



SINE WAVE INTELLIGENT POWER INVERTER 1000WATTES

YOHAKO USER MANUAL



JAPAN TECHNOLOGY

1. Preface

Thank you for purchasing this series of products.

This series of uninterruptible power supply systems can effectively suppress lightning strikes, surges, pulses and filter noise when the mains voltage is normal, and automatically adjust the output voltage when the mains is too high or too low. When the mains is abnormal, the output electricity will be immediately converted to battery power and it is the power patron of personal computers and other over-sensitive electronic devices.

2. Safety instructions

- (1) This system product is not recommended for other special important equipment for life support systems.
- (2) Even if it is not connected to the mains, its power outlet can still have 220 V.
- (3) If the power cord needs to be replaced, please purchase raw materials from our service station or dealer to avoid fire caused by heat caused by insufficient capacity.
- (4) To avoid the risk of electric shock, please DO NOT open the cover by yourself.

CAUTION !

Please be caution of the high pressure inside the machine. In order to avoid personal injury, if you have queries, please consult the dealer professional or repair center, but do not repair it by yourself.
There are no repair parts in the machine

3. Installation notes

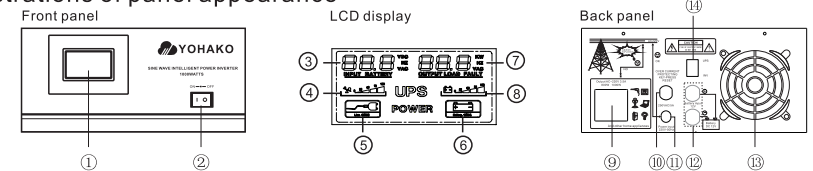
Unpacking inspection

Please check the attached accessories after opening the package, including external power cord, manual, warranty card, and certificate. Please also check if the machine is damaged during transportation. If damages could be found or the attachment was missing, do not switch it on and inform the carrier and dealer.

Installation precautions:

- (1) The placement area must be well ventilated, away from water, flammable gases and corrosives.
- (2) The ambient temperature should be maintained between 0 °C and 40 °C.
- (3) When using the machine, please do not connect to the mains through other regulated filter power supply or power board. Please plug the power cord directly into the mains socket. And the machine should be placed near the mains input socket, so that the mains input plug can be unplugged in case of emergency and the power supply can be cut off.
- (4) Due to the influence of the electromagnetic field of the transformer, the distance from the display must be more than 25 cm, otherwise the display will flash.

4. Illustrations of panel appearance



Panel descriptions:

- ① LCD display
- ② Power switch

(1) Battery on

Press the left to turn on, you will hear a beep and notice the LCD screen lights up, the battery working mode lights up when the output voltage value is displayed at the upper right of the display. Those actions indicate that the machine enters the battery operation and outputs voltage to the load;

(2) Mains on

Press the left to turn on, you will hear a beep and notice the LCD screen lights up, the mains work mode lights up. The upper left side of the display shows the current mains voltage value, and the upper right shows the output voltage value. Those actions indicate that the machine enters the battery and outputs to the load voltage;

(3) Power off

Press the right to turn off, you will hear a beep and notice the LCD screen goes out, indicating that the machine is turned off and the output is stopped.

LCD display function descriptions:

- ③Mains input display: voltage and frequency are displayed alternately.
- ④Load capacity display: 0, 25%, 50%, 75%, 100%.
- ⑤The mains working mode (UPS/INV) is displayed.
- ⑥Machine output display: voltage and frequency are displayed alternately.
- ⑦Battery capacity display: 0, 25%, 50%, 75%, 100%.
- ⑧The battery working mode is displayed: the machine beeps every 6 seconds until the sound stops when it enters the mains working state.

Back panel descriptions:

- ⑨Output socket: it is used to connect the output terminal to the output socket for external load.
- ⑩No-fuse switch: It can be used to protect the power short circuit or super-current action to reduce the load and eliminate the short-circuit fault.Press it to resume normal operation.
- ⑪External power socket: connect to the mains through the power cord.
- ⑫External battery cable: the red wire connects to the battery positive "+", the black wire connects to the battery negative "-".
- ⑭Function changeover switch: When the switch is at "O", the machine works in the UPS state. The machine is operating in the inverter state when the switch is at "I".

