Line Interactive UPS

VI 650/850/1200/1600/2200 GX

Quick Start Guide

EN

NOTE:

Warranty & Service Information

Thanks for buying this UPS product. Please follow the instructions in the product manual and if applicable the software installation manual, to have the maximum use of your product.

Installing the software:

If you product comes with software you will find a CD Rom in the box containing the software. Please follow the instructions when installing the software. You can download the software, manual and short reference manual at the following site: http://powerwalker.com

Problem solving:

Please check the chapter in your manual (hardware and software) on problem solving. If this not solves your problem please contact our support at http://support.powerwalker.com or simply send e-mail to service@powerwalker.com

Service and Maintenance:

If the product requires service or maintenance, no matter it is under or out of warranty period always contact your reseller for the procedures. If outside the warranty period we advise you to contact your reseller as well. In any case always make sure that service or maintenance on the product is performed by a qualified technician.

1. IMPORTANT SAFETY INSTRUCTIONS

- This product is designed for home and office usage and it is not recommended for any medical equipment, life-supporting system and other specific important equipment.
- Do not plug appliances such as hair dryers, microwave ovens or vacuum cleaners to UPS.
- Do not plug the UPS into its own output.
- Connection to any other type of receptable other than two-pole, three-wire grounded receptacle may result in shock hazard as well as violate local electrical codes.
- To reduce risk of overheating the UPS, do not cover the UPS´ cooling vents.
- This unit intended for installation in a controlled environment, only indoor. Do not install the UPS in locations where there is standing or running water or excessive humidity or any of the following environments:
  - o Any area with combustible gas, corrosive substance or heavy dust.
  - o Any area with extraordinarily high or low temperature (above 40℃ or below 0℃) and humidity of more than 90%.
  - o Any area exposed to direct sunshine or near any heating apparatus.
  - o Any area with serious vibrations.
- In the event of an emergency or smoke coming out of the unit, press OFF button and disconnect the power cord from the AC power supply to properly disable the UPS.
- The internal short circuiting of the UPS will lead to dangers such as electric shock or fire; therefore do not allow liquids or any foreign object to enter the UPS. No water containers (such as a water glass) or any other liquid-containing vessels shall be placed on the top of the UPS so as to avoid such dangers as electric shock.
- Please do not use the UPS in excess of the rated load capacity.
- Unplug the UPS prior to cleaning and do not use liquid or spray detergent.
- Risk of electric shock, do not attempt to disassemble the unit. No user serviceable parts inside. Refer servicing to qualified service personnel.
- If UPS is to be stored for a long time, it is recommended to recharge the batteries (by connecting the utility power to UPS, switch "ON"), once a month for 24 hours to avoid a full battery discharge.
- Servicing (replacement) of batteries should be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries.
- A battery can present a risk of electrical shock and high short circuit current. The following precautions should be observed when working on batteries:
  - o Remove watches, rings, or other metal objects from the hand.

- o Use tools with insulated handles and wear rubber gloves and boots.
- o Do not lay tools or metal parts on top of batteries.
- o Disconnect charging source prior connecting or disconnecting batteries terminals.
- When replacing batteries, replace with the same type and number of the sealed lead-acid batteries.
  - o Never short circuit batteries. When working with batteries, remove watches, rings and other metal objects, and only use insulated tools.
  - o The battery must be replaced exclusively by qualified personnel (risk of shock). Prohibit users from their own battery replacement. Contact your reseller if need.
- The maximum ambient temperature rating is 40℃.
- Do not dispose of battery or batteries in a fire. The battery may explode.
- Do not open or mutilate the battery or batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.
- Icon Φ on the rating label stands for phase symbol.
- This is pluggable equipment with pre-installed batteries and may be operated by laymen.
- During the installation of this equipment it should be assured that the sum of the leakage currents of the UPS and the connected loads does not exceed 3.5mA.
- Attention, hazardous through electric shock. Also with disconnection of this unit from the mains, hazardous voltage still may be accessible through supply from battery. The battery supply should be therefore disconnected in the plus and minus pole of the battery when maintenance or service work inside the UPS is necessary.
- In the event that there is fire occurring in the vicinity, please use dry-power extinguishers. The use of liquid extinguishers may give rise to the danger of electric shock.

This product complies with the safety and environmental regulations in EU.

If the time arises to throw away your product, please recycle all the components possible. Batteries and rechargeable batteries are not to be disposed in your domestic waste! Please recycle them at your local recycling point. Together we can help to protect the environment.

