

# **VEVOR<sup>®</sup>**

**TOUGH TOOLS, HALF PRICE**

Technical Support and E-Warranty Certificate

[www.vevor.com/support](http://www.vevor.com/support)

**SUMP PUMP POWER INVERTER**

**OPERATION MANUAL**

**MODEL:SGPC2000W-121/SGPC2500W-121**

We continue to be committed to provide you tools with competitive price.

"Save Half", "Half Price" or any other similar expressions used by us only represents an estimate of savings you might benefit from buying certain tools with us compared to the major top brands and does not necessarily mean to cover all categories of tools offered by us. You are kindly reminded to verify carefully when you are placing an order with us if you are actually saving half in comparison with the top major brands.



# VEVOR<sup>®</sup>

TOUGH TOOLS, HALF PRICE

## SUMP PUMP POWER INVERTER



**SGPC2000W-121**



**SGPC2500W-121**

### NEED HELP? CONTACT US!

Have product questions? Need technical support? Please feel free to contact us:

**Technical Support and E-Warranty Certificate**  
[www.vevor.com/support](http://www.vevor.com/support)

This is the original instruction, please read all manual instructions carefully before operating. VEVOR reserves a clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there are any technology or software updates on our product.

	<p>Warning-To reduce the risk of injury, user must read instructions manual carefully.</p>
	<p>This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1)This device may not cause harmful interference, and (2)this device must accept any interference received, including interference that may cause undesired operation.</p>
	<p>This product is subject to the provision of European Directive 2012/19/EC. The symbol showing a wheeled bin crossed through indicates that the product requires separate refuse collection in the European Union. This applies to the product and all accessories marked with this symbol. Products marked as such may not be discarded with normal domestic waste, but must be taken to a collection point for recycling electrical and electronic devices</p>

## INSTRUCTIONS

Thank you for choosing our product, please read this operating manual carefully in order to install and use the product correctly. and keep a safe place for further use.

The inverter needs to be properly installed and used properly for it to operate safely. Please read the operating manual carefully before installing and using it. Pay special attention to these warnings and warning statements in this manual, warnings about certain conditions and practices that may damage the inverter, and statements that warn about conditions of use and practices that may result in personal injury, as well as all precautions before using the inverter.

## SAFETY NOTICE

In order to avoid causing damage to you and others, please list the following safety notices here, please ensure to obey and refer to the signs with the following meanings



Warn/Note



The mark means  
for prohibited item



The mark means  
for mandatory item



When connect with the battery will produce spark, connect the former to ensure that no flammable gas. Battery charging, discharging will produce inflammable gases, should be well-ventilated, do not put in the place may accumulate flammable gases



Output can not be parallel with the mains  
Will damage the inverter and the danger of electric shock



Minors can not use it  
Output high voltage will cause  
a danger of electric shock



When using this machine, please do not  
bundle wires, Use the broken wire can  
cause electric shock, short circuit of fire



Do not disassemble or remodel the inverter  
Do not disassemble or remodel the inverter. Disassemble or modify unauthorized  
inverter may cause a malfunction or fire, electric shock



Do not wet the airframe  
Otherwise may lead to short circuit, even the fire and electric shock



Do not place rod or other metal objects at vent or other openings  
This may touch on the internal components to cause electric shock or injury



Put the plug of load of equipment full insert into an electrical outlet  
Failure to fully insert the plug socket, could lead to electric shock and overheating,  
even cause a fire accident.  
Do not use a damaged plug or loosed outlet



Forbid wet hand  
This may cause electric  
shock, prohibit wet hands



**KEEP AWAY FIRE**  
Do not let the volatile substances or combustible  
material floating into the machine, away from  
the flame



Do not damage output sockets or wires  
do not cut, remodel, close to the heat, over-distorted, reversed, wiring and pull wires,  
or placed outlet weight on wires or sockets

## **WARN**



### Use inverter in common ground wire power system

If the output connect with the ground will cause inverter to short circuit and damage, for example: used in the car, the inverter's output terminal has the voltage reflected on the car body.



