

INSTALLATION

1 Inspection

The following items are inside the box:

- UPS unit
- User Manual
- Power Cord
- USB Cable

Remove the UPS from its package and inspect it for damage that may have occurred during shipping. If any damage is discovered, re-pack the unit and return it to the place of purchase.

2 Connect to Utility Power

Connect AC power cord to utility power. Then, the UPS will start to charge inside battery and the battery level LED will indicate. For best result, charge the battery for 6 hours prior to initial use.

3 Plug in Equipment

Plug the equipment to Outlets on the rear panel of the UPS.

NOTE: Make sure that the UPS is powered on to protect all important devices from data loss during power failure.

CAUTION: NEVER connect half waveform devices or big inrush load devices (e.g. laser printers) to outlets of UPS

4 Connect Com. Port and Install Software

Connect one end of the USB or RS232 cable to PC and the other to the USB or RS232 port at the rear of the UPS.

Download the latest version of ViewPower software from www.power-software-download.com to your hard drive. Follow on-screen instructions to complete the software installation.

OPERATION

Operation

1 Turn On the UPS

To turn on the UPS unit, press the ON/Mute button. All LEDs will light on for few seconds. Then, only LED1, LED2, LED3 and LED4 will flash few seconds. Then, the unit will be turned on.

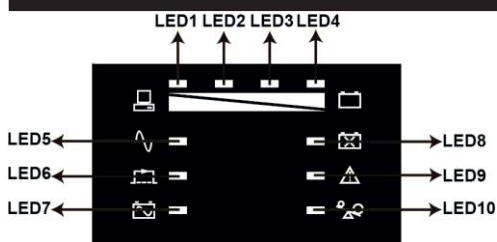
2 Turn Off the UPS

To turn off the UPS unit, press OFF/Enter button. Then, the unit will go off or go standby charging when there is power utility.

3 Switch Displayed Information

Press "Select" button to change displayed info between battery capacity and load level. It will default display load level in Bypass, AC or ECO mode. It will default display battery capacity in battery or test mode.

LED indicators & operation mode



LED	Function		Color
LED1	Battery Level < 25%	load level >76%	Green
LED2	Battery level 26~50%	load level 51~75%	Green
LED3	Battery level 51~75%	load level 26~50%	Green
LED4	Battery level >76%	load level <25%	Green
LED5	Line mode indicator		Green
LED6	Bypass mode indicator		Yellow
LED7	Battery mode indicator		Yellow
LED8	Low battery or bad battery		Red
LED9	Warning or fault		Red
LED10	Overload		Red

Operation Mode	LED	Solid/Flashing
Standby Mode	LED1, LED2, LED3 LED4 indicating battery capacity	Solid
Bypass Mode	LED6	Solid
Online Mode	LED5	Solid
ECO Mode	LED5, LED6	Solid
Battery Mode	LED7	Solid
Self-Test	LED7	Flashing

Warning & fault

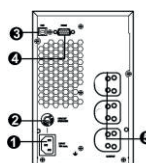
Condition	LED
Short circuit	LED9 on and LED10 flashing
Overload fault	LED10 on
Bad battery	LED8 on
Charger under voltage	LED1 on and LED8 on
Charger over voltage	LED4 on and LED8 on
Charger failure	LED1-LED4 all on and LED8 on
Inverter fault	LED1, LED5 and LED9 on
PFC fault	LED2, LED5 and LED9 on
DC/DC fault	LED1, LED7 and LED9 on
Over-temperature	LED5, LED7 and LED9 on
DC BUS over voltage	LED3 and LED9 on
Output over voltage	LED4 and LED9 on
Battery disconnected	LED8 and LED9 flashing
Over charging	LED1 and LED8 flashing
Low battery	LED8 flashing
Overload warning	LED10 flashing
Out of bypass range	LED6 flashing and LED9 on
Load heavy	LED1-LED4 all flashing
Other warning	LED9 flashing

Note The LED6 will be ON if the UPS transfers to Bypass mode after fault occurs. Otherwise, the LED6 will be OFF.

Alarm

Situation	Alarm
Battery Mode	Sounding every 4 seconds
Low battery	Sounding every second
Overload	Sounding twice every second
Fault	Continuously sounding

REAR PANEL



1. AC input
2. Input circuit breaker
3. USB port
4. RS-232 port
5. Output receptacles

SAVE THESE INSTRUCTION-This manual contains important instructions that should be followed during installation and maintenance of the UPS and batteries.

