1. Introduction
Thank you for choosing our product. This manual contains important safety and operation instructions. Please read this manual before use. The WP-IG needs to be installed by a skilled technician.

1.2 Safety Instruction
As dangerous voltages exist within the WP-IG, only qualified and authorized maintenance personnel are permitted to open and repair it. This manual contains information concerning the installation and operation of the WP-IG. All relevant parts of the manual should be read prior to commencing the installation. Please follow the local regulations. Any operation against the safety requirement or against design, manufacture and safety standard are out of the manufacturer warranty.

1.3 General Precautions
- To avoid fire and electric shock, make sure all cables have the correct thickness and are connected well.
- Please do not put any inflammable goods near to WP-IG.
- Never place the unit directly above batteries; gases from a battery will corrode and damage the WP-IG.

1.4 Product Description
AC power in a vehicle especially in a mobile application where AC power from the grid is not readily available is an attractive solution but brings with it certain safety and operational issues. Within a automotive vehicle application and conformity to applicable safety legislation requirements for the user safety of connected AC powered tools and equipment to / from a mains 230VAC power source generated by an DC to AC power inverter installed in a vehicle, Connection and operation of such tools and equipment outside the vehicle where a high safety hazard and potential risk of electric shock to the user would exists than an RCD (Residual Current Device) or a WP-Isolation Guard must be correctly installed inline of the 230VAC inverter and AC electrical system within the vehicle, be regularly tested and conform to all relevant safety legislation and certification where applicable.

Be fully operational at all times as a safety protection device both whilst connected and whilst in use outside the vehicle.

**NOTE:**
If an RCD is used in the vehicle AC installation to / from a DC to AC power inverter than a GEC (Grounding Electrode Conductor) MUST be installed and always used as part of the AC power system for safety requirement of electric shock hazard. This MUST be installed at all times the vehicle is stationery and tested for correct and safe operation of Ground – Earth. This is only to be performed and confirmed by a qualified AC electrician with the correct knowledge and calibrated test equipment.

This is not always a practical option and qualified staff not always available therefore WhisperPower have developed the advanced solution to this issue of safety with the WP-Isolation Guard Inverter and WP-Isolation Guard Combi.

If the WP-Isolation Guard is used in the vehicle AC installation to / from a DC to AC power inverter than a GEC (Grounding Electrode Conductor) is not required, A major safety and time saving benefit in the installation and operation of the DC to AC vehicle power system.

The WP-Isolation Guard is a fully automatic safety device that measure the electrical resistance in the vehicle AC power system wiring and will instantly switch OFF the AC power before a dangerous situation for the user can occur.
2. **Operation**

Is quick and simple. After normally switching ON the vehicle AC power inverter the installed WP-Isolation Guard will make a short self-system test. After the test in complete the green LED on the unit will illuminate ON and the internal relay will switch ON the protected 230VAC supply from the vehicle AC power inverter to the installed AC vehicle electrical system outlet and to the user whilst constantly monitoring the AC power supply for potential electrical shock hazard when tools and equipment are be operated outside of the vehicle.

**NOTE:**
The WP-Isolation Guard automatic self-system test is safety critical before correct and safe operation of the system.

If the WP-Isolation Guard will not operate in this procedure there may be a possible dangerous electrical safety situation detected by the unit and the green LED will not illuminate ON and the internal relay will not switch the AC power ON.

If this should be the case Switch OFF the vehicle AC power inverter at once and check the vehicle AC power inverter and vehicle AC power system for faults and possible causes before operation of the vehicle AC power system again.

You can turn the vehicle AC power inverter ON once all relevant tests and possible safety issues are resolved.

The WP-Isolation Guard will self-system test again, if everything is safe it will operate in the correct and safe procedure as above continuously checking the AC power system electrical resistance and instantly switching OFF the AC power supply before a dangerous situation of electrical shock hazard can occur. The WP-Isolation Guard can be reset in this manor should the unit TRIP OUT whilst in operation but if this is the case further safety investigation as to the reason the unit isolated the AC power supply MUST be fully investigated tested and rectified before used of the vehicle AC power supply again.

If the WP-Isolation Guard continues to safety self-system test and detect a possible dangerous electrical safety situation further operation of the vehicle AC power inverter and vehicles AC power system should be suspended and isolated until the whole vehicle AC electrical power system can be checked rectified and confirmed safe to use by a qualified electrician.

**NOTE:**
The WP-Isolation Guard will only function in a "floating" or IT network. It is therefore very important that Inverter or Combi are modified in a floating AC output mode.

3. **Warranty and Liability**

Faulty units returned to us will be repaired or replaced free of charge without quibble. Usually, repaired faulty items are dispatched within 48 hours at being received. We have no control over the way the units are installed, the type of electrical system the units are installed on and the condition of such electrical systems, neither can we control the kind of load that is applied and the operating environment on which the units are used. So our guarantee is limited to the replacing of a failed unit, and we will not pay for any consequential damage.

This device complies with the EU directive 2004/108/EC. The type plate is located on the top of the device.

The Technical Construction File required by this Directive is maintained at the corporate headquarters of WhisperPower B.V., Kelvinlaan 82, 9207 JB Drachten, the Netherlands.

M.B. Favot

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For more information go to www.whisperpower.com
4. Connection Diagrams

WP-Isolation Guard Inverter

 WP Sine Remote Control
 WP Sine 12/2000 Art. Nr. 6112500
 WP Charger Booster 50 Amp.
 12 V DC Distribution
 Battery Switch 600 Ah
 Auxiliary Battery 12V
 Lithium-ion Battery (alternative)
 2000 W - WP-Sine AC Output 230 VAC - 50 Hz

WP-Isolation Guard Combi

 Optional:
 5” Touch panel
 Standard panel
 Grid power line
 WP Charger Booster 50 Amp.
 12 V DC Distribution
 Battery Switch 600 Ah
 Auxiliary Battery 12V
 Lithium-ion Battery (alternative)
 2000 W - WP-Sine AC Output 230 VAC - 50 Hz

Euro 6 Vehicle system 12V

WP-Isolation Guard Combi

 Optional:
 5” Touch panel
 Standard panel
 Grid power line
 WP Charger Booster 50 Amp.
 12 V DC Distribution
 Battery Switch 600 Ah
 Auxiliary Battery 12V
 Lithium-ion Battery (alternative)
 2000 W - WP-Sine AC Output 230 VAC - 50 Hz

Euro 6 Vehicle system 12V
Sales outlets in more than 50 countries

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