

Safety instructions warning:

This chapter contains important safety and operating instructions. Read and keep this manual for future reference.

- ① .Before using the unit read all instructions and cautionary markings on the unit, the batteries and all appropriate sections of this manual.
- ② .Caution: If the battery cable is not tightened, sparks may occur when the inverter is turned on, and the inverter may be damaged. Be sure to tighten the battery cable and there is no flammable material around it.
- ③ .Do not disassemble the unit. take it to a qualified service center when service or repair is required Incorrect re-assembly may result in a risk of electric shock or fire.
- ④ .To reduce risk of electric shock, disconnect all wirings before attempting any maintenance or cleaning Turning off the unit will not reduce this risk, wipe with a dry cloth ,and do not use a damp cloth or detergent for cleaning.
- ⑤ .Do not touch the high voltage at the output end.
- ⑥ .Caution: Only qualified personnel can install this device with battery.
- ⑦ .For optimum operation of this inverter, please follow required spec to select appropriate cabl size. is' very important to correctly operate this inverter.
- ⑧ .The appropriate ac equipment is used. prevent the use of equipment with a capacity exceeding the rated capacity of the inverter power supply. long-term load will increase the input dc current and may induce the risk of wire on fire.
- ⑨ .Be very cautious when working with metal tools on or around batteries. a potential risk exists to drop a tool to spark or short circuit batteries or other electrical parts and could cause an explosion.
- ⑩ .Please strictly follow installation procedure when you want to disconnect ac or dcterminals. please refer to installation section of this manual for the details.
- ⑪ .Never cause ac output and dc input short circuited. do not connect to the mains when dc input short circuits.
- ⑫ .The power inverter may become hot under too high power, so do not place object which is susceptible to temperature on the inverter.
- ⑬ .Make sure the fan and air vents are not blocked.
- ⑭ .Make sure that the power inverter and battery are normally connected. the reverse connection of positive and negative terminals may damage the power inverter fuse or machine power devices, turn off the switch in the case of non-use.
- ⑮ .keep away from water, the water shall not drop or spill on the power inverter.
- ⑯ .The working environment is suitable, dry and well ventilated. the suitable temperature is between -10c to 50c, avoid direct sunlight or placement at a heating mouth.

- ⑰ .Do not place the products in the environment with flammable gases or any possible places accumulated with flammable liquids,and do not put the products on the conductive objects.
- ⑱ .Warning! ! Only qualified service persons are able to service this device.

1. Product Introduction

This inverter uses the intelligent IC control produced by our company.the circuit has been very mature and stable. use high-quality circuit board and parts to ensure product quality and excellent performance.output waveform of the machine is pure sine wave,and it can be applied to any load. it has perfect protective functions including overload protection,over current protection,high temperature protection,short circuit protection,battery reverse connection protection,high and low voltage protection,built-in fuse protection,etc.) . With features such as compact in size,digital display.

2.Applicable Scope:

Vehicle,ship,household,field expedition,picnic,travel,touring car, environmentally – friendly energy use (solar or wind power generation system)

3. Specification

3. 1 Pure sine wave inverter specification (Apply to pure sine wave inverter series, pure sine wave inverter with charger series、 pure sine wave inverter with solar controller + bypass series)

Input Specification

Input voltage	Low voltage protection	Recovery voltage	High voltage protection
12V	10V	12.5V	15.5V
24V	20V	25V	31V
36V	30V	37.5V	46.5V
48V	40V	50V	62V
60V	50V	62.5V	77.5V
72V	60V	75V	93V
96V	80V	80V	124V
110V	84V	105V	130.2V
220V	188V	225V	250.5V
360V	300.4V	375.5V	465.6V
84V	70V	87.5V	108.5V

Table 1

Output Specification

Continuous Power	Surge Power	AC Output Voltage	Frequency	Wave Form	Output Efficiency	High Temperature Protection
300W	600W	220VAC \pm 5% / 110VAC \pm 5%	50HZ \pm 1HZ /60HZ \pm 1HZ	Pure Sine Wave Inverter	>90%	>70°
600W	1200W					
1000W	2000W					
1500W	3000W					
2000W	4000W					
2500W	5000W					
3000W	6000W					
3200W	6400W					
4000W	8000W					
5000W	10000W					
6000W	12000W					