- Please transport the UPS system only in the original package to protect against shock and impact.
- Condensation may occur if the UPS system is moved directly from cold to warm environment. The UPS system must be absolutely dry before being installed. Please allow at least two hours for the UPS system to acclimate the environment.
- Do not install the UPS system near water or in moist environments.
- Do not install the UPS system where it would be exposed to direct sunlight or near heater.
- Do not block ventilation holes in the UPS housing.
- Do not connect appliances or devices which would overload the UPS system (e.g. laser printers) to the UPS output sockets.
- Place cables in such a way that no one can step on or trip over them.
- Do not connect domestic appliances such as hair dryers to UPS output sockets.
- The UPS can be operated by any individuals with no previous experience.
- Connect the UPS system only to an earthed shockproof outlet which must be easily accessible and close to the UPS system.
- Please use only VDE-tested, CE-marked mains cable (e.g. the mains cable of your computer) to connect the UPS system to the building wiring outlet (shockproof outlet).
- Please use only VDE-tested, CE-marked power cables to connect the loads to the UPS system.
- When installing the equipment, it should ensure that the sum of the leakage current of the UPS and the connected devices does not exceed 3.5mA.
- Do not disconnect the mains cable on the UPS system or the building wiring outlet (shockproof socket outlet) during operations since this would cancel the protective earthing of the UPS system and of all connected loads.
- The UPS system features its own, internal current source (batteries). The UPS output sockets or output terminals block may be electrically live even if the UPS system is not connected to the building wiring outlet.
- In order to fully disconnect the UPS system, first press the OFF/Enter button to disconnect the mains.
- Prevent no fluids or other foreign objects from inside of the UPS system.
- The UPS system operates with hazardous voltages. Repairs may be carried out only by qualified maintenance personnel.
- Caution - risk of electric shock. Even after the unit is disconnected from the mains (building wiring outlet), components inside the UPS system are still connected to the battery and electrically live and dangerous.
- Before carrying out any kind of service and/or maintenance, disconnect the batteries and verify that no current is present and no hazardous voltage exists in the terminals of high capability capacitor such as BUS-capacitors.
- Only persons are adequately familiar with batteries and with the required precautionary measures may replace batteries and supervise operations. Unauthorized persons must be kept well away from the batteries.
- Caution - risk of electric shock. The battery circuit is not isolated from the input voltage. Hazardous voltages may occur between the battery terminals and the ground. Before touching, please verify that no voltage is present!
- Batteries may cause electric shock and have a high short-circuit current. Please take the precautionary measures specified below and any other measures necessary when working with batteries:
 - remove wristwatches, rings and other metal objects
 - use only tools with insulated grips and handles.
- When changing batteries, install the same number and same type of batteries.
- Do not attempt to dispose of batteries by burning them. This could cause battery explosion.

- Do not open or destroy batteries. Escaping electrolyte can cause injury to the skin and eyes. It may be toxic.
- Please replace the fuse only with the same type and amperage in order to avoid fire hazards.
- Do not dismantle the UPS system.

MODEL	1000
CAPACITY	1000VA/700W
Input Voltage	110/120VAC or 220/230/240 VAC
Input Voltage Range	80-140 VAC \pm 5% or 160-280 VAC \pm 5%
Output Voltage	110/120VAC or 220/230/240 VAC
Output Voltage Regulation	\pm 1 % (Bat. mode)
Transfer Time	Zero
Waveform	Pure Sine Wave
Battery Type	12V/7Ah
Battery Number	2
Charging Time	4-6 hours recover to 90% capacity
Dimension (DxWxH)	282 x 145 x 220
Net Weight (kgs)	9.8
Humidity	20-95% RH @ 0-40°C (non-condensing)
Noise Level	Less than 50dB
USB/RS-232 Port	Supports Windows family, Linux, Unix and MAC

*Unit transfer to ECO mode when long time run on online mode and load > 60%.

** Product specifications are subject to change without further notice

Problem	Possible Cause	Solutions
LED not lit	The UPS is not on.	Plug in the power utility or press the ON/Muter button to cold start the UPS.
	Battery voltage is too low.	Charge the battery at least 6 hours.
	Battery fault.	Replace the battery.
The UPS always on battery mode.	Power cord loose.	Re-plug the power cord.
The UPS continuously beeps.	Please check the fault code for the details of LED indicates.	Contact your dealer.
Backup time too short.	Battery voltage is too low.	Charge the battery at least 6 hours.
	Overload.	Remove some unnecessary loads. Before reconnecting equipment, please verify that the load matches the UPS capability specified in the specs.
	Battery defect.	Replace the battery.

If any abnormal situations occur that are not listed above, please call for service immediately.