

X.TREME
Power Conversion®
UNINTERRUPTIBLE POWER SUPPLY (UPS)

XVTi Line Interactive UPS

600VA, 800VA, 1200VA, 1500VA Models

USER & INSTALLATION MANUAL

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SAFETY INSTRUCTIONS

ATTENTION: To safely interact with and enjoy all the features and benefits of these Xtreme Power Conversion Uninterruptible Power Supplies (UPS), please read and follow all installation and operation instructions completely. These UPS are designed to provide power protection for connected electronic equipment.

Please read this manual before installing the XVTi-Series UPS models XVTi-600, XViT-800, XVTi-1000, and XVTi-1500 as it provides important information that should be followed during installation and maintenance of the UPS and batteries, allowing you to correctly set up your system for the maximum safety and performance. Included is information on customer support and factory service, if it is required. If you experience a problem with the UPS, please refer to the Troubleshooting section in this manual to correct the problem. If the problem is not corrected, please collect information so that the Technical Support personnel can more effectively assist you.

CAUTION: Any changes or modifications not expressly approved by the manufacturer of this device could void the user's authority to operate the equipment.

CAUTION: A shielded-type power cord is required in order to meet FCC emission limits and to prevent interference to the nearby radio or TV reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment.

CAUTION: Any changes or modifications not expressly approved by the manufacturer of this device could void the user's authority to operate the equipment.

IMPORTANT SAFETY INSTRUCTIONS:**(SAVE THESE INSTRUCTIONS)**

This manual contains important safety instructions. Please read and follow ALL instructions carefully during the installation and operation of the UPS. Read this manual thoroughly before attempting to unpack, install, or operate.

CAUTION! To prevent the risk of fire or electric shock, install in a temperature and humidity controlled indoor area, free of conductive contaminants. (Please see specifications for acceptable temperature and humidity range).

CAUTION! To reduce the risk of electric shock, do not remove the UPS cover. Qualified Service Personnel must perform ALL repairs and maintenance. No user serviceable parts inside.

CAUTION! Hazardous live parts inside can be energized by the battery even when the AC input power is disconnected.

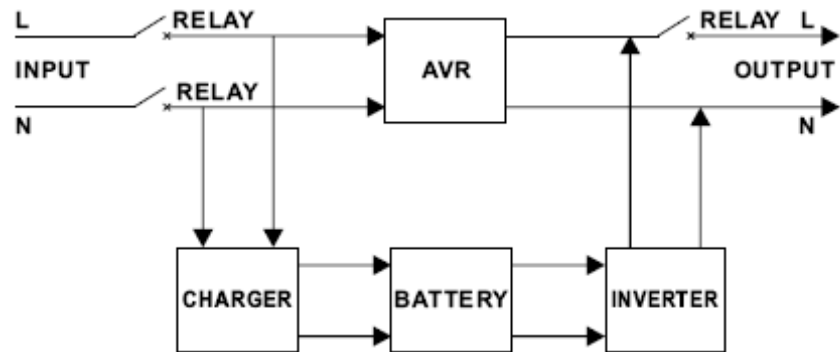
CAUTION! UPS must be connected to an AC power outlet with fuse or circuit breaker protection. Do not plug into an AC wall outlet that is not grounded. If you need to de-energize this equipment, turn off and unplug the UPS.

DO NOT USE FOR MEDICAL OR LIFE SUPPORT EQUIPMENT! Xtreme Power does not sell products for life support or medical applications. DO NOT use these UPS in any circumstances that would affect operation or safety of any life support equipment or with any medical applications or patient care.

NOTICE! Not for use in a computer room as defined in the Standard for Protection of Electronics Computer/Data Processing Equipment.

NOTICE! An acceptable outlet (based upon UPS Specifications) shall be installed near the equipment and shall be easily accessible.

