

you need (AC) using advanced power MOSFET transistors or IGBT technology in a full bridge configuration. The result is excellent overload capability and the capacity to operate difficult reactive loads.

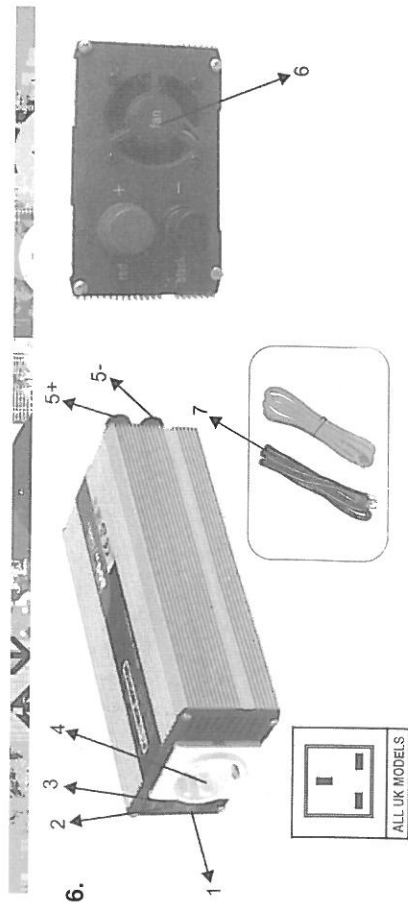


Image is for illustration purposes only, actual product may differ slightly.

## 7. Explanation of controls & accessories (shown above)

- (1) ON/OFF power switch  
This switch turns ON/OFF the inverter.
- (2) Power indicator  
When lit, it indicates the inverter has been turned on, and is ready for use.
- (3) Overload (Fault) indicator  
If the LED overload on, indicates that the inverter in the state of warning or protection, please stop to use it soon.
- (4) AC outlets  
Output AC power.
- (5) Battery connections posts  
Please connect the inverter to the battery, using the included connecting wire (7) Pay attention to polarity when attaching the clips to the battery. Red terminal is positive (5+) and black terminal is negative(5-).
- (6) High speed cooling fan  
The fans cool the internal circuits automatically, while the inverter is in working.
- (7) Connecting wire  
For Connecting batteries with the inverter.

## 8. Power supply

The power supply source needs to guarantee at least 10.5 Volt to max. 15.0 Volt DC and enough permanent output to operate the unit.

The power supply source can be a battery or a similar DC power supply.  
To establish the estimated necessary power supply (in amps), divide the respective output (in Watt) of the operated unit by the incoming voltage. (12 Volt in the case of a car battery)

## 9. Connection to the power supply

- Unpack the power inverter and ensure that the switch is at the OFF position.

**Caution:**

**May only be operated with 12 Volt batteries. It cannot be operated at 6 Volt and at 24 Volt this will result in damage.**

## 10. Connection

- Insert the plug into the socket of the power inverter.
- Press the "On" switch - the green LED lights up, the unit is operational.
- The LED will turn off if the voltage drops below 10V and the power inverter switches off- switch off the consumer and disconnect the plug.

**Caution: Never draw power from the power inverter with a cable.**

## 11. Rechargeable units

**Caution:** Some rechargeable units can be directly connected to standard sockets. These units can damage the power inverter.

When a rechargeable unit is used for the first time, observe the temperature for approx. 10 minutes. If it becomes relatively hot, the unit cannot be operated using the power inverter.

Rechargeable units can be easily operated using a separate charger or transformer.

## 12. Fuse

The power inverter is fitted with 50X2 amp fuse. Defective fuses should be exchanged with new fuses.

## 13. Position of the power inverter

The unit was designed so that it can be placed in a drinks holder.

- No liquid may be allowed to enter the unit.
- The ambient temperature should lie between 10° and 27° C — do not place on or directly adjacent to a heat source.
- Do not expose to direct sunlight.
- Leave a space of 2 - 4 cm to allow adequate air circulation.
- Do not place any objects on top.
- Do not use close to inflammable materials or in places where inflammable vapours can occur.

## 14. Connection via the vehicle's battery

- It is recommended running the vehicle's motor for approx. 15 minutes every hour to avoid the battery from discharging.
- The power inverter can be operated when the engine is running or when the engine is at a standstill.
- It is possible that the power inverter may not work due to the voltage drop during the starting process.
- If not used, remove the unit from the battery.

## 15. Alarm in case of voltage drop of the battery

The power inverter switches off automatically when the voltage drops below 10 Volt.