### In power, do not let the load and to type in the loop

Cause the overload protection circuit will invalidate or increase the overload protection power



### Do not install inverter worked in hot, humid environment

Inverter leakage may cause electric shock or fire caused by accident



### The inverters have not been tested for used in medical equipment

## **ATTENTION**

Rated current and equipment actually used:

Most power tools, household appliances and audiovisual equipment, in the power rating range or much lower, but when they are activated UPIT will be overload protected. The inverter is most likely to drive resistive loads and switch power loads, Because resistive loads are linear loads that can work, such as electric stoves, rice cookers, LCD TVs and other equipment. Partially audiovisual Equipment and power tools require more power than resistive loads to function properly, Asynchronous motors, CRT TVs, compressors, pumps and so on. They need 2 to 6 times of the operating current to start. Whether it can run a specific load depend on the subject test.



Note: continuous frequently on and off the inverter may cause the damage.

Applied to the following products:

- The normal capacity of this product can be used for lamps, rice cookers, desktop computers, laptops, computer monitors, printers, televisions, fans, mobile phones, digital products, drilling rigs, electric irons, washing

machines and other original equipment available electricity.

- When you use a pump type of load, choose one that has a capacity greater than more than double the load capacity, and double-check that the load power you want to use is less than one time the power of our product.

## INTRODUCTION OF PERFORMANCE

The inverter is a power device that can convert direct current (storage batteries, solar cells, wind energy) into alternating current, and the inverter uses high-frequency power conversion technology and uses a ferrite transformer instead of the old bulky silicon steel transformer. That's why our power inverters are lighter and smaller than other inverters of their kind. In inverter mode, the output waveform is a sine wave. (See Figure 1).

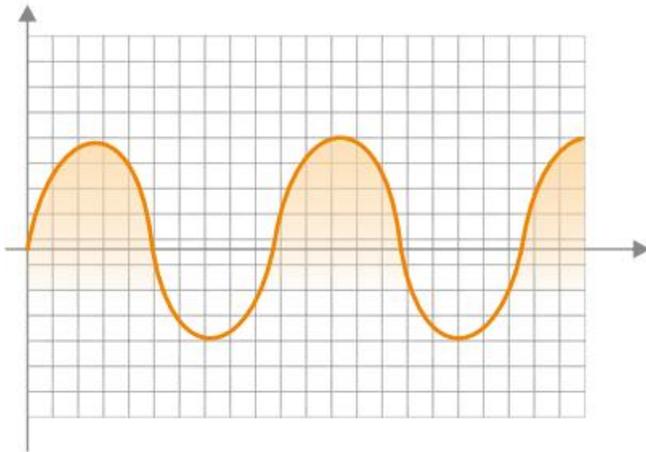


Figure 1: Output sine waveform

### 1. Using Environment.

For best use, place the inverter on a flat surface, such as the ground, car floor, or other solid surfaces where the power cord of the inverter can be easily fixed. The workplace should meet the following conditions:

- Keep it dry, do not let the inverter come into contact with water or other liquids, keep the inverter Keep away from moisture or water.
- Cool environment with a temperature of 0 degrees Celsius To 50 degrees

Celsius, do not place the inverter next to vents or other heated vehicles. Try to keep the inverter out of direct sunlight.

- The surrounding ventilation does not obstruct the surrounding area, keeping the air flowing freely. Don't put anything on the inverter when working.
- The inverter does not work around combustible materials or flammable Gases.
- The battery can not only provide DC power from 10V to 15V (under a 12V system), but also have sufficient load current. Lead-acid batteries should be fully charged, and have a good quality and capacity or lithium batteries with sufficient discharge current.
- High-quality lead-acid batteries and high-capacity lithium batteries have sufficient discharge current. A rough estimate of the battery's current capacity is to divide the power of the load by ten (12V system).

**Note:**For example: if the power of a load is 100W, the current of the battery  $100/10=10A$  must be supplied, this manual does not include all battery combinations. The specifications of the battery belong to other areas of technology.