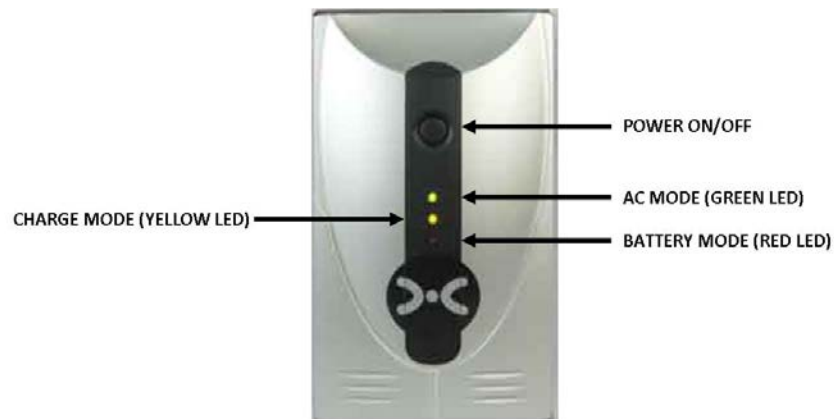
PRODUCT DESCRIPTION

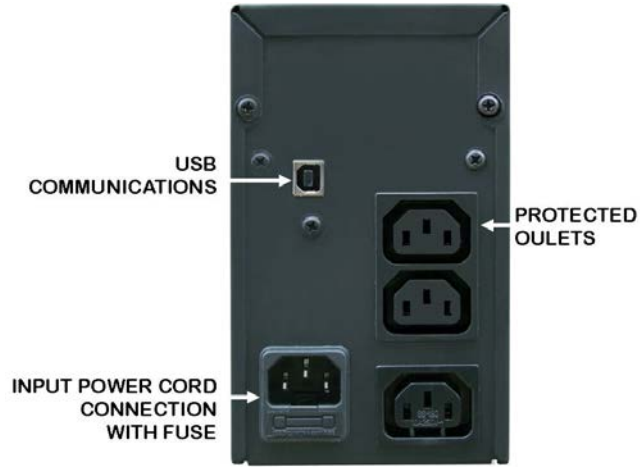


UPS Functionality

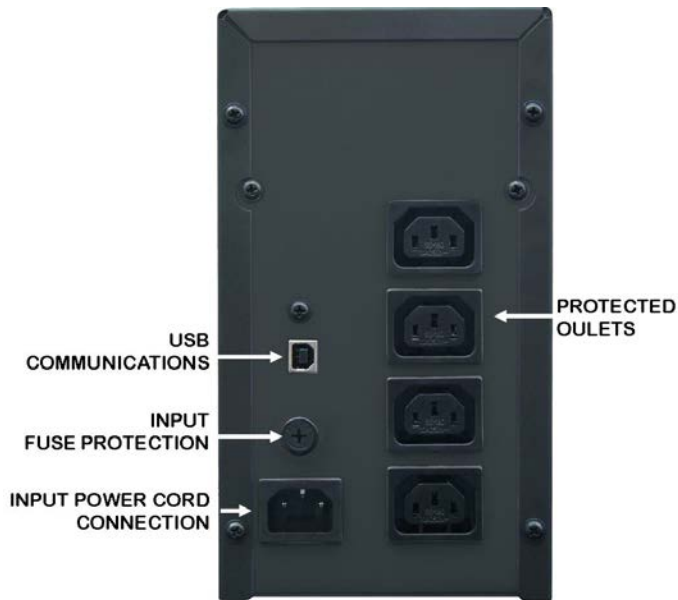
The XVTi UPS products use Line-Interactive Automatic Voltage Regulation (AVR) UPS technology. Under normal AC power operation, the input power flows through the AVR circuit, regulating the incoming AC power to the output of the UPS and the load connected. If the input power disappears, the Inverter circuit is switched on to provide output from the batteries contained within the UPS.

Front Panel Display





XVTi-600/800 Rear View



XVTi-1000/1500 Rear View

Battery

Provides battery-powered outlets for the connected equipment, and insures uninterruptible operation of your equipment during a power failure.

Power Switch

Can be used as a master on/off switch for equipment connected to the battery-powered outlets.

Power On Indicator

This LED is illuminated when the utility condition is normal and the UPS outlets are providing power, free of surges and spikes.

Fuse

The fuse that provides overload and fault protection.

