**TECHNICAL SPECIFICATIONS** 



Call 01255 555200 Email info@durite.co.uk Visit www.durite.co.uk



# 0-857-20 - 12VDC 2000W PSW INVERTER

Durite's 12VDC 2000W Pure Sine Wave Heavy Duty Inverter

Key Features:

- Robust Construction
- Wide Range Input Voltage 11-15.5VDC (Supports EURO 6 Requirements)
- LCD Panel Display with fault code reader / diagnostics
- Fan cooled
- E Marked R10.05 EMC



# THE TRUSTED QUALITY BRAND FOR PROFESSIONALS

#### 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 <2000 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 12volt +VE terminal to a fused positive supply source. Use a minimum of 35.0mm<sup>2</sup> cable and keep all cable runs as short as possible. Fuse size 220 Amp 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 ; 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 <2000 watts at 230 volt 50Hz AC.

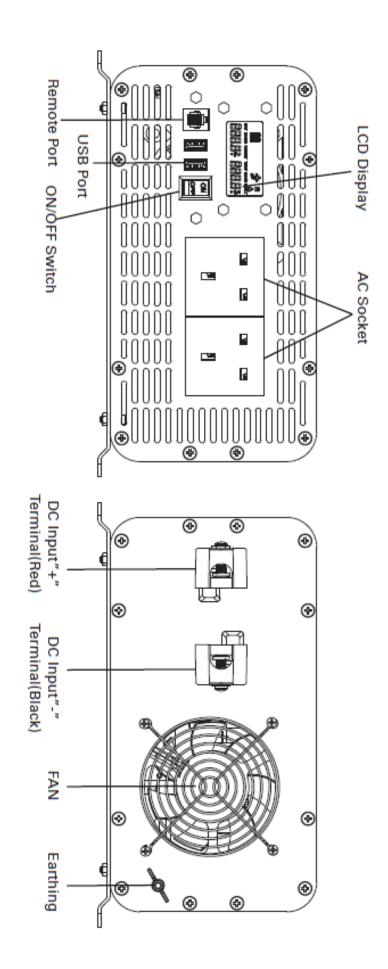
2. Plug the appliance into the inverter and then turn on the inverter's power switch; hold for 3-5 seconds. The LED will illuminate to indicate AC power is present, then switch on the appliance. Always turn on the inverter before turning on loads individually.

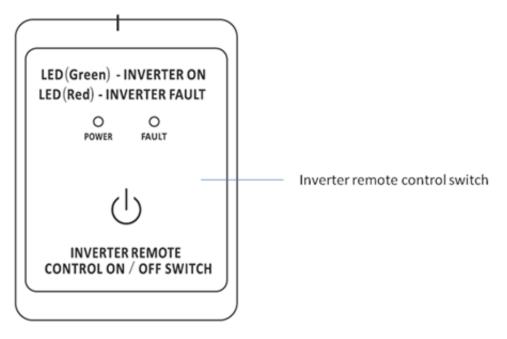
3. Switch off the inverter when not in use or when heavy current is drawn from the DC supply, e.g. when starting an engine from the same supply source,

4. 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 9.5 + - 0.3 volts.

5. 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 detail please see below :

	State description				
Function	LCD display	Alarm AC outpu		Restart work method	
Input under voltage alarm	888.8 * 888.8 *	Yes Di	Yes	/	
Input under voltage shut down		Yes DiDi	No	When the input voltage rises to 12V +/- 0.3V, the inverter will automatically resume operation.	
Input over voltage shut down	BAT FAULT	Yes DiDi	No	When the input voltage drops to 14V +/- 0.3V, the inverter will automatically resume operation.	
Over load shut down	OUTPUT LOAD FAULT	Yes DiDi	No	Reduce the load in the rated power range. Restart inverter recovery work. Or Wait 3-4 minutes for the inverter to recover automatically.	
Over temperature shut down		Yes DiDi	No	When the inside temperature return to related range.	
Output short-circuit		Yes DiDi	No	After troubleshooting, restart the inverter by manual to resume work.	