## WITH CHARGING PANEL DESCRIPTION

- Panel schematic.(See Figure 2)

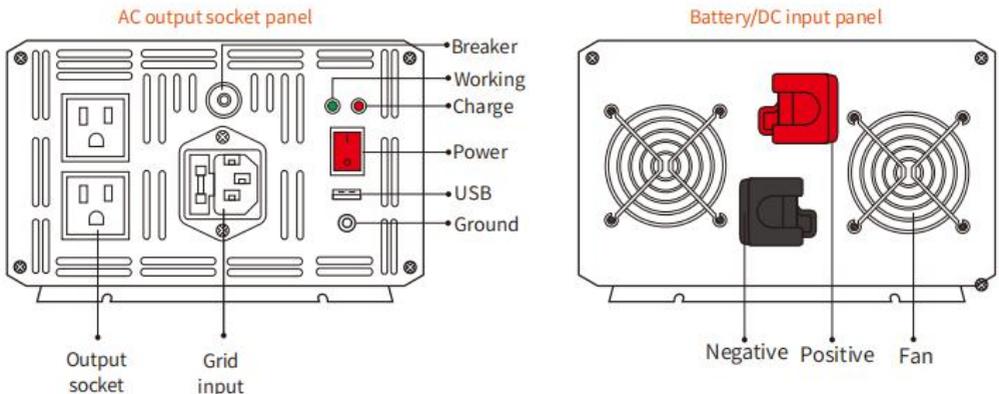


Figure 2



● Battery connection diagram.(See Figure3)

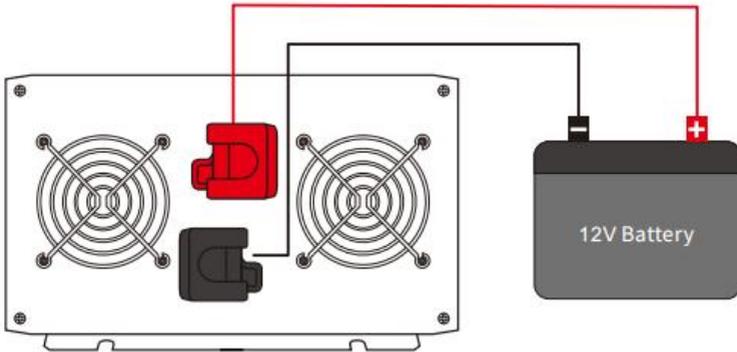


Figure3

● Installation connection steps.

Please refer to the wiring diagram in Figure 3.

1. First of all, turn off the inverter power.
2. Use a black DC cable to connect the negative pole of the battery to the black binding post head of the inverter.
3. Use the red DC cable to connect the anode terminal of the battery and the red post head of the inverter.
4. Plug the electrical devices into the output socket of the inverter.
5. Turn on the inverter switch.
6. Put the AC cable into the grid input socket.



Attention:

1. Do not invert the negative and positive of the battery connecting cable with inverter
2. The connecting cable screw between battery and inverter must be tightened after it's fixed
3. Do not touch the negative and positive cable after it's fixed

The inverter can use one or more batteries, but it is best to use one or more batteries Batteries with a capacity of 150AH or above.

Please use the cable sold with the inverter to connect the inverter and the battery;The red cable connects the anode terminal of the battery and the red stigma of the inverter,The black cable connects the negative terminal of the battery and the black stigma of the inverter. Please make

sure all cables are securely fastened. Unsuitable The connection may cause the cable to overheat and damage to the terminal block, and it will too Shorten the power supply time of the battery.

Turn on the power switch, the working LED of the inverter will turn red when the battery is fully charged, and when the inverter is in grid input mode, the working LED of the inverter will turn green.

If there is any fault, the LCD display will show a fault icon, and then you need to check whether the battery voltage is too high or too low, and check if the inverter output is overloaded or short-circuited.

