



# ™ MODIFIED SINE WAVE POWER INVERTERS

MODEL No's: PI1100.V2, PI1500.V2, PI2000.V2

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions and maintained properly, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to  
instructions



Electrical shock  
hazard



Warning!



Warning!  
Battery Charging

## 1. SAFETY

- ▲ **DANGER!** - Beware, lead-acid batteries generate explosive gases during normal battery operation.
- ✓ Wash with soap and water immediately if battery acid contacts skin or clothing. If acid enters eye, flush immediately with cool, clean running water for at least 15 minutes and seek immediate medical attention.
- ✗ **DO NOT** smoke or allow a spark or flame in the vicinity of the battery or engine.
- ✓ If the battery terminals are corroded or dirty, clean them before attaching the leads.
- **WARNING!** To prevent the risk of sparking, short circuit and possible explosion **DO NOT** drop metal tools in the battery area, or allow them to touch the battery terminals.
- ✓ Before attaching to battery, remove personal metallic items such as rings, bracelets, necklaces and watches. A lead acid battery can produce a short-circuit current which is high enough to weld such items to the vehicle and cause severe burns.
- ✓ Keep children and unauthorised persons away from the working area.
- **WARNING! DO NOT** use on any vehicles other than those with 12Volt DC systems.
- **WARNING!** These inverters produce voltages similar to mains AC power; beware of electric shock.
- ✗ **DO NOT** connect to any AC power source.
- ✗ **DO NOT** dismantle. The inverter must be checked by qualified service personnel only.
- ✗ **DO NOT** get inverter wet or use in damp or wet locations or areas where there is condensation.
- ✗ **DO NOT** use the inverter for any purpose other than for which it is designed.
- ✗ **DO NOT** pull the cables or clips from the battery terminals.
- ✗ **DO NOT** use in a flammable atmosphere.
- ✗ **DO NOT** operate the inverter if damaged.
- ✗ **DO NOT** connect to a positive earthed system. Ensure you have the polarity correct before connecting, red cable to positive (+) battery terminal and black cable to negative (-) battery terminal.
- ✓ Before connecting ensure nothing is plugged into the inverter, and the inverter is switched OFF.
- **WARNING! Inverters become hot during use.**
- ✓ When not in use store inverter in a safe, dry, childproof location.

