

## **INSTRUCTION MANUAL** PURE SINE WAVE INVERTER / UPS



Thank you for choosing **WELL**. Please read carefully the following instructions and keep them within reach.

Reorder No: UPS-HEATST-TRIUMPH-500VA-WL, UPS-HEATST-TRIUMPH-800VA-WL

#### **Product features**

- Inverter, UPS, AVR and charger function;
- Toroidal transformer design, high efficiency low static loss, much more energy-saving than old square transformer type design;
- 32-bit high speed CPU controlled, swift response speed, more accurate detection;
- LED colorful humanistic and friendly operation interface, displays clearly device's working status, input & output voltage, loading status, battery status, etc.
- Pure sine wave output, suitable for almost all of appliance;
- High charging current
- Short switchover time, guarantees the connected appliances uninterruptable usage;
- Ventilation fan intelligent controlled, fan working based on the setting temperature and working status.

### Safety precautions

- This series product is designed for computer & internet devices and home appliance usage not recommended in life support system and other special important equipment application.
- Avoid overloading, do not use the device beyond its maximum power capacity.
- It will be a danger of high voltage in the device even all the switches are turned off, any operation to move or open the device should be performed by authorized professional personnel.
- In case of fire, use dry powder type fire extinguisher, do not use liquid type fire extinguisher.
- If the device works unusually, please switch off both power sources of battery and city power immediately, any power source exist in such case will cause danger; and please report to the distributor for professional advices.

### Display, control and warning details

• Normal working interface



• Detail display

	City power input normal, device through AVR supplies output
BATTERY MODE	City power input abnormal, battery through inverter supplies AC output
	Temperature is too high, device cuts off output
	Battery over voltage, short circuit, high MOSFET's temperature
$V^{\dagger}$ over voltage	City power input is over voltage
	City power input is low voltage
SO OVER LOAD	Loading exceeds device's rated power
	Loading bar showing the loading situation
	Battery bar showing the battery capacity, when in charging, the bar will be flashing
	Input voltage indication
очтрит <b>220</b> ,	Output voltage indication and frequency indication

## **Operational description**

Name	<b>Component drawing</b>	Description				
Output switch	$\bigcirc$	Pushing it for more than 2 seconds, switch on/off the inverter or output				
AC input cord or terminal		Plug it or connect it to wall socket or city power when charges battery or supplies output through AVR				
Main switch	TO DI	When connect to city power and city power is normal, turn on this switch, device will work on mains mode, charging the battery; Turn off this switch, device will switch over to battery mode				
Output socket or terminal	or or or	Appliance connect to this socket or terminal for output Note: The Max. power for single socket is 2000W If your appliance's power is more than 2000W, please connect to terminal				
Ventilation fan		Under battery mode or charging, when the power transistor temperature is higher than 45 °C, fan will start.				
Battery input pole	• •	Red battery input cable for positive pole, black battery input cable for negative pole. Be attention to the battery voltage must follow the device marking.				

#### **Buzzer working status description**

Working status	Description		
When city power abnormal switch over to battery mode	Beeping on tine		
Battery working low voltage or output overload	Beeping every second		
Protection or output abnormal	Beeping hurry		

#### Installation and operation

#### 1. Installation:

1.1 If found any damage upon package opening, please contact distributor immediately;

1.2 Do not install the device up-side-down; not exposed to direct sunlight or heat source; out of reach from children; away from water, moisture, oil or grease and any flammable substance; 1.3 For better ventilation, fan outlet and device ventilation hole should have at least 10cm

distance from the wall or other adjacent not heat producing equipment;

1.4 Make sure the city power voltage and frequency matches the device rated;

1.5 The device should be placed in the well grounded condition to ensure the safety;

#### 2. Battery connection:

Connect the red cable to battery "+" pole and connect the black cable to battery "- " pole, device cannot work under wrong connection.

#### Technical parameter table

Power	500VA	800VA	1000VA	1500VA	2000VA	3000VA	5000VA			
Battery voltage	12V DC	12V DC	12V DC	24V DC	24V DC	48V DC	48V DC			
Charging current	Max. 5A-10A for model 500VA; 10-15 for model 800VA									
Charging voltage	$13.8V \pm 0.5V$			$27.6V\pm0.5V$		$55V \pm 1V$	$55V \pm 1V$			
AC input range	On battery mode or power off, it returns to mains mode when input voltage is $165V\pm5V \sim 260\pm5V$ On mains mode, it switch over to battery mode when input voltage is less than $150V\pm5V$ or over than $270V\pm5V$ .									
AC input frequency	45 Hz ~ 65Hz									
Output range	Mains: 204V – 240V Inverter: 230V ±3%									
Inverter output frequency	50Hz/60Hz±0.5Hz, subject to the mains									
Output overload protection	Battery mode: when overload 110% ~ 130%, last 30 seconds before cut off the output; when overload 130% and above, cut off the output immediately Mains mode: warning till circuit breaker protects									
Working ambient temperature	$0 \sim 40^{\circ} \text{C}$									
Working ambient humidity	10% RH ~ 90% RH									



Waste electrical and electronic equipment are a special waste category, collection, storage, transport, treatment and recycling are important because they can avoid environmental pollution and are harmful to health. Submitting waste electrical and electronic equipment to special collection centers makes the waste to be recycled properly and protecting the environment. Do not forget! Each electric appliance that arrives at the landfill, the field, pollutes the environment!

# CE

#### Importer & distributor:

SC VITACOM ELECTRONICS SRL CIF: RO 214527 Tel. 0264-438401\* office@vitacom.ro, www.vitacom.ro