At the same time, the LCD will also display the fault code, please find out and check the fault The reason is on [page 12-13](#).

The DC power supply of a 12V inverter can be one 12V battery or several opposing 12V batteries to increase the power supply time.

**Note:** The battery voltage connected to the inverter must be the same as the inverter DC input voltage, such as the 12V inverter should be connected to the 12V battery, and make sure that all the equipment is turned off before powering on.

●Dismantle steps.

1. First, turn off the inverter power switch.
2. Disconnect the power plug.
3. Dismantle the red DC cable.
4. Dismantle the black DC cable.
5. The done of dismantle.

●With grid charger and UPS function.

Characteristics of Conventional inverter,Grid power first choice to protect it powered all the time, grid power and battery switched automatically, UPS continuous protection.(See Figure4)

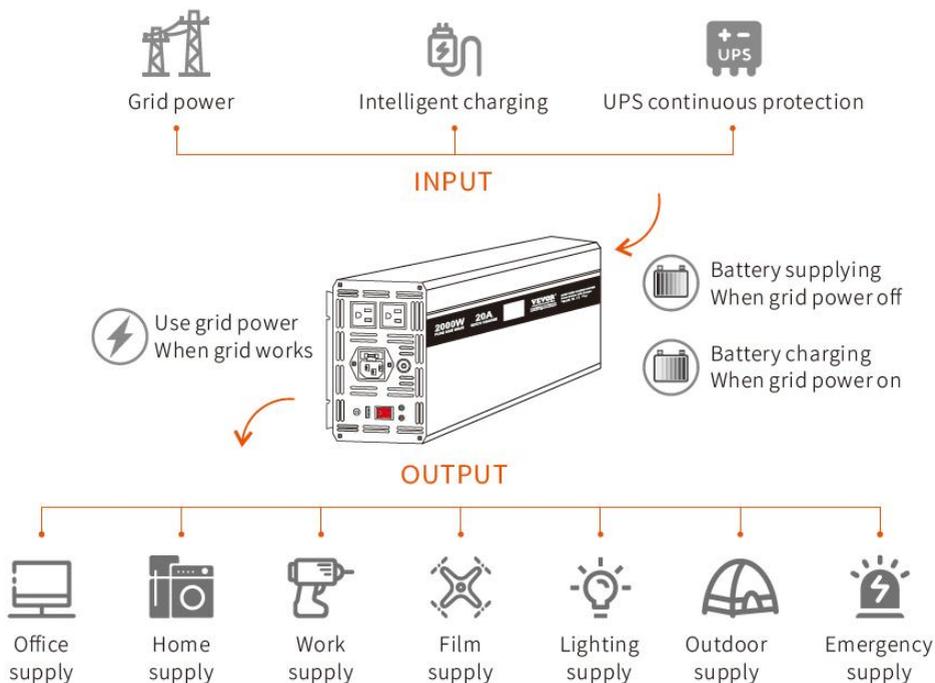


Figure4

Feature description:

1. Don't connect the grid power with AC output of the inverter, or it may destroy the inverter .
2. Grid Mode: When the grid power is connected to the AC input plug, the AC output socket terminal puts grid power as the first priority.
3. Battery Mode: When the grid power is disconnected from the inverter AC input, the AC output outlet terminal will automatically output power from the battery as a second priority.
4. The switching time from grid power to battery power and battery power to grid power is less than 10ms.
5. In grid mode, the inverter will charge the battery in the mean time, with 3-step charging way.
6. When the battery is charged, the charging red LED lights up, and when the battery is fully charged, The charging red LED will turn off and the full green LED will light up.

