

WELGEN

DC TO AC POWER INVERTER



Model:
Inverter 350W-12
Inverter 350W-24

For above-mentioned models: most of automobile and boats will provide an ample power supply for 30~60 minutes even when the engine is off.

USER MANUAL

Keep this file for future reference:

This instruction manual will show you how to install, operate and maintain DC To AC Power Inverter, please read this carefully and keep this file for future reference.

How to choose the suitable inverter?

We manufacture many different sizes, and several series. Contact with your local dealer for specifications on each of our models. The size you choose depends on power consumption (find the power consumption by referring to the specification plate on the appliance). We recommend you to buy larger inverter than you need, because of surge power reason...etc.

Max output continuous & Max surge power:

What's the meaning of the "Max output continuous" & "Max surge power" is that some appliances or tools, such as a motor, which requires an initial surge power to start up (max surge load or max peak load). Once started, the tool or appliance requires regular power to operate (max output continuous load).

★Helpful formulas:

Amps * 120 or 230 (AC voltage) = watts

Watts * 2 = surge power

Those formulas yields a close approximation of the surge power of the appliance.

★**CAUTION:** Induction motors such as compressor, air conditioners, refrigerators, freezers and pumps need 3~9 times greater surge power . If you need inverter to run induction loads, it's better to use pure sine wave inverter.

How to choose the suitable battery type?

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Model No.	Inverter 350W-12	Inverter 350W-24
Input reverse protection	○	○
Output short circuit prot.	○	○
Soft Start	○	○
AVR	○	○
DC & AC isolated	○	○
Auto Temperature Control Fan	○	○
Dimensions (L * W * H)	157*103*64	157*103*64
Net weight	640g	640g
Accessories	Cigar plug & Alligator clip	Cigar plug & Alligator clip

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SPECIFICATIONS		
Model No.	Inverter 350W-12	Inverter 350W-24
Max Output continuous	350W	350W
Max surge power	700W	700W
AC Output Voltage	<input type="checkbox"/> 100VAC <input type="checkbox"/> 110VAC <input type="checkbox"/> 115VAC <input type="checkbox"/> 120VAC <input type="checkbox"/> 220VAC <input type="checkbox"/> 230VAC <input type="checkbox"/> 240VAC	
Regulation	± 5%	
DC input Voltage	10~15V	20~30V
Output wave form	 ~ ~ Modified Sine Wave ~ ~	
Output socket type	 <input type="checkbox"/> <input type="checkbox"/> Type 1 Type 2 Type 3 Type 4 Type 5 Type 6 Type 7	
Frequency	50Hz± 1% / 60Hz ± 1%	
Efficiency	>85%	
No load current draw	0.3	0.25
Temperature protection	60°C ± 5°C	
Input low voltage alarm	<input type="radio"/>	<input type="radio"/>
Input low volt shut-down	<input type="radio"/>	<input type="radio"/>
Input high voltage prot.	<input type="radio"/>	<input type="radio"/>

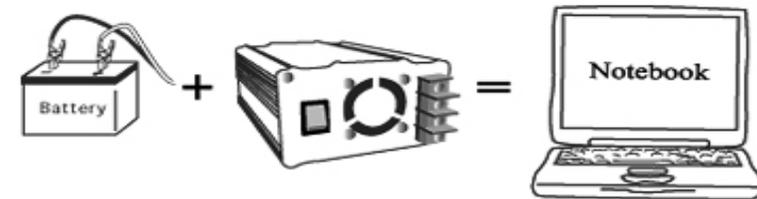
Overload protection

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Actual time depends on the age and condition of battery. We recommend you to start the engine every hour and let it run for 10 minutes to recharge the battery.

Available Appliances:

It is suitable for the electrical appliance that power consumption is not excess overload, like: Notebook, TV set, Video game, fan, Karaoke, Emergency lighter... etc.



How to use power inverter:

Put the cigar plug into the cigarette lighter hole in the car (DC12v or 24V) or connect the alligator clip to the car battery. Turn on the power switch; LED indicator will light up. Then connect the electrical appliance to your inverter.

★**CAUTION:** Make sure positive pole of DC clip (**Red wire +**) connect to positive pole of car battery (**Red wire +**).

Unpack and inspection:

Before you start to use, the carton should contain the following items:

- Power Inverter
- User's manual
- Cigar plug or Alligator clip or both of Cigar plug & Alligator clip.



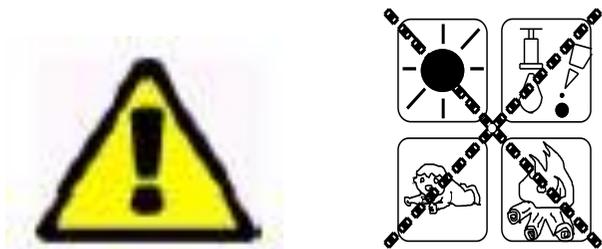
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★**CAUTION:** If you have one of above-mentioned items in your carton, please contact with your local dealer immediately.

- How to select Cigar plug or Alligator clip to use:
 - Cigar-Lighter: Use with the electric equipment which is under 150 Watt output.
 - Alligator clips: Use with the electric equipment which is over 150 Watt output.

WARNING!



Before installing and using

Please read the Safety Instructions first!

- If battery acid contacts to skin or cloth, wash immediately with soap and water. If acid gets into eyes, immediately flood eyes with running cold water for at least 20 minutes and get medical attention immediately.

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- **NEVER** smoke, spark or flame near to batteries or engine. Do not put a metal tool on the battery. The spark or short-circuit of the batteries may cause an explosion.
- Remove personal metal items such as rings, bracelets, necklaces, and watches when work with a lead-acid battery. The temperature of the short-circuit lead-acid battery is high enough to melt the ring or similar metal and cause a burn.
- Remember to pull all the plugs out of the socket when cleaning and clean inverter with dry cloth only.
- Please do not use unsuitable voltage and current.
- Under Voltage Protection system will automatically shut off the inverter if the input voltage is too low. Please start your car engine to charge the battery, or stop using it.
- Please pull out the plug from the cigarette lighter hole when start the engine.
- If the consumption power is over inverter itself when start the tools, Over Load Protection system will automatically shut off the inverter.
- Away from water/moisture, oil or grease.
- Keep ventilation.
- Not expose inverter under sunlight or heat place.
- Out away from children
- Away from any flammable substance
- Due to the difference of the waveform, it may cause some buzz and noise in audio and video equipment.
- Do not place in any heavy object on the inverter or the power cord. Do not use it when the power cord is coiled or distorted.

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