2. Introduction

VI GX series is an intelligent and compact line interactive UPS (Uninterruptable Power Supply) which is designed to protect your personal computer or sensitive electronic equipments from all forms of power interference, including complete power failures. It is equipped with many features that allow any attached equipment to operate longer and more reliability.

3. Description of Features

- Easy to use and install utilized microprocessor control to maximize the reliability and efficiency
- Equipped with built-in boost and buck AVR function
- DC Cold start function
- Auto restart while AC recovery.
- Provides AC Overload protection
- RJ11/RJ45 (in/out) LAN/Modem line protection
- Provides DC 5.1V 2.0Amp Max USB charger

4. Package Contents

You should have received the following items inside of package:
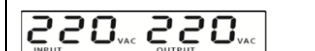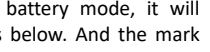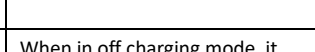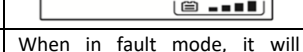
For IEC socket product	For Schuko/FR socket product
- UPS Unit x 1 - Startup manual x 1 - Warranty card x 1 - USB cable x 1 - IEC output cable x 1	- UPS Unit x 1 - Startup manual x 1 - Warranty card x 1 - USB cable x 1

5. Product Overview

5.1 Front Panel

400VA~850VA	1200VA & 1600VA & 2200VA
Power ON/OFF — USB charger 5V 2A max — LCD Indicators	LCD Indicators — Power ON/OFF — USB charger 5V 2A max

4.1.1　Display

When LCD starts to work, it will display all information for 3 seconds.	When in normal mode, it will display as below.	When in AVR mode, it will display as below. And the mark will flicker every 1second.
When in battery mode, it will display as below. And the mark will flicker every 1second. **Note:** If I/P-V<40V，input voltage will display "000"	When in off charging mode, it will display as below. **Note:** the output voltage always is displayed as "000" in off charging mode.	When in fault mode, it will display as below. "FAULT" character and "0" character only.

4.1.2　Load capacity level display:

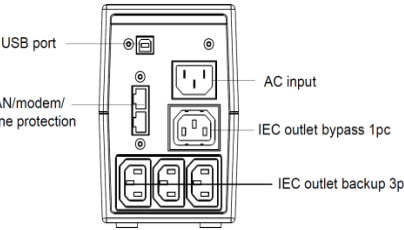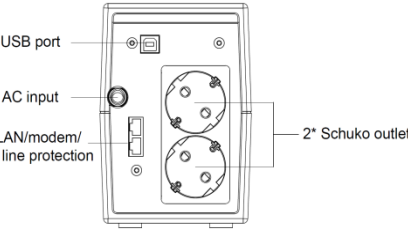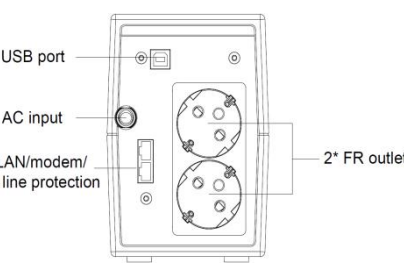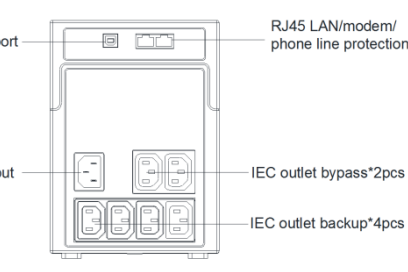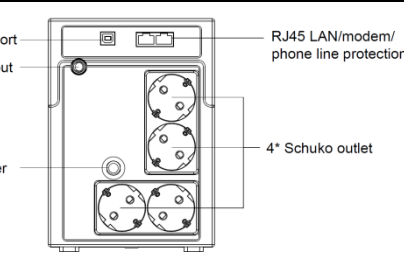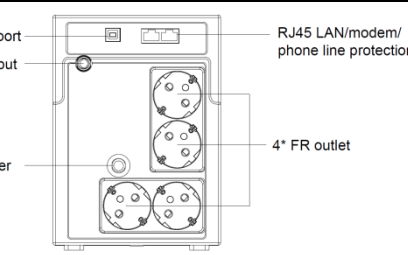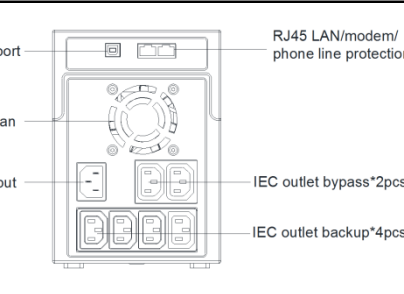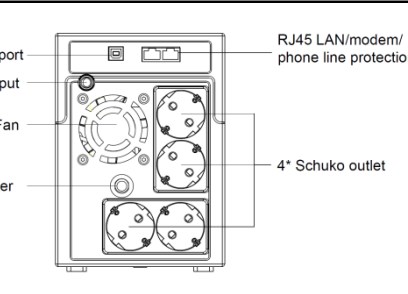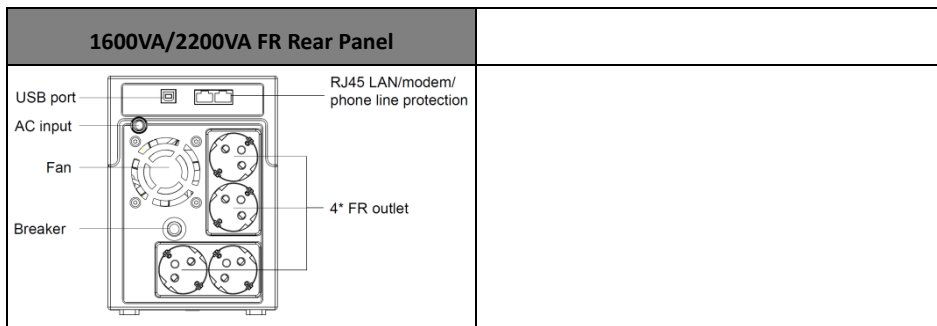|	Indicate the percentage of UPS load capacity which is being used by the protected equipment. Each LCD level bar indicates a 25% of the total UPS output capacity.