Table 2

3.2 Pure Sine Wave Inverter With Charger Specification

Pure Sine Wave Inverter With Charger Specification				
Model	Input Voltage	12V	24V	48V
Inverter Specification	Inverter Specification	Refer To Table 1 And Table 2		
Charger Specification	Charging Voltage	14.6V \pm 0.2V	29.2V \pm 0.3V	58.4V \pm 0.5V
	Floating Charge Voltage	13.8V \pm 0.2V	27.6V \pm 0.3V	55V \pm 0.5V
	Charging Current	10A	5A	2.5A
	Transfer Time	9MS	9MS	9MS
	Grid Input Voltage	220VAC or 230VAC or 240VAC \pm 10%		

3.3 Pure Sine Wave Inverter With Solar Controller+Bypass Specification

Pure Sine Wave Inverter With Solar Controller+Bypass Specification				
Model	Input Voltage	12V	24V	48V
Inverter Specification	Inverter Specification	Refer To Table 1And Table 2		
Solar Controller Specification	Solar Panels Open Circuit Voltage	18V	36V	72V
	The Highest Solar Panels Open Circuit Voltage	<46V (Above The Voltage,Controller Will Be Damaged)		<90V(Above The Voltage,Controller Will Be Damaged)
	Improve Charging Voltage	14.6V	29.2V	58.4V
	Direct Charge Voltage	14.4V	28.8V	57.6V
	Floating Charge Voltage	13.6V	27.2V	54.4V
	Charging Current	30A	30A	20A
	Transfer Time	9MS	9MS	9MS
Bypass Specification	Grid Input Voltage	220vac Or 230vac Or 240vac \pm 10% Or 100vac Or 110vac Or 120vac \pm 10%		

4.Status indication:

4.1 Normal work instructions:blue light is always on

4.2 Output fault indication:

Input Low Voltage Protection	Red flashes 2 times,buzzer calls 2 times
Input High Voltage Protection	Red flashes 3 times,buzzer calls 3 times
Output overload protection	Red flashes 4 times,buzzer calls 4 times
High temperature protection	Red flashes 5 times,buzzer calls 5 times

5.Insulation performance:

5.1 Dielectric voltage withstand:

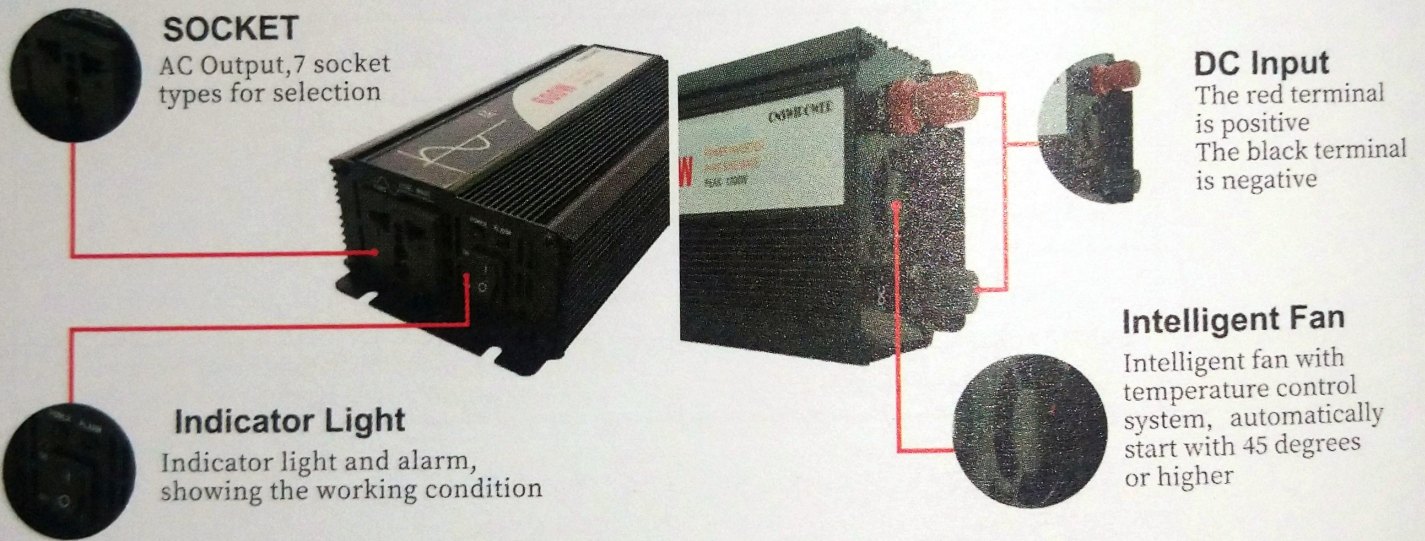
Input End To The Shell	1000VAC (50Hz 1min \leq 1.5mA)
Output End To The Shell	1000VAC (50Hz 1min \leq 1.5mA)