USB

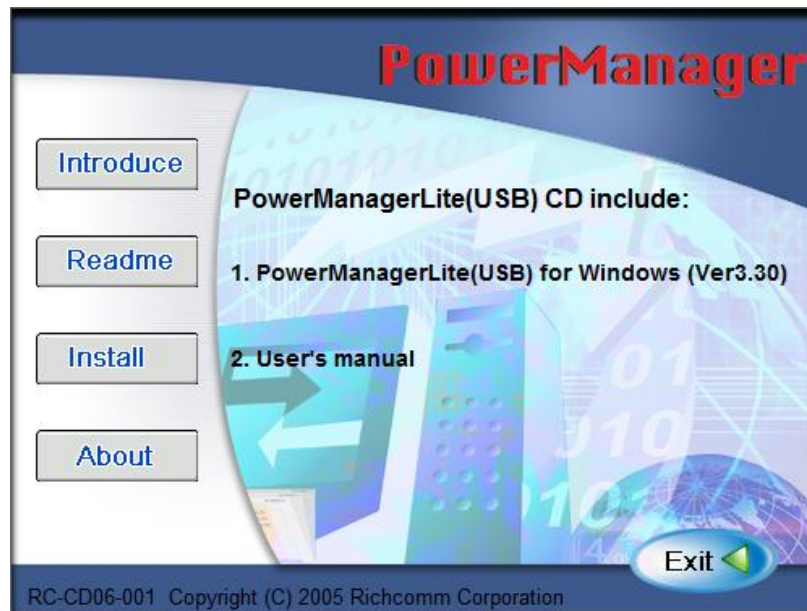
Port/protocol that provides communication between the UPS and PC Network.

