DC TO AC

INVERTER
USER'S MANUAL

Please read this manual carefully before using

✱ Contents

CONTENTS

REMARK:This is a general manual,please choose the relative parts for reference acoording to product/products.

✱ Safety instructions

This equipment should be installed,adjusted, and serviced by qualified electrical maintenance personnel familiar with the constructruction and operation of the euqipment and the hazards involved. Failure to observe this precaution may result in bodily injury.

1.Do not connect the unit to ACdistribution wiring,such as your house wiring.

2.Keep the unit away from water.Do not allow water to drip or splash onto the inverter.Do not insert or pull out plug with wet hands.

3.Keep the unit in cool environments.Ambient air tempera -ture should be between-10℃ and 50℃.Keep from direct sunlight and away from heating vents.

4.Keep the unit away from flammable material or in any location where may accumulate flammable fumes orgases, such as the battery compartment of your car,boat,RV or truck.

5.With heavy use,the unit will become warm and possibly hot.So keep it aways from any heat sensitive materials.

6.Make sure the opening to the fan and vent holes are not Blocked.

7.Do not open the unit.High voltages are inside.

✻ Safety instructions

8.Use proper size wiring.High power inverters can draw many amps from the DC source and can melt wires if not fused and sized properly.

9.Make sure connecting the inverter with battery/batteries correctly.Reverse polarity connection may melt invert fuse. Switch off the switch when do not use the equipment.

10.Before cleaning the equipment,switch off power,clean with dry cloth.Do not use wet cloth or cleanser to clean it.

✻ How to use the inverter

1.Power supply selection

It must get power from storage battery/batteries or car cigarette lighter.Input volatage can be 12V/24V/48V subjecting to the products.

2.Connect inverter to power supply.

Set the switches at OFF position(including inverter and appliances)

A:Get power fron battery/batteries:Connerct the black Ushape end of battery cable with the Black connecting pole(-)of inverter,and the red U shape end with the red connecting pole(+).

B:Get power from car cigarette lighter:Insert the car cigarette lighter plug into the car cigarette lighter.

3.Connect inverter to electronical appliances

Make sure the load power within the rated power of inverter and start power should not exceed peak powe of inverter.

When having connect inverter with appliances and power supply,switch on the inverter and appliances.

✻ Protection function

4.Input low voltage protection

A:When battery voltage is low,buzzer will alarm,which indicates DCpower supply voltage is descending and batteries need recharge.B:When input voltage is below 10V±0.5V(for 12V input inverter)/20V±1.0V(for 24V input inverter),AC output will be automatically shut off, buzzer alarm and ALARM/WARNING light turns red at the same time.

5.Input over voltage protection

When input voltage reach 15V±0.5V(for 12V input inverter)/30V±1.0V(for 24V input inverter),ALARM/WARNING light turns red and AC output will be shut off automatically.

6.Short circuit protection

When short circuit happened,output will be shut off and ALARM/WARNING light turns red.

7.Overload protection

When overload happened,output will be shut off and ALARM/WARNING light turns red.

8.Reverse polarity input protection

When battery terminals are reverse connected,fuse will be melted to protect appliances.

✻ Protection function

9.Invert thermal protetion

When inner temperature exceeds 75℃,AC output will be Automatically shut off,ALARM/WARNING light turns red. It can not be used until15 minutes later.

10.Charge thermal protection

When radiator temperature exceeds 50℃,the inner fan will Automatically start up to cool the inverter.

✻ Common troubles & solutions

Acoustics buzzer alarms

When applying the inverter to acoustics,some inferior acoustics will buzzer,that is because the output wave from of this inverter is modified sine wave.

TV Interference

You can get minimum interference through filter.In some occasions,interference of very weak signal will be more obvious,you can try as follows.A:Let inverter far from TV and TV antenna.B:Try to change the direction of TV signal cable and TV antenna to reduce the interference to minimum, C:select screen cable antenna with high quality.

Inverter no response

1.Poor connection between batteries & inverter,reconnect them.
2.Reverse polarity connection and fuse melted,replace the fuse with a same spec fuse and reconnect.

Output voltage very low

1.Overload.Load power exceeds rated power,shut off part of the appliances and restart inverter.
2.Input voltage too low.Make sure input voltage is within the rated range.

Low-voltage alarm

1.Battery no power.Recharge the battery.
2.Battery voltage too low or poor connection.Recharge the batteries,check terminal connection or clean terminals with a dry cloth.

