

# Pure Sine wave 600 watt voltage inverter 12 volt dc to 230 volt 50Hz ac Part 0-857-60



#### **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 12 volt electrical systems with negative earth.

To supply 230 volt 50 Hz loads of <600 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 12 volt -ve terminal to the negative side of the supply source and the red 12 volt +ve terminal to a fused positive supply source. Use a minimum of 10.0mm2 cable and keep all cable runs as short as possible. Fuse size 70amp Max.
- 4. Connect the inverter case ground terminal to the chassis ground when installing in a vehicle, the vessel's grounding system in a boat or to earth in a fixed location. The case ground terminal is connected to the ground terminal in the ac outlet socket.
- 5. If using the optional remote control (part 0-856-97), fix the remote control in a suitable position and insert the connector into the remote control socket on the inverter control panel.

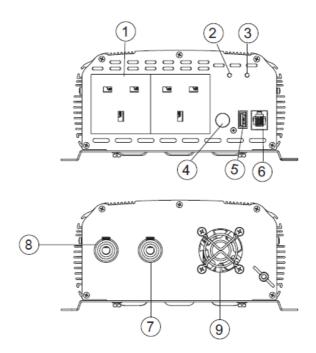
#### **Operating Instructions**

- 1. Ensure that the inverter is supplied by a 12-14 volt dc negative earth system and that the load requires <600 watts at 230 volt 50Hz ac.
- 2. Plug the appliance into the inverter and then turn on the inverter's power switch; hold for 3-5 seconds. The LED will illuminate to indicate ac power is present, then switch on the appliance. Always turn on the inverter before turning on loads individually.
- 3. 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.
- 4. In normal operation the inverter will operate in the green region. The inverter protective shutdown will occur if used in the red zone.
- 5. 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  $10.0 \pm 0.5$  volts.
- 6. The fault light indicator illuminates when the inverter has shutdown due to output short-circuit or gross overloading. If this occurs switch the inverter off and correct the cause before switching the inverter on again. For more detaile please see below:

### **Troubleshooting**

|                                     |           | S     | tate descri |             |   |  |
|-------------------------------------|-----------|-------|-------------|-------------|---|--|
| Function                            | LED light |       | Alarm       | AC cutnut   | Restart work method   |  |
|                                     | Green     | Red   | Alarm       | AC output   |   |  |
| Input under<br>voltage alarm        | Light     | Flash | DiDi        | have output | When the voltage of the batter return to the related voltage the inverter will restart work, green light on, red light off. |  |
| Input under<br>voltage shut<br>down | Light     | Flash | DiDi        | No          |   |  |
| Input over<br>voltage<br>protection | Light     | Flash | DiDi        | No          | When the voltage of the batter return to the related voltage the inverter will restart work, green light on, red light off. |  |
| Over load protection                | Light     | Flash | DiDi        | No          | Reduce the load to related<br>rang the inverter will restart<br>work, green light on,<br>red light off                      |  |
| Over<br>temperature<br>shut down    | Light     | Flash | DiDi        | No          | When the inside<br>temperature return to<br>related rang, inverter will<br>restart work, green light on,<br>red light off.  |  |

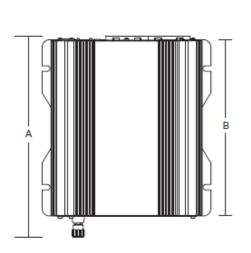
## **Display and Controls**

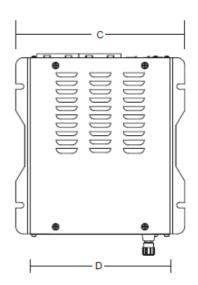


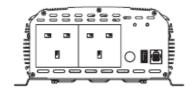
- 1. AC Output Sockets
- 2. Power Indicator(Green)
- 3. Fault Indicator(Red)
- 4. ON/OFF Switch
- 5. USB Output
- 6. Remote Port
- 7. DC Input "+" Terminal (Red)
- 8. DC Input "-" Terminal (Black)
- 9. FAN
- 10. Inverter remote control switch without LCD Display

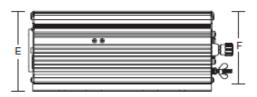


# **Dimensional Drawing**









| Α       | В     | С     | D     | E      | F    |
|---------|-------|-------|-------|--------|------|
| 245.1mm | 210mm | 201mm | 181mm | 93.9mm | 85mm |

## **Specifications**

| DC input voltage              | 12VDC (11VDC-15.5VDC) |
|-------------------------------|-----------------------|
| AC output voltage             | 230VAC +/- 10%        |
| Output frequency              | 50Hz +/-0.5Hz         |
| USB Output                    | DC 5V, Max 1000mA     |
| Output waveform               | Pure Sine Wave        |
| Continuous output power       | 600W                  |
| Surge output power            | 1200W                 |
| Efficiency                    | 85% Max               |
| No load current               | <0.85Amps             |
| Input Under Voltage Alarm     | 10.2 - 10.8VDC        |
| Input Under Voltage Shut Down | 9.2 - 9.8VDC          |
| Input Over Voltage Shut Down  | 15.5-16.0VDC          |
| Alarm and Thermal Shutdown    | 60 +/- 5°C            |
| Input 100% load current draw  | 63 Amps               |
| Output 100% load current draw | 2.61 Amps             |
| Operating Temperature         | 5 - 35°C              |
| Cooling Method                | Fan Assisted          |
| Dimensions                    | 245*201*93.9mm        |
| Weight                        | 2.196Kg               |