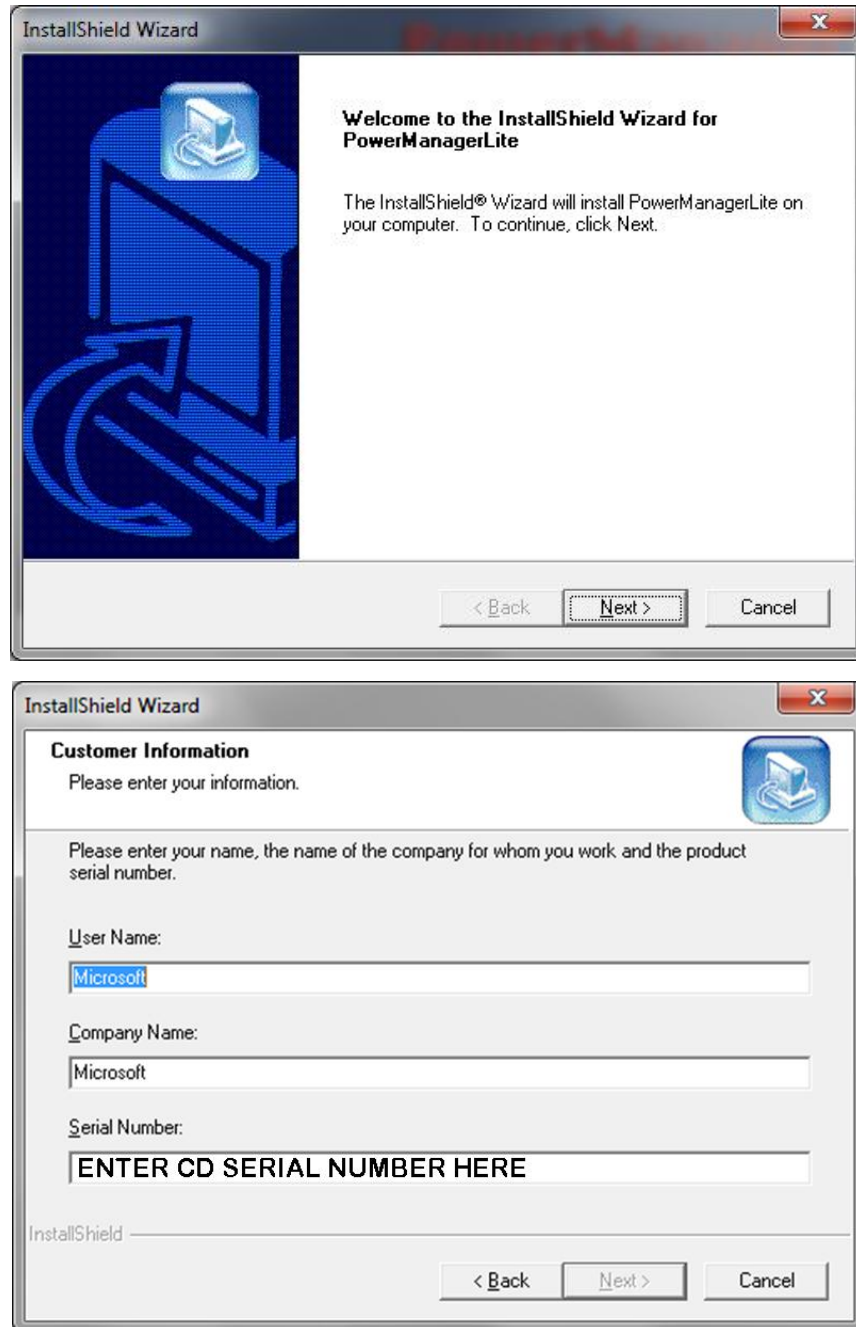
HARDWARE INSTALLATION GUIDE

1. Your new UPS may be used immediately upon receipt, however, charging the battery for at least 4 hours is recommended to ensure that the batteries maximum charge capacity is achieved. Charge loss may occur during shipment and storage. To recharge the battery, plug the power cord into the correct type AC wall outlet and turn the power switch on. **Note:** Xtreme Power units will charges the battery with the power switch in either the on or off position.
2. With the UPS off and unplugged, connect your computer, monitor, and/or any other externally powered equipment into the battery power supplied outlets. **DO NOT plug a laser printer, copier, space heater, vacuum, or other large electrical device into the UPS. The power demands of these devices will overload and possibly damage the UPS.**
3. Plug the UPS into a 2 pole, 3 wire grounded receptacle (AC wall outlet) as rated in the Specifications section of this document. Make sure the wall outlet is protected by a fuse or circuit breaker and does not service equipment with large inrush electrical demands (e.g. refrigerator, copier, etc). **Note: DO NOT** use extension cords or power or surge strips on the input or the output of the UPS.
4. Depress the power switch to turn the UPS on. The power on LED indicator, and charging LED will illuminate after the UPS initial test to indicate the UPS is switched "ON".
5. If an overload is detected, an audible alarm will sound and the UPS will emit one long beep every 2-4 seconds. To correct this, turn the UPS off and unplug at least one piece of equipment from the battery-powered outlets. Wait 10 seconds. Make sure the circuit breaker is depressed and then turn the UPS on.
6. Your UPS is equipped with an auto-charge feature. When the UPS is plugged into an AC wall outlet and there is acceptable AC voltage present, the battery will automatically recharge. Charging is controlled by firmware to rapidly charge units to 15VDC (600/800VA units) and 29VDC (1000/1500VA units). After this threshold is met, the XVTi places a float charge to maintain battery energy, and the charging light will continue to stay on during this time.
7. To maintain optimal battery charge, leave the UPS plugged into an AC wall outlet with the power switch turned on at all times.
8. To store your UPS for an extended period of time, cover and store it with the battery fully charged. Recharge the battery every two months to maintain battery life.

QUICKSTART SOFTWARE INSTALLATION GUIDE

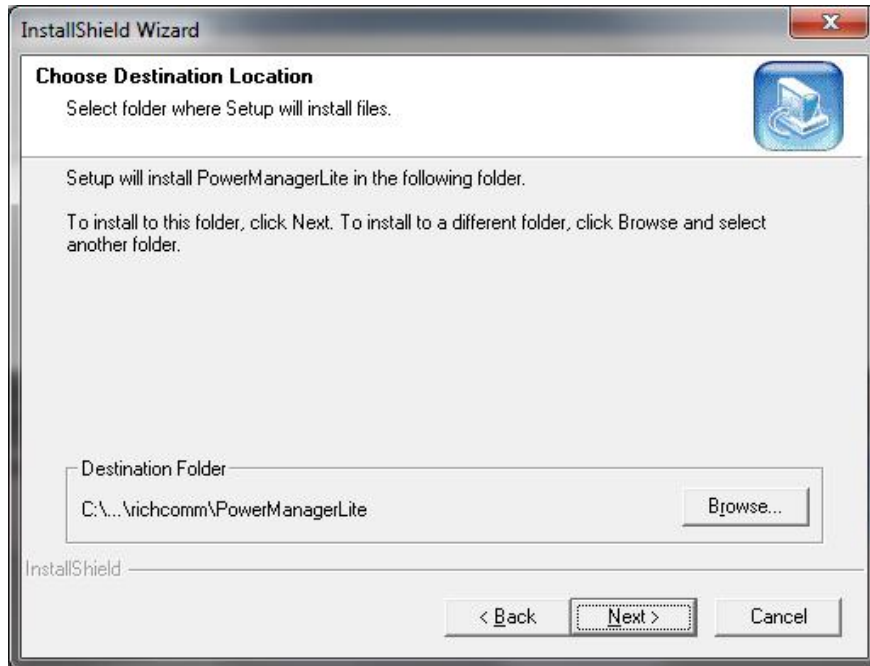
1. Locate the USB Cable inside the box.
2. Insert one end of the USB Cable into the UPS and the other into a USB port on your computer.
3. Insert the Power Manager Lite CD into your computers CD drive.
4. When the software interface requests a serial number, locate and input the serial number from the CD software jacket.
5. Follow the software setup prompts.
6. Quickstart Software Installation Guide.



