract.

Warranty Performance: During the above one (1) Year warranty period, a product with a defect will be replaced with a comparable model when the product is returned to WAGAN Corporation with an original store receipt. The replacement product will be in warranty for the balance of the one (1) Year warranty period.

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Please activate my limited warranty for WAGAN Corp.

Name	
Mailing address	
City	
State, Zip code	
E-mail address	
Item purchased	Item no.
Store name	
Date of purchase	
Signature	Date

All WAGAN Corporation Products must be registered within (30) days of purchase to activate this warranty. Mail the complete registration form, along with a copy of the original sales receipt to:

Attn: Customer Service
WAGAN Corporation
31088 San Clemente St.
Hayward, CA 94544