LCD display:(See Figure5)

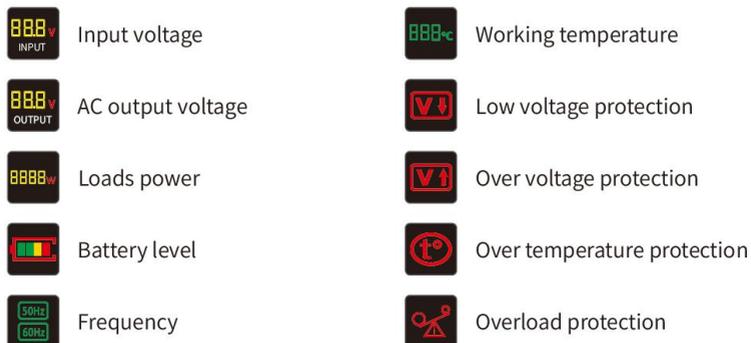
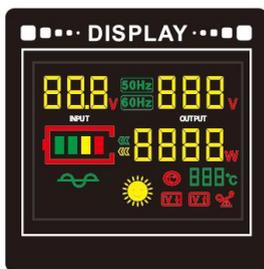


Figure5

Protection mode

●Characteristics(Inverter mode).

Our inverters have perfect protection mechanisms, including battery high voltage protection, battery low voltage protection, output short circuit protection, overload protection and battery and load anti-interference protection. The soft start of the inverter can gradually increase the output voltage, which has the effect of buffering the inrush current when the high-power electrical appliance is started, thereby improving the load capacity of the inverter. (A schematic diagram of the protection function is shown in Figure 6).

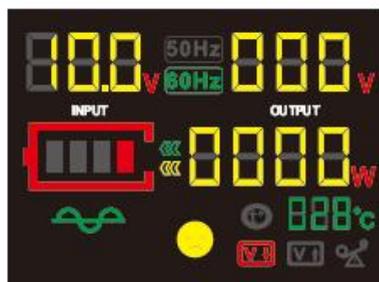


Figure 6

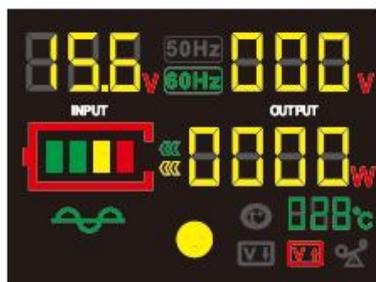
●What the display displays in protected mode.(See Figure7)



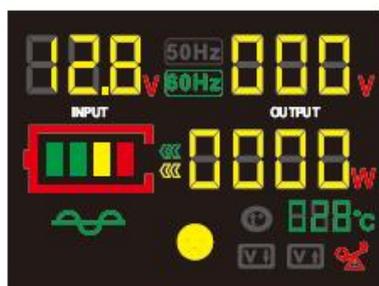
Normal working



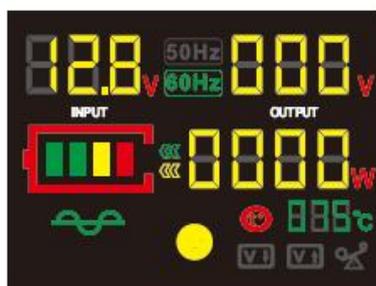
Low-volt protection



High-volt protection



Overload protection



High-temp protection

Figure7

● Technical parameters.

Model	SGPC2000W-121	SGPC2500W-121
Rated Power	2000W	2500W
Surge Power	4000W	5000W
Input Voltage	Battery:12V DC Power grid:120VAC 60HZ	
Output Voltage	120V AC ±10%	
USB Port	5V 2A	
Frequency	60Hz±3	
Output Waveform	Pure Sine Wave	
Soft Start	YES	
Charging Current	20A	
Priority	Grid first	
Transfer time	<10 ms	
AC Regulation	THD<3%	
Output Efficiency	≤94%	
Cooling Way	Intelligent Cooling Fan	
Protection	Battery Low Voltage & Over Voltage, Over Load, Over Temperature, Short Circuit	
Working Temp.	-10°C - +50°C	
Packing	Carton	
Warranty	1 Year	