Normal mode

The display interface has only one page, and the left and right digital tubes display the input voltage and output voltage. Under normal conditions, the input voltage and output voltage are always displayed. If an alarm message is generated, the voltage parameter is displayed in the first 7s and the alarm message is displayed in the last 3s.

Left digitron	Alarm causes	Right digitron
ALA	Low battery voltage	27
	High battery voltage	28
	Overload	31
	Abnormal output	51

Failure display

Alarm display after failure shutdown.

Left digitron	Alarm causes	Right digitron
ERR	Low power shutdown	134
	Short circuit shutdown or incorrect phase	105
	Overload shutdown	102
	Overload shutdown	104

5. Troubleshootings

Abnormal occurrence	Possibilities	Solutions
No mains inputs	1.Mains voltage is too high or too low; 2.No-fuse switch pops up; 3.The power cord is not plugged in properly.	1.Save and exit on the computer and turn off the machine and wait for the utility to return to normal. 2.Press the no-fuse switch to reset. 3.Plug in the power cord.
No batteries inputs	1.Overload; 2.Insufficient battery power; 3.Battery damage.	1.Please reduce the load. 2.Charge continuously for 8 hours. 3.Replac the batteries.
No reactions after power on	1.Battery input cable is loose 2.Low battery voltage 3.Host internal failure	1.Check the battery and battery input cable. 2.Please send it to the repair center.
Mains/battery mode switch frequently	1.The changes of mains are too large, causing normal, steady voltage and buck-boost switching.	1.This is normal
In the case of normal operation of the machine, the fuseless switch on the rear panel immediately pops up and shuts down when the load is applied.	1.Overload severely or short circuit.	1.Please check if the loaded device power is too high or short circuited. 2.Press the no-fuse switch to reset.

If the faulty still remains and cannot be eliminated, please contact the dealer and do not handle it yourself.

A. First turn off the power and unplug the mains input cable, then press no-fuse switch on the rear panel.

B. Replacement of the battery.

6. Service

(1) When there is a problem or damage to the machine, please contact the customer service center with the customer service card for assistance.

(2) Please contact the maintenance center or dealer about the relevant items.

If the battery is found to be defective (for example, the battery life is greatly reduced), it should be replaced in time. Please contact the local dealer to confirm if you need to replace the battery. Battery replacement must be performed by a qualified professional.

Note: The replacement battery must be the same as the original model number. The battery may generate electric shock hazard and short-circuit current. When replacing the battery, please remove the watch, ring or other metal objects and use a tool with an insulated handle. Do not throw the old battery into the fire, it may explode, and do not open the battery. The old battery should be returned to the local recycling station for disposal or return it to our company to ensure proper recycling.

Specifications:

Capacity	1000VA
Input	
Range of working voltage under UPS mode	175~275 VAC
Range of working voltage under INV mode	145~275 VAC
Frequency	50-60Hz Auto sensing
Output	
Voltage range (Battery mode)	220VAC±10%
Frequency range (Battery mode)	50/60 Hz
Transfer time	Normally 2~6 ms, not exceeding 10ms
Waveform (Battery)	Pure sine wave
Charging	
Battery numbers	12V×1
Charging voltage	13.75V± 1%
Charging current	20A
LED instructions	
LCD display	Load size, battery capacity, mains mode, battery mode, malfunction indication
Audible alarm	
Low battery	The buzzer beeps once a second and stops after one minute
Overload	The buzzer keeps beeping and stops after one minute
Malfunction	The buzzer keeps beeping and stops after one minute
Protections	
Overall protections	Overload protection; Deep discharge and overcharge
Physical properties	
Dimensions, D X W X H (mm)	287x258x115mm
Net weight (kgs)	6.6
Working environment	
Humidity and temperature	Relative humidity 0-90 % and temperature 0- 40℃ (non condensing)
Acoustic Noise (db)	>55dB

(Product technical changes are not subject to further notice)