

## **Inverter – DC 12V to AC 230V voltage converter**

Dear customer, thank you for buying our product. Please carefully read and follow these directions so that you can fully and safely utilize this inverter to your satisfaction. By observing the enclosed instructions, you will avoid incorrect usage and prevent damage to the product. Do not attempt to modify this equipment and always adhere to the principles for utilizing electrical appliances. Keep these instructions in a safe place. The inverter is intended for use in cars, households or indoor locations only and should be operated only by adults. Never expose the equipment to a high-humidity environment (e.g. bathroom), avoid contact with liquids and protect it against external climatic influences. Avoid proximity or contact with home electronics and computing devices.

### **Features:**

This product is ideal for connecting a digital camera, mobile phone, lamp, CD/DVD player, radio, etc. through your car's cigarette lighter socket. While using the inverter, there is no risk of a power outage! The inverter is also equipped with a USB output for supplying various appliances through the USB 2.0 interface. However, this output is not intended for data transmission. Therefore, do not connect any USB cables, devices or players into this output.

The inverter includes protection against reverse polarity, low/high voltage, short circuits, overloads, overheating and high or low battery voltage.

### **Switch and indicators**

Switched on – the switch is in the ON position, the green indicator lights

Switched off – the switch is in the OFF position, the indicator does not light

Indicator (ERROR) lights in red: an inverter malfunction has been indicated

### **Caution**

Make sure that the input inverter voltage and output battery voltage of your car are the same.

Insert the cigarette inverter plug into your car's cigarette lighter socket. Once this has been confirmed, connect the appliance that you wish to supply into the inverter's socket. The inverter must always be switched on (the switch must be in the ON position) first, i.e. before the respective appliance is connected.

If you intend to use the inverter for connecting a motorized device, e.g. a drill, grinder, air conditioner, etc., make sure that the inverter output is at least three times higher than the input of the appliance to be connected. By doing so, you will ensure trouble-free operation since consumption for these types of devices at start-up is greater than their respective nominal value. The inverter will automatically switch off if the input of the connected device exceeds the output of the inverter. Automatic switch-off will also occur if the inverter's operational temperature exceeds 60°C.

If the battery's voltage drops, you will hear a warning signal. If this happens, switch off the connected appliance, switch out the inverter and let the car engine run without using the inverter for at least 20 minutes. The battery will then be recharged.

If you need to use the inverter for appliances located far from the car, it is recommended that you use an extension cord with a maximum length of 30m (the cord should be 3 x 1,5mm<sup>2</sup>).

Failure to follow these instructions can cause damage to the inverter and void the warranty.

**Do not use the inverter if the car engine is not running!!! Your battery might be discharged!**

**Switch the inverter off when not in use.**

**Switch the inverter off when starting your car – failure to do so increases the risk of damage.**

**Switch the inverter off when charging your car battery with a charger – there is a risk of damage.**

**Do not disassemble the inverter! Danger of electric shock!!!!**

The inverter has a replaceable external fuse that can be easily changed. If the inverter does not function, you can replace the fuse or take the inverter to a competent service station.

**WARNING:** The inverter must be grounded before being started.

- There is a grounding terminal on the inverter's rear panel. This terminal shall be connected to the inverter's housing and AC ground of the output socket. Usage of this socket depends on the application. For a grounded installation, a green-yellow insulated wire resistant to wear should be used. Grounding of the AC 220V socket is ensured by connecting the neutral conductor and central working conductor, the same as with a standard indoor socket.
- If the inverter is used in a vehicle and connected to the cigarette lighter socket, the grounding clamp should be attached by a short insulated pull-wire conductor either to the negative or DC positive input terminal of the inverter depending on whether the vehicle is fitted with a negative (typical) or positive chassis connection.
- For use on ships, the grounding socket should be connected to the existing grounding system.

## Ventilation – cooling

Important: Make sure that the cooling ventilator rotates during operation. If it does not rotate, check the inverter. Make sure that there is enough space behind the inverter so that the cooling is efficient.

If a short circuit, overload, etc. occurs at the AC output, the inverter will automatically switch off.

If this occurs:

- (A) Switch off the inverter (OFF)
- (B) Switch off all appliances
- (C) Check the connection of all appliances
- (D) As soon as no problems exist, switch the inverter on again.

If you use the inverter for a long period of time, the AC output can abruptly disconnect even though there is sufficient battery voltage. This can be caused by excessive overheating. If this happens, proceed as follows:

- (A) Switch off the inverter
- (B) Disconnect all appliances and wait until the inverter cools down
- (C) Switch the inverter on again

The inverter should be situated in the following way:

- (A) The area must be well ventilated and away from flammable sources
- (B) Excessive solar radiation and heat must be avoided
- (C) Access by children shall be prevented
- (D) There shall be protection against water/moisture, oil and grease

In order to ensure that the inverter will properly work, a small amount of regular maintenance is necessary: clean the inverter's exterior parts from dust and impurities using a wet cloth and tighten the output clamps' screws.

## Inverter specification:

- Output power (rated): 200W
- Output power (peak): 400W
- Overload fuse: 200W
- Fuse for replacement: 1 x 25A (part of delivery)
- Input voltage (DC): 12V DC
- Output voltage (AC): 230 V AC
- Frequency: 50Hz
- USB feeding port: 5V; 500mA
- Output curve: modified sinusoid
- Operating temperature: -20~50°C
- Low voltage fuse: <9.6V
- High voltage fuse: >14.8V

The product has been issued with a CE declaration of conformity in accordance with the applicable regulations.

On request from the manufacturer: [info@solight.cz](mailto:info@solight.cz), or downloadable at [www.solight.cz/en](http://www.solight.cz/en)



**SOLIGHT**

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