## FAULT INFORMATION GUIDE

Screen display	Fault code	Fault information	Fault reason	Solution	Warning buzzer
	F01	Parameter fault	Configure the parameter and restart	Restart the power	Ring 7 continuous cycle
	F02	Sampling circuit fault	Self-check after power the machine: under static operating point, voltage standard is 2.5V when the input current is zero	Check and fix the current sampling circuit, re-power	
	F03	Generatrix low-volt	1) DC generatrix is lower 8V after opening 2) DC generatrix can't reach the lowest generatrix working voltage after a period of time of delayed startup	1) Check if the power tube of the rear stage is short circuit 2) Check the boosted circuit of front stage or DC generatrix component	long middle short continuous cycle
	F04	Other power source on output line	Output terminal connects equipment with power supply by mistake	Check if the output line has other power supply	
	F05	Output short circuit	Output short circuit	Check output line and loads	Ring 6 continuous cycle

	F06	Output over current	Output current is too large, instantaneous protection	Reduce loads	Ring 5 continuous cycle
	F07	Output overload	Output current is too large, time-delay protection		
	F08	high-temp protection	Temperature is too high	Check fan and ventilation, reduce the ambient temperature	Ring 4 continuous cycle
	F10	Battery high-volt	Battery input, voltage too high	Check if input power supply or charger work	Ring 3 continuous cycle
	F11	DC generatrix low-volt	Voltage of DC generatrix too high	1) Check input power supply 2) Internal damage of the vehicle	Ring 2 continuous cycle
	F12	Battery low-volt	Battery input, voltage too low	Charging the battery or change the battery	
	F13	Data read error	1) During manufacturing, the silicon chip data area is empty, not initialized 2) Show after configuring the parameter, need to repower	Repower	Ring 7 continuous cycle



## WARRANTY CARD

**To our dear customers:**

**Thanks for using our inverters, please read & keep the warranty card to ensure our after-sale warranty.**

●Warranty Clause.

1. All of our products had passed strict tests before packing, to ensure the quality & performance.
2. Inverter warranty from the date of purchase: 1 year.
3. When the warranty period is expired, we will offer compensable service for our products.

●Not applicable:

Our products are neither refundable nor exchangeable if they belongs to the following circumstance:

1. The product damaged by user's improper operation/ maintenance/ storage.
2. Products that have been damaged due to unauthorized removal by the user or damage caused by non-authorized maintainers of the Company.
3. The user cannot offer the warranty card or valid purchase receipt.
4. Warranty card and product information do not match or the warranty card has been altered.
5. Damage caused by flood, fire, earthquake or other disasters is not covered by this warranty. In the above cases, we will provide a compensable service.

**Please fill in the correct product user or company information when purchasing, and ask the distributor Stamp the warranty card.**

## ACCESSORY INFORMATION

1. Operating instructions \* 1
2. The battery is connected to the wire \* 2
3. 40A DC current fuse:  
SGPC2000W-121 \* 6  
SGPC2500W-121 \* 8
4. AC VOLTAGE PLUG WIRE \* 1

Battery:12V DC    Power grid:120VAC 60HZ

**Manufacturer:** Shanghaimuxinmuyeyouxiangongsi

**Address:** Shuangchenglu 803nong11hao1602A-1609shi, baoshanqu, shanghai 200000 CN.

**Imported to AUS:** SIHAO PTY LTD, 1 ROKEVA STREETEASTWOOD NSW 2122 Australia

**Imported to USA:** Sanven Technology Ltd., Suite 250, 9166 Anaheim Place, Rancho Cucamonga, CA 91730

<b>EC</b>	<b>REP</b>
-----------	------------

E-CrossStu GmbH  
Mainzer Landstr.69, 60329 Frankfurt am Main.

<b>UK</b>	<b>REP</b>
-----------	------------

YH CONSULTING LIMITED.  
C/O YH Consulting Limited Office 147, Centurion House,  
London Road. Staines-upon-Thames. Surrev. TW18 4AX



**VEVOR**<sup>®</sup>

**TOUGH TOOLS, HALF PRICE**

**Technical Support and E-Warranty Certificate**

**[www.vevor.com/support](http://www.vevor.com/support)**