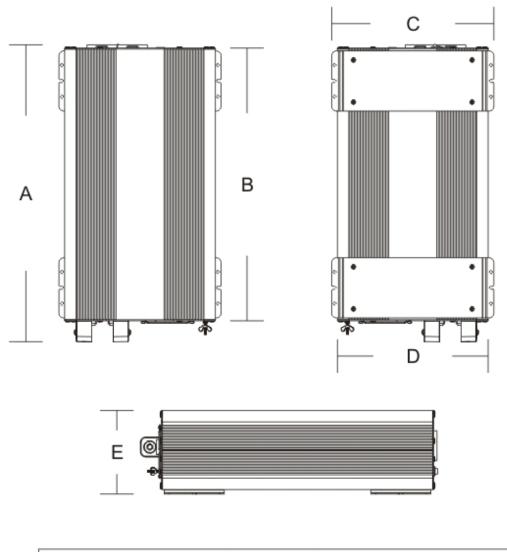


Remote Control Usage : Please keep "OFF" position for switch of inverter, otherwise remote control function is invalid.

Status instruction for LED light of Remote Control Panel :

Free Mars	LED light		
Function	Red	Green	
Input under voltage alarm	ON	ON	
Input under voltage shut down	ON (flash, 3s apart)	ON	
Input over voltage shut down	ON (flash, 3s apart)	ON	
Over load shut down	ON (flash, 3s apart)	ON	
Over temperature shut down	ON (flash, 3s apart)	ON	
Output short-circuit	ON (flash, 3s apart)	ON	

### **Dimensional Drawing**



А	В	С	D	E
495MM	494MM	270MM	251MM	139MM



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Input	Operating voltage range	DC 11V-15.5V		
Output	Output voltage	AC 230V +/- 10V		
	Output frequency	50Hz +/- 0.5Hz		
	USB Output (2 USB total)	DC 5V, 2100mA		
	Continuous power	2000W		
	Peak power	4000W		
	Output Wave	Pure sine wave		
Max Efficier	ncy	≧85%		
12V Input N	lo load current draw	≦1A		
	Input Low-Voltage Alarm	DC 10.5V +/- 0.3V		
Low voltage	Input Low-Voltage Shut Down	DC 9.5V +/- 0.3V		
	Low-Voltage Recovery Voltage	When the input voltage rises to 12V +/- 0.3V, the inverter will automatically resume operation.		
	Input Over Voltage Shut Down	DC 16V +/- 0.3V		
Over		When the input voltage drops to 14V +/- 0.3V, the inverter		
voltage	Over-voltage Recovery Voltage	will automatically resume operation.		
	Over-load protection	Yes (2050 ~ 2100W)		
Over	Overload Recovery	Reduce the load in the rated power range.		
load		Restart inverter recovery work. Or		
		Wait 3-4 minutes for the inverter to recover automatically.		
0	Over Temperature protection	Yes		
Over		When the temperature inside the inverter decreases to the		
temp	Over Temperature Recovery	set point, the inverter will back to work automatically.		
Short	Output Short Circuit protection	Yes		
circuit	Short Circuit Recovery	After troubleshooting, restart the inverter by manual to resume work		
Reverse protection The Best Working Temperature		Reverse connection will blow the fuse, fuse replacement with the same specifications can fix the inverter; Reverse connection will cause irreparable damage to the inverter!		
		5 - 35°C		
Fuse		35A*7		
Cooling method		By Fan		
LCD display information		Input voltage, Load power, Output frequency,		
		Output current, Battery power, Fault code		
		(E0 : Low volt , E1 : Over volt , E2 : Over temp ,		
		E3: Over load, E4: Output short circuit)		
Remote control		RJ12 port, 6m cable		

The information contained in this document is correct to the best of our knowledge and subject to change at any time without notice.