

Please read this instructions before operating

## INSTRUCTIONS OF INVERTER



### GENERAL

The inverter with “SenWei” brand can convert direct current to alternating current with 220V,50Hz for the electric appliance. With beautiful outlook and easy operation, SenWei inverter is able to stabilize voltage-output automatically. Particularly, they have many protective functions against short voltage of direct current, overload of output, and so on. The core components of “SenWei” inverter adopts the high quality equipment manufactured by the American FAIRCHILD company and circular transformer with power-save model. Therefore, the wastage of the equipments is very low. Proved by a lot of tests, the equipments run safely and steadily with high productivity and a long life.

### FUNCTION DESCRIPTION

#### Automatic voltage-steadying output

This equipment can stabilize voltage-output at AC220V  $\pm$  8% in case the voltage of storage batteries waves from 90% to 125% of normal voltage. When the storage batteries' voltage is below 90% this function is not available meanwhile the alternating voltage sent from inverter will fall down quickly with the decrease of the

batteries' voltage. In this case the inverter will execute the short-voltage-protection automatically.

### **Protection of over charge**

In case the overload occurs the inversion will be stopped and locked at same time automatically. Restart the inverter after the failure is taken-off by user and the out put can be available again.

## **OPERATION OF INVERTER**

For installing and operating of the inverter, the following steps have to be observed.

### **1. Wiring**

- 1.1 Set all switches of the inverter in "OFF" position.
- 1.2 open the upper cover of inverter and wiring as the instructions. Keep the wiring steadily and reliably. The inverse connection is prohibited.
- 1.3 Connect the inverter with accumulator, especially keep the correct connection of pole "+" and "-" !
- 1.4 Connect the inverter with the electric appliance or the socket.

### **2. Start and stop inverter**

- 2.1 Settle the main switch in "ON" position after correct wiring. The inverter can work effectively.
- 2.2 Put the out put switch in "ON" position and the out put current can be available.

### **3. Turn off of inverter**

Before shutting off power, please settle the out put switch in "OFF" position and then settle the main switch in "OFF" position.

## **CAUTIONS**

1. Forbid connect the output of this equipment with urban electric net web at any ways. It needs separated wiring! The total length of wiring cable is less than 200m.
2. Apply the internal protection function correctly for the long life of inverter.
3. The alternating output of this equipment can be used only for the appliance with 220V; 50Hz.
- 4. Keep the main switch of inverter on "OFF" position during checking the accumulator and/or circuit.**
- 5. Keep the main switch of inverter on "OFF" position during the inverter is stopped.**
6. Total power of electric appliance supplied by inverter should be less than the rating power of inverter at any time.
7. The inverter will execute protection in case the AC output being short-current. In this case please turn off inverter and then restart it. Otherwise the output will be not available.
8. This equipment can be applied to such normal appliances as light, TV, VCD, fan etc.

**9. Because the HD system output is modified square wave, this equipment is forbidden for such appliances as daylight lamp with inductance regulator, halogen lamps, mercury-vapor lamp, neon lamp, and air pressure pump, transformer, AC regulator, charger, UPS and the other power convert devices.**

10.If the voltage of accumulator fall down to the low level the lamp “short voltage” will light. The inversion will stop and the accumulator should be charge.

**11. To avoid electric shock, this equipment should be connected with earth right at any time. Keep good aeration and damp proof.**

**12. The inflammable or explosive environment is forbidden; the flame or spark is also forbidden.**

**13. It is forbidden for accumulator to inverse connection!**

**Table-1**

Lights	Normal	Descriptions
Inverse light	On	Inverting (the inverse switch is “on” position)
Protection light	Off	See “Table-2” if it lights
Short voltage light	Off	Lighting means short voltage of accumulator. Please see “Table-2”.
Fuse light	Off	See “Table-2” if it lights.
Inverse connecting light	Off	See “Table-2” if it lights.

**Table-2**

Failures	Analysis	Solutions
No indication	1.False connecting of accumulator. 2.Damage of accumulator.	1.Connect accumulator right. 2.Check accumulator.
The light of short voltage is “on”	Short voltage of accumulator	Charge accumulator in time.
The light of inverse connecting is “on”	Inverse connecting of accumulator.	Connect accumulator right.
The fuse light is “on”	1. inverse connecting of accumulator. 2. over-load or short-circuit of output. 3. Damage on internal components.	1. Connect accumulator right. 2. check the short-circuit or overload failures. 3. Change accumulator if it has been damaged. 4. Contact us for repair.
Both the protection light and the inverse light are “on” without alternating output	1. Short voltage of accumulator. 2. Over-load of output 3. short-circuit of output	1. Charge accumulator to the settle value. 2. Decrease the load. 3. Keep stopping the inverter for one minute after solving the short-circuit failures. Put the main switch in “ON” position and the inverter can work effectively again.

## SPECIFICATIONS

Rating output power	2000W
Matching battery groups	48V
Output voltage	220V
Output frequency	50±2Hz
Function	Charge,Inverse
Application environment	Temperature:-10~40℃ Humidity:≤80%
Output wave	Square wave
Over discharge protection	35V±2 V
Working mode	75% Continue resistant load
Overload protection	5500W instant protection
Fuse current (A)	63A