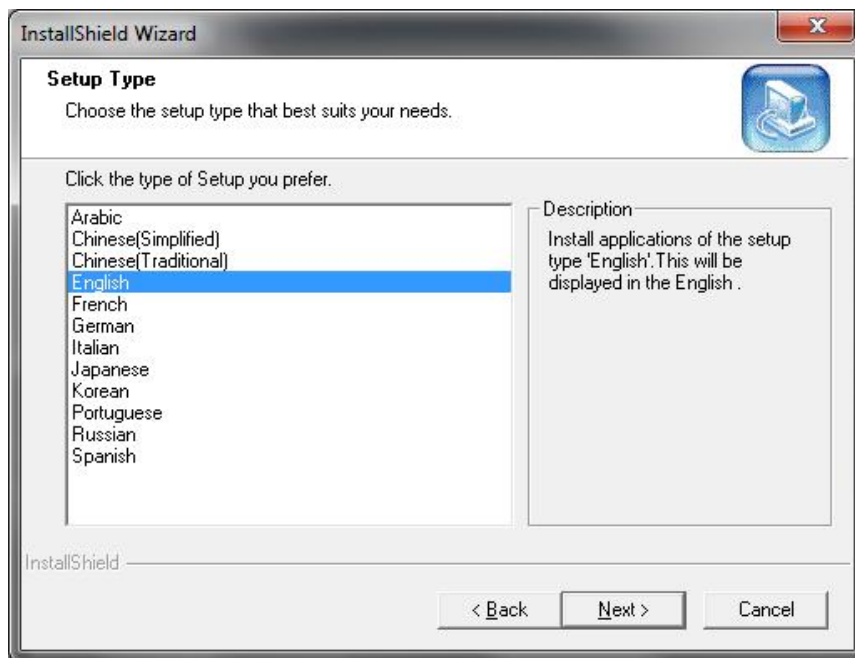


Input user name, company name and serial number into the software interface.

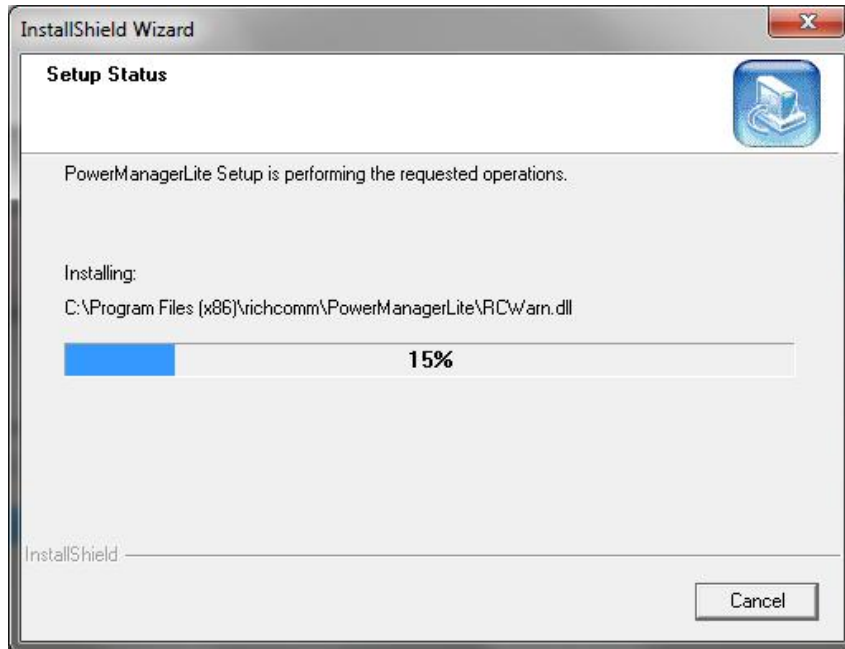
Note: the serial number is on the CD software jacket.



