



**Modified wave 500 watt voltage inverter**  
**24 volt dc to 230 volt 50Hz ac**  
**Part 0-856-55**

### Warnings



**Read all instructions before attempting to install or use the inverter.**  
**High voltage, 230 volts ac, is generated by this unit.**  
**Do not use with wet hands or near water.**  
**This unit is only suitable for 24 volt electrical systems with negative earth.**  
**To supply 230 volt 50 Hz loads of <500 watts.**  
**Do not connect to any other ac power source.**



### Installation Instructions

1. Disconnect all battery leads, -ve leads first, before installing the inverter.
2. Locate a suitable position for the inverter and fit securely. The site chosen should be:
  - (a) Well ventilated.
  - (b) Not exposed to direct sunlight or heat source.
  - (c) Away from water or moisture.
  - (d) Out of reach of children.
  - (e) Away from any flammable or heat sensitive substance.
3. Connect the black 24 volt -ve terminal to the negative side of the supply source and the red 24 volt +ve terminal to a fused positive supply source. Use a minimum of 4.50mm<sup>2</sup> cable and keep all cable runs as short as possible.

### Operating Instructions

3. Ensure that the inverter is supplied by a 24-28 volt dc negative earth system and that the load requires <500 watts at 230 volt 50Hz ac.
4. Plug the appliance into the inverter and then turn on the inverter's power switch. The LED will illuminate to indicate ac power is present, then switch on the appliance. Always turn on the inverter before turning on the load.
5. Switch off the inverter when not in use or when heavy current is drawn from the dc supply, e.g. when starting an engine from the same supply source.
6. If the inverter beeps, but is still supplying ac output, this indicates a low supply voltage; switch off the inverter to preserve battery voltage. If left on the inverter will automatically shut down when the supply voltage falls to approximately 20.0 ± 1.0 volts.



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## Troubleshooting

If the inverter beeps or does not appear to be functioning properly, check the following:

- (i) Low dc supply voltage, supply voltage  $<21.0 \pm 1.0$  volts.
- (ii) Low dc voltage shutdown, supply voltage  $<20.0 \pm 1.0$  volts.
- (iii) Overload shutdown, check load requirement is  $<500$  watts.
- (iv) Thermal shutdown, switch off, allow the inverter to cool down and reduce load.
- (v) Wiring, terminals and connections.

## Specifications

DC input voltage	<b>24 volts (22 - 33 (+/-1.5) volts)</b>
AC output voltage	<b>230 volts</b>
Output frequency	<b>50 Hz</b>
Output waveform	<b>Modified wave</b>
Continuous output power	<b>500 watts</b>
Surge output power	<b>1500 watts</b>
Efficiency	<b>90%</b>
No load current	<b>&lt; 0.95 amps</b>
Input 100% load current draw (@ 24 volt supply)	<b>23.2 amps</b>
Output 100% load current draw	<b>2.18 amps</b>
Battery low voltage alarm	<b>21.0 <math>\pm</math> 1.0 volts</b>
Battery low voltage shutdown	<b>20.0 <math>\pm</math> 1.0 volts</b>
Alarm and thermal shutdown	<b>55 <math>\pm</math> 5°C</b>
Dimensions	<b>l 240 x w 303 x h 76mm</b>
Weight	<b>3.16 Kg</b>

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