4.1.3　Battery capacity definition:

	Indicate the amount of battery volume remaining. Each battery volume level bar indicates a 20% of total battery volume

4.1.4　When over load , the mark will flicker every 1second.

4.1.5　When battery low , the mark will flicker every 1second.

5.2 Back Panel:

650VA/850VA IEC Rear Panel	650VA/ 850VA Schuko Rear Panel
USB port — AC input — IEC outlet bypass 1pc — RJ45 LAN/modem/ phone line protection — IEC outlet backup 3pc	USB port — AC input — RJ45 LAN/modem/ phone line protection — 2* Schuko outlet
650VA/ 850VA FR Rear Panel	**1200VA IEC Rear Panel**
USB port — AC input — RJ45 LAN/modem/ phone line protection — 2* FR outlet	USB port — RJ45 LAN/modem/ phone line protection — AC input — IEC outlet bypass*2pcs — IEC outlet backup*4pcs
1200VA Schuko Rear Panel	**1200VA FR Rear Panel**
USB port — AC input — RJ45 LAN/modem/ phone line protection — Breaker — 4* Schuko outlet	USB port — AC input — RJ45 LAN/modem/ phone line protection — Breaker — 4* FR outlet
1600VA/2200VA IEC Rear Panel	**1600VA/2200VA Schuko Rear Panel**
USB port — RJ45 LAN/modem/ phone line protection — Fan — AC input — IEC outlet bypass*2pcs — IEC outlet backup*4pcs	USB port — AC input — RJ45 LAN/modem/ phone line protection — Fan — Breaker — 4* Schuko outlet

1600VA/2200VA FR Rear Panel	

USB port — AC input — Fan — Breaker

RJ45 LAN/modem/ phone line protection

4* FR outlet

6. Installation and Initial Startup

> ⚠️ Before installation, please inspect the unit. The unit is prepared without any falling objects or physical dmanage.

I: Placement & Storage Conditions

Install the UPS in a protected area that is free of excessive dust and has adequate air flow around the unit, and is free from excessive dust, corrosive fumes and conductive contaminants. Please place the UPS away from other units at least 20 cm to avoid interference. Do NOT operate the UPS where the temperature exceeds 0-40° C and the humidity is over 0-90 % RH.
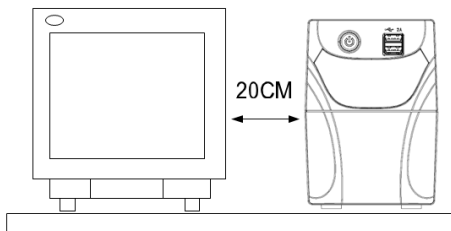
II: Connect to Utility and Charge

Plug in the AC input cord to the 2-pole, 3-wire grounded wall outlet. For the best results, we suggest charging the battery at least 6 hours with no load (no electrical devices such as computers, monitors, rtc.) connected before initial use. The unit charges its battery while connecting to the utility.