## 16. Malfunctions

(Protective features of the power inverter)

**Low-voltage of the battery** - may damage the battery but not the power inverter as it switches off. Once the normal operating status is reinstated, the unit can be operated again.

**Overload protection** - If the incoming voltage exceeds 15 Volt DC, or if the permanent output is exceeded, the unit switches off automatically.

**Short-circuit** - If the wires are crossed or the consumer has short-circuited, this usually causes the 15 amp fuse to blow. Disconnect the appliance immediately from the power inverter & exchange the fuse.

**Overheating protection** - If the internal temperature of 65°C is exceeded, the unit switches off automatically. After a cool-down phase of approx. 15 minutes, the unit can be switched on again.

## 17. General problems

**The unit is started but no permanent operation is possible**

Some inductive motors may require 2-6 start-up attempts. If the consumer only runs at the moment in which the power is supplied, switch the power inverter on and off quickly and repeatedly.

**Humming in music systems**

The loudspeakers of cheaper stereo systems may hum as they cannot filter the modified sine waves that the power inverter generates.

**Malfunctions when operating a TV**

The power inverter is already screened, although there may be visible interference, especially if the TV signal is weak. Try one of the following actions:

- Position the power inverter as far away as possible from the unit, the aerial and the aerial cable.
- Look for the best possible position for the aerial cable, the power cable, the TV and the power inverter.
- Use good quality aerial cables.

## 18. Troubleshooting

**Problem: Low outgoing voltage**

**Cause**

- The power inverter is overloaded.
- Incoming voltage is below 10.6 Volt.

**Recommendation**

- Reduce the outgoing output.
- Ensure adequate incoming voltage of over 10.6 Volt.

Note: Only use RMS voltmeters to measure the outgoing voltage.

**Problem: battery power is too low**

**Cause**

- Poor condition of the battery.
- Inadequate power supply or inappropriate voltage drops.

**Recommendation**

- Replace the battery.
- Check the condition of the cigarette lighter clean or replace

**Problem: No output**

**Cause**

- The power inverter is not at operating temperature.

**Recommendation**

- Switch the power inverter off and on again. If necessary repeat the process until the operated unit starts.
- Switch the ignition on.
- Charge or exchange the battery.
- Allow the power inverter to cool down. Ensure there is enough air circulation.
- Exchange the fuse. Check that the wires are connected correctly when connecting the power inverters

## ! CAUTION!

- Do not connect live AC power to the inverter's AC outlets. The inverter will be damaged even if it is switched OFF.
- Do not expose the inverter to temperatures exceeding 104°F(40°C).

## ! CAUTION! Do not use the inverter with the following equipment:

- Small battery operated products such as rechargeable flashlights, some rechargeable shavers, and nightlights that are plugged directly into an AC receptacle to recharge.
- Certain battery chargers for battery packs used in hand powered tools. These chargers will have warning labels stating that dangerous voltages are present at the charger's battery terminals.
- Note: DC voltage of the battery should be connected with the input DC voltage of the power inverter.  
(For example, DC12V of battery connect with input voltage 12V of the inverter).

## ! Don't disassemble or modify the inverter by yourself.

## 3. Safety Features

- Input protections: Polarity reverse (Fuse broken/Over and under voltage/Low battery Alarm and shut Down
- Output protections: Short circuit / Overload / Over temperature
- With power ON/OFF switch and LED indicator
- Input and output fully isolation
- Low power consumption(standby)
- LVD meets EN60950 and e8 mark
- EMC meets EN61000-6-3.EN55022

## 4. Install (Using) Environment - Selecting a suitable location

For safe and optimum performance. Install the inverter in a location that is...

- Dry. Do not expose to water drip or spray.
- Cool. Operate only in ambient temperatures between 32°F(0°C) and 104° (40°C) Keep away from surface heating vents or other heat producing equipment.
- Well ventilated. Allow at least 2 inches (5 cm) clearance above and on all sides of the unit for proper cooling.
- Safe. Do not install the inverter in a compartment with batteries or flammable liquids, such as fuel, or explosive vapors and ensure that the unit is clean and free of dust and dirt.

## 5. Working Principle

The inverters work in two stages. During the first stage, the DC to DC converter increases the DC input voltage from the power source (eg. a 12 volt battery) to 300 DC volts. In the second stage, the high voltage DC is converted to the watts

## 1. Introduction

Thank you for purchasing this Power Inverter. It is a compact and highly portable unit. From the 12V/24V/48V DC outlet in your vehicle or boat, or directly from a dedicated 12V/24V/48V DC battery, the inverter will efficiently and reliably power a wide variety of household AC products, such as TVs, computers, DVDs, etc. The inverter is designed to provide years of trouble-free operation and includes an automatic safety monitoring circuit to protect the inverter, and your battery and loads from inadvertent overload conditions.