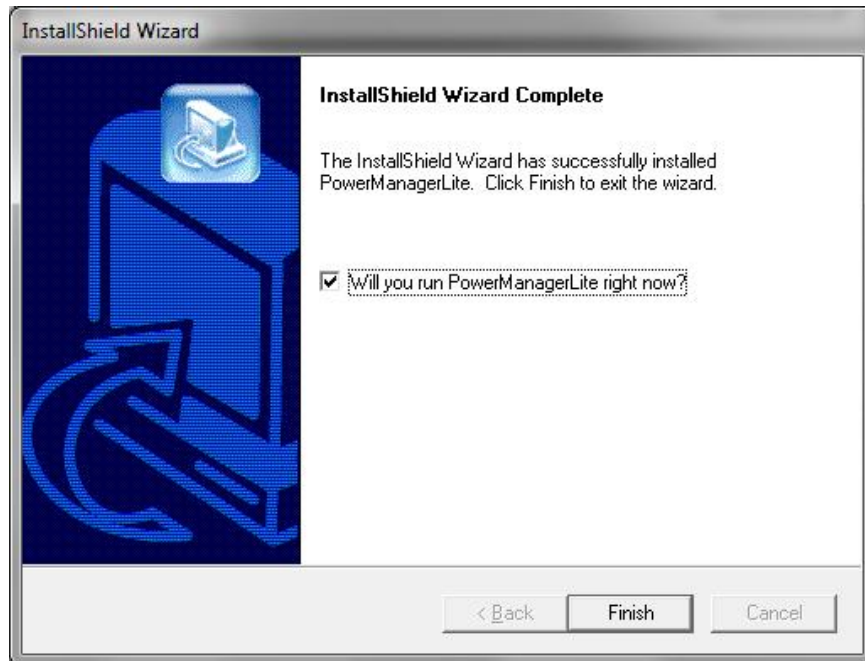
Choose installation location and click "Next"



Choose software language and click "Next"



Software will install automatically



Double click the icon of PowerManager Lite, or click it with the right key of mouse, then click the "start monitor" menu which in the pop-up menu, the status window should be displayed as shown below.



After the UPS switches on, you should see the above screen that will automatically connect your computer to the UPS for monitoring. Choose icons on the left to setup and configure alarm status.

There is a Utility status drawing and a UPS Battery status drawing on the status window.

When Utility failure or UPS battery low, they should be altered.

Below are shown visual indicators available.



AC FAIL



AC NORMAL



BATTERY VOLTAGE LOW



BATTERY NORMAL



UPS CONNECTION



UPS DISCONNECTION

REPLACING THE BATTERY

(QUALIFIED SERVICE PERSONNEL ONLY)

CAUTION! Read and follow the IMPORTANT SAFETY INSTRUCTIONS before servicing the battery. Service the battery under the supervision of Qualified Service Personnel knowledgeable of batteries and their precautions.

CAUTION! Use only the specified type of battery. See your dealer for replacement batteries.

CAUTION! The battery may present risk of electrical shock. Do not dispose of batteries in a fire as it may explode. Follow all local ordinances regarding proper disposal of batteries.

CAUTION! Do not open or mutilate the batteries. Released electrolyte is harmful to skin and eyes and may be toxic.

CAUTION! Although the battery system voltage is only 12VDC and 24VDC, the battery can present a high risk of short circuit current and electrical shock. The short circuit current capability of the battery is sufficient to burn wire or tools very rapidly, producing molten metal. Observe these precautions when replacing the battery:

1. Remove all watches, rings or other metal objects.
2. Only use tools with insulated handles.
3. Do not lay tools or metal parts on top of battery or any terminals.
4. Wear protective eye wear (goggles), rubber gloves and boots.
5. Disconnect the charging source before connecting or disconnecting the battery terminals.
6. Determine if the battery is inadvertently grounded. If inadvertently grounded, remove the source of the ground. Contact with a grounded battery can result in electrical shock! The likelihood of such shock will be reduced if such grounds are removed during installation and maintenance (applicable to a UPS and a remote battery supply not having a grounded circuit).