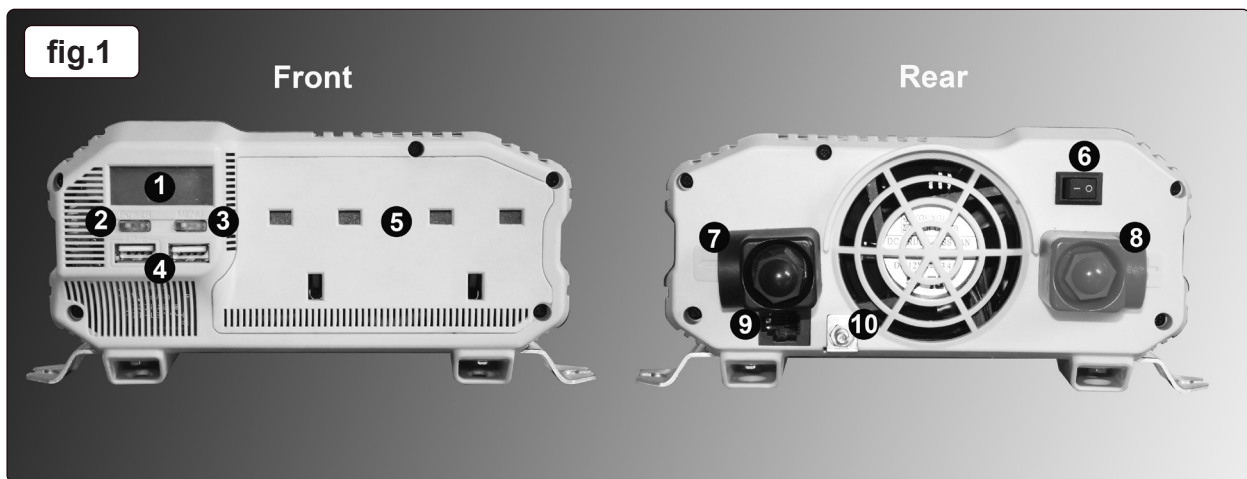
## 2. INTRODUCTION

Supplies continuous smooth 230V power from 12V DC power supply found in cars, caravans, boats and commercials. Features two USB charging ports combined 2.1A and an LCD screen which displays the output wattage, input voltage and battery level. Durable aluminium body with four mounting points for secure installation. Near silent cooling fan for low noise operation. Safety features include overload shutdown, audible low voltage alarm, thermal shutdown and short circuit shutdown. Supplied with 1m battery cables, wired remote control and in-line fuse kit.

## 3. SPECIFICATION

Model No:	PI1100.V2	PI1500.V2	PI2000.V2
Continuous Output:	1100W	1500W	2000W
Dimensions (W x D x H)	297 x 170 x 88mm	351 x 170 x 88mm	390 x 170 x 88mm
Input Voltage:	12V DC	12V DC	12V DC
Nett Weight:	2.83kg	3.58kg	4.08kg
Supply:	12V = 100A (Max.)	12V = 135A (Max.)	12V = 200A (Max.)
Output frequency:	50Hz	50Hz	50Hz
Output Voltage:	230V ~ 50Hz 1100W (Max.)	230V ~ 50Hz 1500W (Max.)	230V ~ 50Hz 2000W (Max.)
USB Output:	5V=2.1A (x2)	5V=2.1A (x2)	5V=2.1A (x2)
Supply Connection:	Battery Terminal Leads	Battery Terminal Leads	Battery Terminal Leads

## 4. OPERATION



1	Digital display	6	Main on/off switch
2	On/off button for inverter circuits	7	Negative (-) power input terminal
3	Display selector button	8	Positive (+) power input terminal
4	USB ports	9	Remote control socket
5	230V sockets	10	Earth terminal

### 4.1. ELECTRICAL CONNECTIONS

4.1.1. Ensure that the main switch (fig.1.6) is in the off position before making any connections.

**IMPORTANT:** Connect the positive (+) cable first. Connecting the + first will help avoid sparks that could occur if the - is connected first.

4.1.2. Remove the plastic cover, nut, and spring washer from the positive (+) terminal of the inverter (fig.1.8) and place the ring connector on the red cable over the terminal post.

4.1.3. Repeat the above procedure to connect the negative (-) cable and remove the plastic cover, nut, and spring washer from the negative terminal (fig.1.7), then place the ring connector on the black cable over the terminal post and secure it.

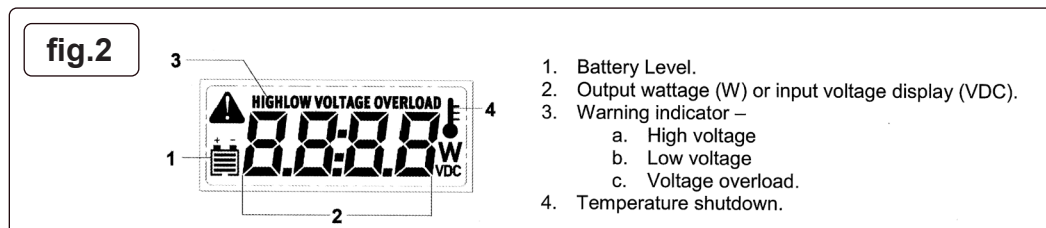
4.1.4. If required, connect an earth cable to the earth terminal (fig.1.10). For further information, consult an automotive electrician.

