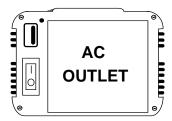


TE-1203UB / TE-1403UB DC To AC Power Inverter

300W-USB 50Hz Modify Sine Wave TE-1203UB: DC12V to AC220V~240V TE-1403UB: DC24V to AC220V~240V



Instruction Manual

Please read user manual before use.

SPECIFICATION

Input voltage range: DC 10~15V (12V) // DC 20~30V (24V)

Input full load current: 30A (12V) // 15A (24V) Standby input current: <0.6A (12V) // <0.5A (24V)

USB port: output 5VDC (500MA max.)
Output voltage (AC): 220V~240V
Output waveform: modify sinewave

Output frequency: 50Hz
Continue output power: 300W
Peak output power: 900W

Efficiency: 90%

Battery low pre-alarm: $10.5 \pm 0.5 \text{V}$ (12V) // 21 \pm 1V (24V) Battery low shutdown: $10 \pm 0.5 \text{V}$ (12V) // 20 \pm 1V (24V)

Auto-operation fan (temperature or load)

Thermal protection: 60 ± 5 °C (microcontroller) Overload protection: yes (microcontroller) Output short protection: yes (microcontroller)

Battery ex. 12V / 24V protection: yes (microcontroller)

Battery polarity protection: yes (by fuse)

Fuse: 35A*1pc+15A*1pc (12V) // 20A*1pc+15A*1pc (24V)

Dimension: (L*W*H): 140*73*58mm

Weight: 750g

TROUBLESHOOTING

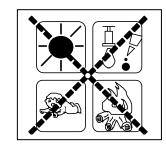
If the inverter does not appear to be functioning properly, there are several reasons why the inverter may not be responding.

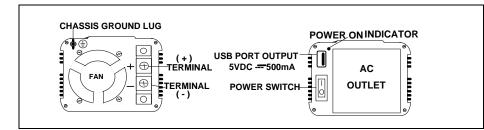
- 1) Poor contact
 - *Cleaning contact parts thoroughly.
- 2) Receptacle has no power
 - *check fuse, replace damaged fuse.
 - *check receptacle wiring. repair if necessary
- 3) Fuse is blown
 - *The fuse is located inside the DC plug. Please replace fuse with a new equivalent value fuse.
- 4) Overload caused AC output reduce
 - *Reduce the wattage of loading to lower than 300 watts.
- 5) Thermal caused AC output reduce
 - *Under heavy loads for extended periods of time. The AC inverter will reduce output to prevent damage to excess heat. If this happened, please proceed as below:
 - (A) Switch off the power of this inverter.
 - (B) Decreases the load of this machine i. e. disconnect some of the appliances or wait until this inverter become cool.
 - (C) Switch on the power of this inverter.
- 6) Low-battery shutdown
 - *Recharge your battery and resume operation.

CAUTION

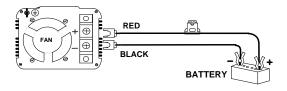
Always place the inverter in an environment which is:

- (A) well ventilated
- (B) not exposed to direct sunlight or heat source
- (C) out of reach from children
- (D) away from water/moisture, oil or grease
- (E) away from any flammable substance





CAUTION: do not reverse input. Use red battery cord to connect (+) of a DC battery to (+) terminal. Then, use black battery cord to connect (-) battery to (-) terminal.

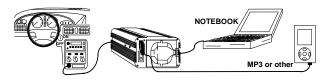


When connected to any appliance, be sure to turn on inverter first, and then turn on the power of the appliance.



WARNING:

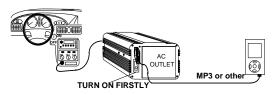
Start the engine of car when connected to any appliance, do not exceed the output power 150w of the inverter.



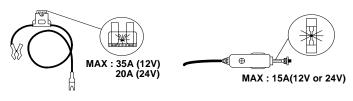
WARNING SIGNAL

condition	warning signal cycle	shutdown signal cycle
Low battery alarm:	BI BI BI (pause)	BEE BEE BEE (pause)
Over heating alarm:	BI BI (pause)	BEE BEE (pause)
Over load alarm:	BI BI BI BI BI	continuous tone
NOTE: BI is a short beep, and BEE is a longer beep.		

While using USB port: output 5VDC (500MA max) for charging, please turn on the switch of the inverter first, then connect the USB cable to the electronic appliance needed to be charged



During operation, when the power is switch on, if the power indicator doesn't light up, please check the fuse in the battery cables or cigarette plug. If the fuse is spoilt, please replace fuse with a new same current fuse.



If the total watts of electrical appliances exceeds the output capacity of inverter, or if the temperature of the inverter reaches 60° C after operating for a period of time, the inverter shall be reduced AC output by the protection circuit.