## Operating Instructions

This product was developed carefully and designed for long term trouble free use. Read this guide before installing or using the inverter. Please keep in a safe place and retain for future reference

Please read the **PRECAUTIONS** section carefully to avoid any damage to the power inverter or the other units that are being operated.

## 2. Safety First

Incorrect installation or misuse of the inverter may result in danger to the user. We urge you to pay special attention to all **CAUTION** and **WARNING** statements. **CAUTION** statements identify conditions or practices that may result in damage to the inverter or to other equipment. **WARNING** statements identify conditions that may result in personal injury or loss of life.



### **WARNING ! Shock hazard. Keep away from children.**

- The inverter generates the same potentially dangerous AC power as a normal household wall outlet. Treat it as you would use any other AC outlet.
- Do not insert foreign objects into the inverter's AC outlet, fan or vent openings.
- Do not expose the inverter to outside elements such as rain, snow and water.
- Do not under any circumstance, connect the inverter to AC Power.



### **WARNING! Heated surface.**

- The inverters housing may become uncomfortably warm, reaching 140°F (60°C) under extended high power operation. Ensure at least 2 inches (5 cm) of air space is maintained on all sides of the inverter. During operation, keep away from materials that may be affected by high temperature.






### **WARNING! Explosion hazard.**

- Do not use the inverter in the presence of flammable fumes or gases, such as in the bilge of a fuel powered boat, or near an propane tanks. Do not use the inverter in a enclosure containing automotive-type, lead-acid batteries. These batteries, unlike sealed batteries, vent explosive hydrogen gas which can be ignited by sparks from an electrical connection.
- When working on electrical equipment always ensure someone is nearby to help you in an emergency.

## 19. Precautions

- If connected directly to a battery or similar unit, please check the wires are connected correctly with regard to the polarity
- Ensure that the incoming current does not exceed 15 Volt.
- Check that the plug and connections are tight at regular intervals. Loose connections can generate heat and/or damage the inverter or the power source.
- Improper use of the power inverter can cause injuries.

## 20. Technical Data

RATED POWER			800W
OUTPUT	SURGE POWER		1600W
	FREQUENCY		60Hz±5% or 50Hz±5%
	AC REGULATION		± 10%
	AC VOL TAGE		100/110/120VAC or 220/230/240 VAC(The Specific data is based on the product label)
	WAVEFORM		 (The Specific data is based on the product label)
INPUT	NO LOAD- CURRENT DRAW		<0.7A
			<0.8A
	DC VOLTAGE		12V or 24V (The Specific data is based on the product label)
	VOLTAGE RANGE		10--15VDC or 21--30VDC or 42-61VDC
	EFFICIENCY(Typ.)		≥80%
	REPLACEABLE- FUSE	12V	50A×2
		24V	50A×1
	BAT LOW ALARM		10.5VDC±0.5V or 21.0VDC±1V or 42VDC±1V
	BAT LOW SHUT DOWN		9.5VDC ±0.5V or 19.5VDC±1V or 39VDC±1V
	PROTECTION	OVER LOAD	
OVER VOLTAGE		Shut off output voltage, re-power on to recover	
OVER VOLTAGE		15-16V or 30~32V or 60~65V	
OVER TEMPERATURE		>60℃, />140	
OUTPUT SHORT		Auto. Shut-off	
Other	BAT. POLARITY		By fuse open
	1. With accessories AC connector, and a wire of 1.5m (only for CPS)		
	2. With spare fuse in the packing		
			3. With DC wire in the packing

## 21. Caution

The warranty will lapse in case the power inverter is used improperly.

Metal and electro parts should not be disposed of in the household waste system. Information about proper disposal is available from your local council.



#### IMPORTANT: ADDITIONAL SAFETY INFORMATION

This Power Inverter is **NOT** intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or have been given instruction concerning use of the Power Inverter by a person responsible for their safety.

Professional Solutions

# 800W

# Power Inverter

- 800 Watt [Continuous Power]
- 1600 Watt Peak Power



SWINV800

Streetwize Accessories

E-mail: [sales@streetwizeaccessories.com](mailto:sales@streetwizeaccessories.com)

[www.streetwizeaccessories.com](http://www.streetwizeaccessories.com)



#### CAUTION:

**THIS INVERTER IS FOR USE WITH 12V BATTERIES ONLY.**

Read these instructions before operating this power inverter and retain for future reference!