### 4.2. USAGE

4.2.1. Once connected to the battery supply, switch the main switch (fig.1.6) on.

4.2.2. Switch the inverter circuit on by means of the on/off button (fig.1.2).

4.2.3. When switched on, the digital display (fig.2) will light.



4.2.4. The main display can show input battery voltage or output amperage. Pressing the display selector button changes the display from one to the other.

4.2.5. Before connecting an appliance to the 230V output (fig.1.5) ensure that the appliance is switched off.

4.2.6. When connected, switch the appliance on.

4.2.7. Small appliances may be connected to the USB ports (fig.1.4).

4.2.8. If the fault alarm sounds, the fault will show on the digital display (fig.2).

4.2.9. Inductive loads, such as TV's and stereos, require more current to operate than resistive loads of the same wattage rating. Induction motors, as well as some televisions, may require 2 to 6 times their wattage rating to start up. The most demanding in this category are those that start under load, such as compressors and pumps. Testing is the only definitive way to determine whether a specific load can be started and how long it can run. The unit will simply shut down if it is overloaded. To restart the unit after a shutdown owing to overloading, remove the overload.

### 4.3. PERMANENT INSTALLATION

4.3.1. If mounting the inverter permanently, mount in a cool, dry location close to the vehicle battery. **DO NOT** mount the inverter in the engine compartment.

4.3.2. Mount the inverter horizontally, with room for air circulation around the unit.

4.3.3. Offer the unit up and mark the positions for the fixings; ensure that the fixings do not disturb any wiring, piping or reservoirs.

4.3.4. Drill on the markings and secure the unit.

4.3.5. Connect wiring as in section 4.1.

4.3.6. A remote control is supplied if the unit is to be operated in an inaccessible location. Plug one end of the cable into the remote control socket (fig.1.9) and the other into the rear of the remote control switch.

4.3.7. Switch the main switch on and connect the 230V outlet to the required extension socket.

4.3.8. The remote switch will now switch the inverter on and off as required (an LED illuminates in the switch when switched on).

## 5. TROUBLESHOOTING

Problem	Possible Cause	Suggested Remedy
Unit will not operate.	<ol style="list-style-type: none"> <li>1. Poor DC contact.</li> <li>2. Battery voltage below 10V.</li> <li>3. Load draws too much power.</li> <li>4. Inverter in thermal shutdown.</li> <li>5. Vehicle battery in poor condition.</li> <li>6. External fuse blown due to short circuit.</li> <li>7. Internal fuses blown due to short circuit.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check all DC contacts.</li> <li>2. Recharge or replace battery.</li> <li>3. Reduce load.</li> <li>4. Allow inverter to cool.</li> <li>5. Check / replace battery.</li> <li>6. Check battery connections and replace fuse.</li> <li>7. Contact local repair agent or Sealey technical helpline for guidance.</li> </ol>
Low voltage alarm sounds continuously.	<ol style="list-style-type: none"> <li>1. Bad connection or wiring.</li> <li>2. Low battery voltage.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check and tighten all DC connections.</li> <li>2. Recharge battery without load.</li> </ol>
Television Interference.	<ol style="list-style-type: none"> <li>1. Inverter too close to the television.</li> </ol>	<ol style="list-style-type: none"> <li>1. Locate the inverter as far as possible from the TV, antenna and other cables.</li> </ol>

## 6. MAINTENANCE

- 6.1. The inverter contains no user-servicable parts. If a problem is encountered, contact a Sealey stockist for advice.
- 6.2. To clean the casing of the inverter, first isolate from the input supply and clean with a damp, soapy cloth. **DO NOT** use abrasive or solvent cleaners.



### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



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### WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

**NOTE:** It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on [technical@sealey.co.uk](mailto:technical@sealey.co.uk) or 01284 757505.

**IMPORTANT:** No Liability is accepted for incorrect use of this product.

**WARRANTY:** Guarantee is 12 months from purchase date, proof of which is required for any claim.

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