III: Connect the Loads

Plug in the loads to output receptacles on the rear panel of the UPS. Simply turn on the power switch of UPS unit, and devices connected to the UPS will be protected by UPS unit.

> ⚠️ Do not attach a power strip or surge suppressor to the UPS.

IV: Connect LAN cable, Modem line for Surge Protection

Connect for example a single modem line into surge-protected outlet on the back panel of the UPS unit. Connect from another outlet to the computer with another line cable.

V: Connect USB Cable

To monitor the UPS status, such as unattended UPS shutdown and start-up, by using bundled software, please connect the UPS and PC with USB cable included.

⚠	**NEVER** connect a **laser printer** or **scanner** to the UPS unit, **because in-rush current generated by motor's devices** may cause the damage of the unit.	

VI: Turn On/Off the Unit

Turn on the UPS unit by pressing the power switch. Turn off the UPS unit by pressing again the power switch.

VII: Following figure shows the basic internal circuit configuration of the UPS
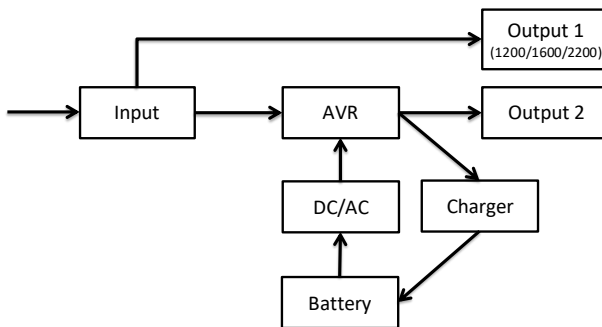
7. Audio Indicator

Audible Alarm	Situation
Sounding every 10 seconds	Battery Mode
Sounding every 1 second	Battery Low
Sounding every 0.5 seconds	Overload
continuous sounding	Faulty

8. Software Installation on your PC

Connected by USB to a PC or notebook, the Software enables communication between the UPS and the computer. The UPS software monitors the status of the UPS, shuts down the system before the UPS is exhausted and can remotely observe the UPS via the Network (enabling users to manage their system more effectively). Upon AC failure or UPS battery low, UPS takes all necessary actions without intervention from the system administrator. In addition to automatic file saving and system shut-down functions, it can also send warning messages via pager, e-mail etc.

- Use the bundled CD and follow the on-screen instructions to install the software WinPower.
- Enter the following **serial No**. to install software: **511C1-01220-0100-478DF2A**
- After the software is successfully installed, the communication with UPS has been established and a green icon will appear in the system tray.
- Double-click the icon to use the monitor software (as above).
- You can schedule UPS shutdown/start-up and monitor UPS status through PC.
- Detail instructions please refer to the e-manual in the software.

⚠	Check http://winpower.powerwalker.com to get the latest version of monitoring software.

9. Smart Battery function

- When UPS connect windows PC with USB cable, it will show a battery icon located in the system tray, near the clock. You can get some basic information (ex. Charging/Discharging, battery remaining capacity) by clicking the battery icon.