✻ Common troubles & solutions

Inverter no output

1.Battery voltage too low,recharge or replace the Batteries.
2.Load power too high,shut off part of the appliances and restart inverter.
3.Inverter thermal protection.Cool the inverter and place it in the place with good ventilation.
4.Inverter start-up fail.Repeat starting the inverter.
5.Reverse polarity connection and fuse melted,replace the fuse with a same spec fuse and reconnet.

Inverter does not work

Check the power switch,fuse and battery connecting cables or cigarette lighter.

✻ AC/DC Side panel

NOTE:This is a general manual.The output voltage can be110V/60Hz or 220V/230V/50Hz,please take the relative part for reference.The socket draft in this manual is just for explanation use,which is not necessarily same to product.

Indicator light on AC side:

WORK/WORKING:When inverter is working,this light turns on.

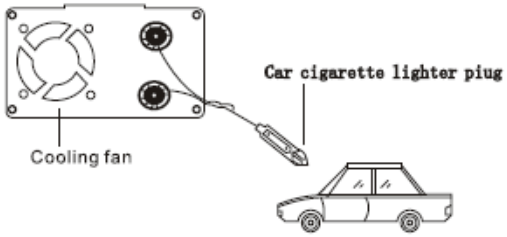
ALARM/WARNING:When low voltage,over voltage, short Circuit,overload,or thermal protection happened,this light turns on.

CHARGING:For inverter with charge function,when charging battery/batteries,this light turns on and flash,when flash is not obvious, charging complete.

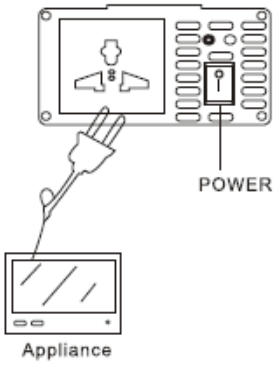
Graphic illustration

✻ AC/DC Side panel

• DC SIDE



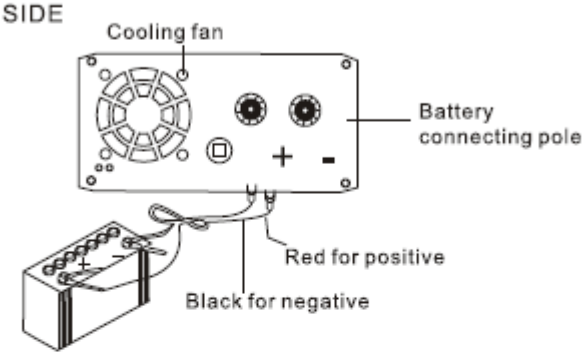
• AC SIDE



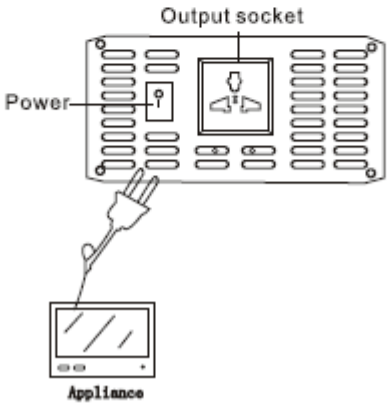
* AC/DC Side panel

PANELS

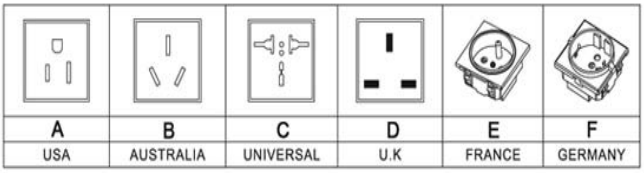
- DC SIDE



- AC SIDE



SOLARTORRENT ST3000W

Product	Description	Picture
3,000 WATTS PURE SINE WAVE INVERTER	DC 12V/24V TO AC 110V	
	3000W continuous power inverter	
	6000W Peak Power	
	pure sine wave output	
	Input Voltage : 10V-15V/21V-30V	
	Frequency: 60HZ±2	
	Low battery alarm:10.5V± 0.3V,21±0.5V	
	Low battery shut down: 10V±0.5V 20V DC±0.5V	
	Over voltage shut down: 15.5V±0.5V or 30.5V±0.5V	
	Over load shut down :3600W over 10 seconds	
	Over heating shut down>75℃	
	Over Thermal :shut down the output	
	Short Circuit: fuse	
	Working Temperature: Between -10℃ and +50℃	
	Working Humidity: 20%～90%RH non-condensing	
	Storage Temperature : Between -30℃ and +70℃	
	Dimension:370*150*152mm	
	Weight:7.5±0.5KG. No load current draw: <1.2A	