5.2 Insulation resistance:

Input End To The Shell	> 20MΩ(1000VDC)
Output End To The Shell	> 20MΩ(1000VDC)

6. Panel indicate diagram:

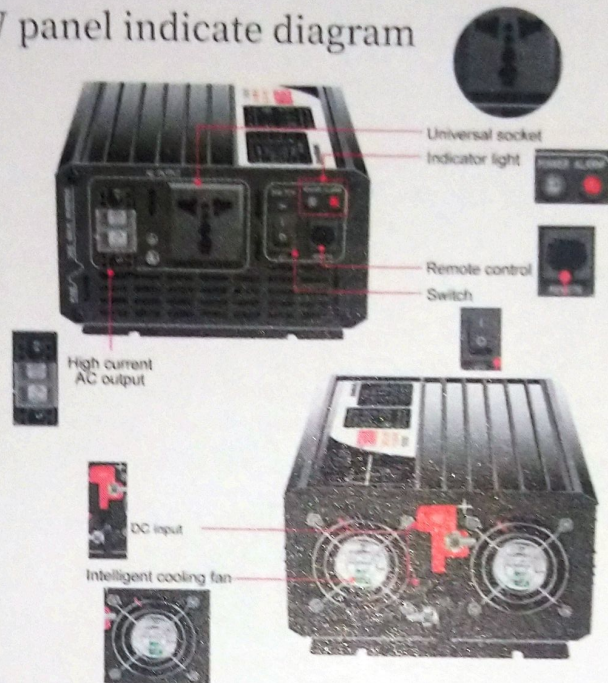