on charging status	on discharging status
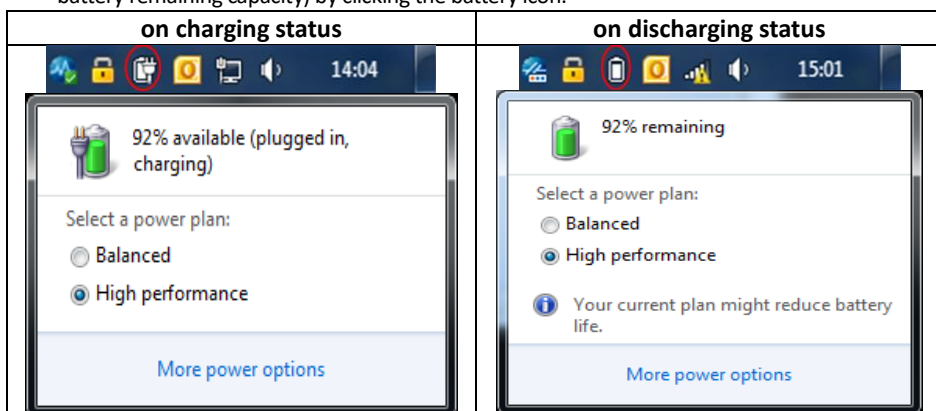
- You can set to Sleep/Hibernate/Shutdown OS or do nothing when it reached Battery Low Level or Battery Critical Level (with OS without Winpower).
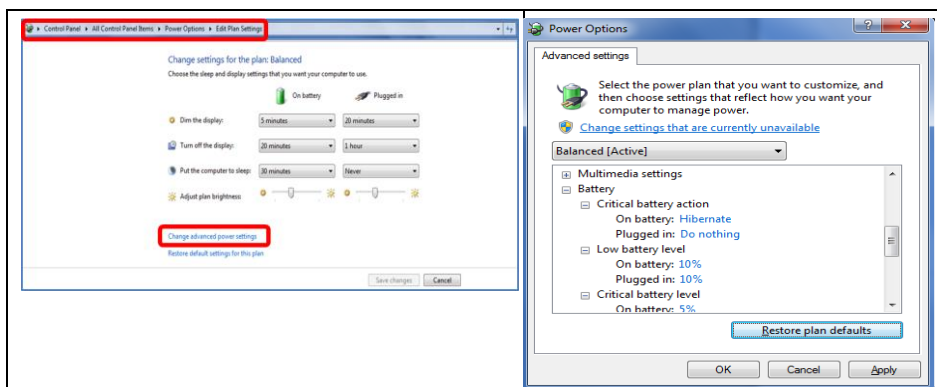
- In order to have more detail information and advantage functions by software; Winpower software is available for further application.

10. Trouble Shooting

Symptom	Possible Cause	Remedy
No LED display on the front panel.	1. Battery weak.	1. Charge battery up to 8 hours.
	2. Battery defect.	2. Replace with the same type of battery.
	3. Power switch is not pressed.	3. Press the power switch again.
Alarm buzzer beeps continuously when AC supply is normal.	Overload of the UPS.	Verify that the load matches the UPS capability specified in the specs.
When power failure, back-up time is shorten.	1. Overload of the UPS.	1. Remove some non-critical load.
	2. Battery voltage is too low.	2. Charge battery 8 hours or more.
	3. Battery defect due to high temperature operation environment, or improper operation to battery.	3. Replace with the same type of battery.
Mains normal but LED is flashing.	Power cord is loose.	Reconnect the power cord properly.

- If any abnormal situations occur that are not listed above, Please stop using the unit and contact your reseller for advice.
- When replacing the batteries, use batteries with exactly same specifications.
- The battery must be replaced exclusively by qualified personnel (risk of shock).

⚠️ Prohibit user replace battery by oneself. Please contact your reseller if need.

11. Specifications

Model	VI 650 GX	VI 850 GX	VI 1200 GX	VI 1600 GX	VI 2200 GX
CAPACITY	650VA/360W	850VA/480W	1200VA/720W	1600VA/960W	2200VA/1200W
INPUT					
Voltage	230 VAC				
Voltage Range	170~280 VAC				
OUTPUT					
Voltage	230 VAC				
Voltage Regulation	± 10% (Battery mode)				
Frequency Range	50/60Hz				
Frequency Regulation	±1Hz (Battery mode)				
Transfer Time	Typical 2-6ms		Typical 4-8ms		
Waveform	Modified Sine Wave				
PROTECTION					
Full protection	Discharge, overcharge and overload protection				
ENVIRONMENT					
Humidity	0-90 % RH @ 0° to 40° C (non-condensing)				
Noise Level	Less than 40dB		Less than 45dB		
Software					
Monitoring Software	WinPower (included) / HID				
BATTERY					
Type & Number	12V/7Ah x 1	12V/9Ah x 1	12V/7Ah x 2	12V/9Ah x 2	12V/9Ah x 2
Charging Time	4 hours recover to 90% capacity				
Backup Time (est. 100W)	17 min	22 min	45 min	55 min	55 min
PHYSICAL					
LCD Indicator	LCD display				
Outlet	4 x IEC outlets（1 bypass） 2 x FR outlets 2 x Schuko outlets		6 x IEC outlets（2 bypass） 4 x FR outlets 4 x Schuko outlets		
USB charger	DC 5.1V/2.0Amp Max.				
Connector	USB communication port, USB charge port, RJ45 Surge Protection				
Dimension (DxWxH)	290mm x 100mm x 143mm		364mm x 139mm x 195 mm		
WEIGHT					
Net weight	4.4kg	5.2kg	8.9kg	10.4kg	10.4kg