6.1 SC 300W-600W panel indicate diagram



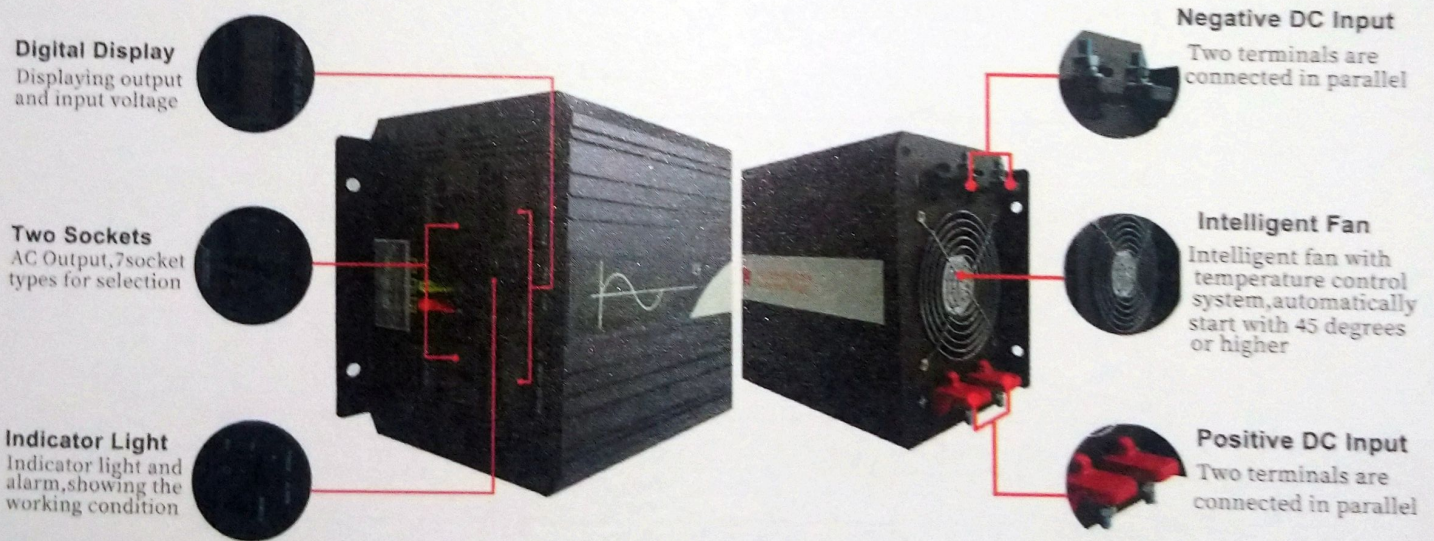
6.2 SC1000W-2000W panel indicate diagram



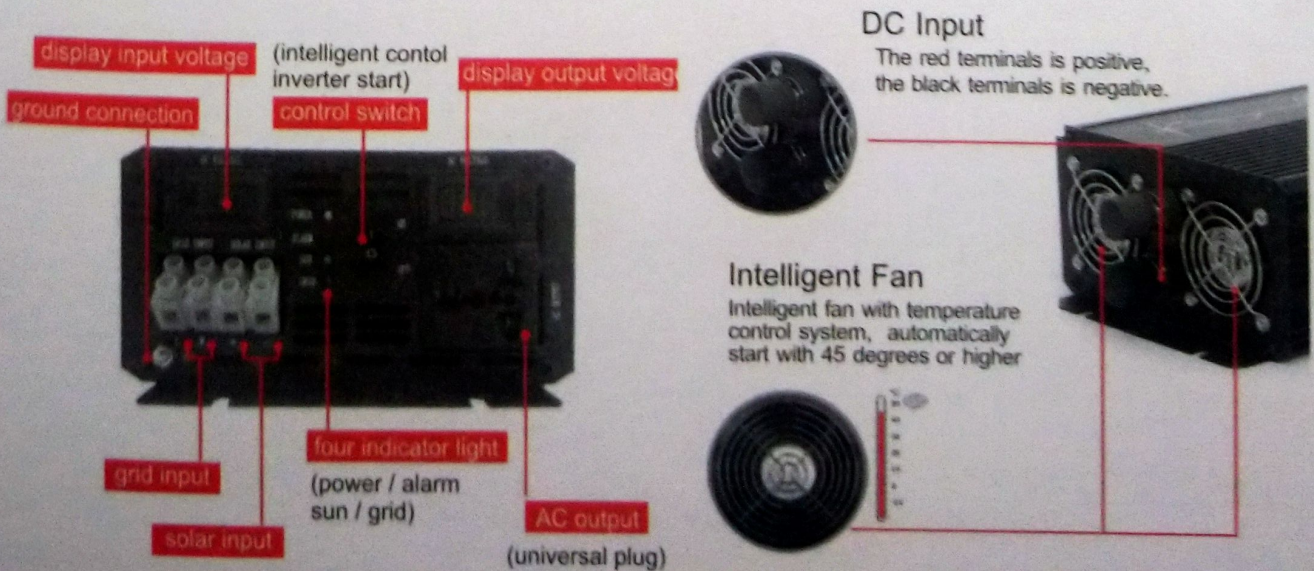
6.3 SP 1500W-3000W panel indicate diagram



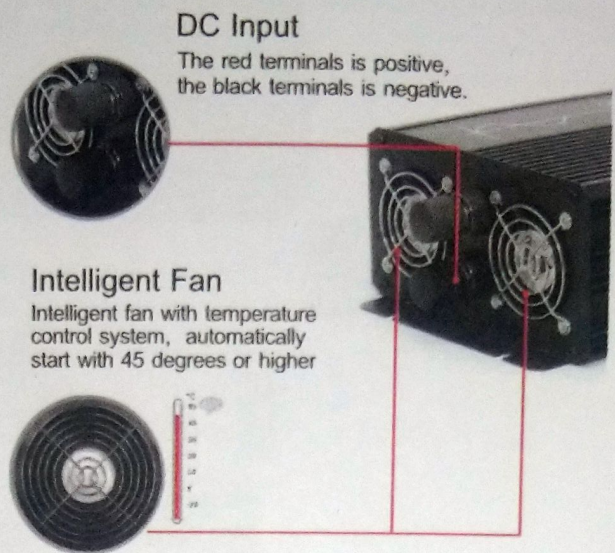
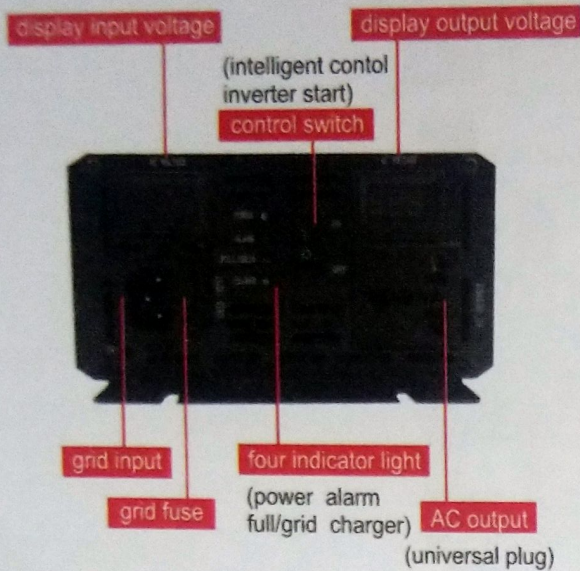
6.4 SP 3200W-5000W with charger panel indicate diagram



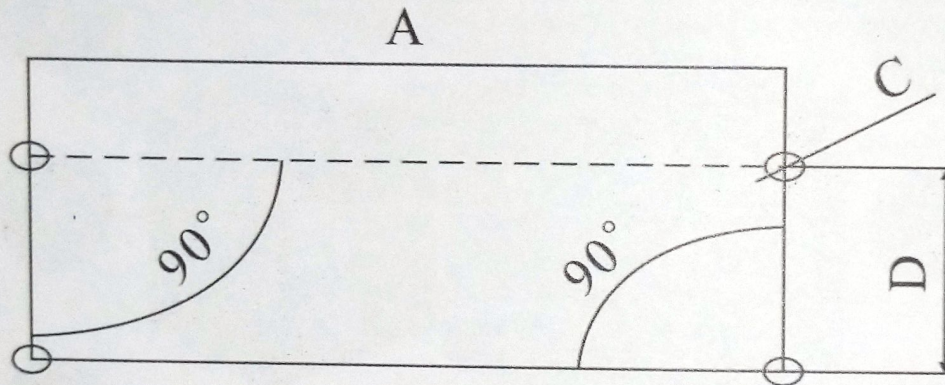
6.5 Pure Sine Wave Inverter With Solar Controller+Bypass Panel indicate



6.6 500W-3000W with charger panel indicate diagram



7. Installation Hole Position Reference



Specifications	Length		diameter
	A	D	C
SC300W	222	62	5
SC600W	222	62	5
SC1000W	260	54	5
SC1500W	270	54	5
SC2000W	320	54	5
SP500W	220	84	5
SP1000W	290	84	5
SP1500W	290	84	5
SP2000W	350	84	5
SP2500W	400	84	5
SP3000W	465	84	5
SP3200W	355	125	9
SP4000W/5000W/6000W	465	125	9

Remarks The above data are only measured manually
If there is any error, it is normal

8. Battery Connect