DEFINITIONS FOR LED INDICATORS

LED 1 (green)	LED 2 (yellow)	LED 3 (red)	Unit Status
ON	*	OFF	On AC Power
OFF	OFF	FLASH	On Battery
*	ON	*	Charge
*	*	ON	Overheat
			Low Battery
			Overload Protection
			Short Circuit

Note: * means any situation



ALARMS

Alarm Indication	Unit Status
Buzzer every 5 sec	DC start
Buzzer every 1 sec	Self test
2 buzzer every 1 sec	Low battery
4 beep every 2.4 sec	Overload
3 buzzer every 1 sec	Overheat
Input is off, long beep, power off at once	Short circuit

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Full-time surge protection outlets stop providing power to equipment	Circuit breaker has tripped due to an overload	Turn the UPS off & unplug at least one piece of equipment. Wait 10 sec, replace the fuse with a fuse of like size & rating, & turn the UPS on
The UPS does not supply expected runtime	Battery not fully charged	Recharge the battery for at least 4 hours
	The battery is defective	Contact Xtreme Power Conversion about replacement of batteries
The UPS will not turn on	The on/off switch is designed to prevent damage by rapidly turning it off and on	Turn the UPS off. Wait 10 sec & then turn the UPS on
	The UPS is not plugged into an AC wall outlet	Connect the UPS to an 220/230V 50Hz AC wall outlet
	The battery is defective	Contact Xtreme Power Conversion about replacement of batteries
	Mechanical problem	Contact Xtreme Power Conversion
The UPS shuts down when there is loss of AC power	The UPS is not providing battery power	Shutdown your load & turn the UPS off. Wait 10 sec & turn the UPS back on. This should reset the UPS

SPECIFICATIONS

230V Model		XVTi-600	XVTi-800	XVTi-1000	XVTi-1500
INPUT	Voltage	175 – 285 V ± 4%			
	Capacity VA (W)	600 VA (360 W)	800 VA (480 W)	1200 VA (600 W)	1440 VA (750 W)
	Frequency	50HZ ± 1Hz			
OUTPUT	Voltage	205 - 255 VAC			
	Waveform	Pure Sine Wave (Typical)			
	Frequency	AC mode-follow utility Battery mode 50 ± 0.5Hz			
	Transfer Time	4ms (Typical)			
	Surge Protection	320 Joules			
	Input Protection	Compliance with IEEE 587			
	Short Circuit	Fuse			
BATTERY	Battery Type	Sealed, Maintenance-free lead acid			
	Battery Qty & Size	(1) 12V 7AH	(1) 12V 9AH	(2) 12V 7AH	(2) 12V 9AH
	Recharge	less than 10 hours to 90% capacity			
	Backup Time	3 min (full load) ≥ 6 min (50% load)			
	Charge Current	1.5A(Max)	1.8A (Max)	2.1A (Max)	3.0A (Max)
PHYSICAL	Dimensions	W x D x H		W x D x H	
	Product Dimensions	94 x 320 x 162 mm (3.7 x 12.6 x 6.4 in)		124 x 382 x 225 mm (4.9 x 15.0 x 8.6 in)	
	Shipping Dimensions	150 x 380 x 250 mm (5.9 x 14.9 x 9.8 in)		200 x 490 x 320 mm (7.9 x 19.3 x 12.6 in)	
	Product Weight	5.8 kg (12.8 lbs)	6.9 kg (15.2 lbs)	10.8 kg (23.8 lbs)	12.5 kg (27.6 lbs)
	Shipping Weight	6.5 kg (14.3 lbs)	7.6 kg (16.8 lbs)	12.3 kg (27.1 lbs)	14.0 kg (30.9 lbs)
	Line Cord	Detachable 1.5 m (5 ft)			
	Receptacles	(3) IEC C13		(4) IEC C13	
	Comm Interface	USB Communications			
	Bezel Color	Brushed Metallic Outer / Black Inner			
	In the box	PowerManager Lite CD, USB cable, Manual			
	ENVIRON- MENT	Operating Temperature	0-40°C		
Humidity		0%-90%			
Audible Noise		<45dB			
Altitude		3500 m (11,500 ft) above sea level			
INDICATOR & ALARMS	AC Mode	Green LED on, Orange LED on, Red LED off, no beep			
	Charging Battery	Orange LED on until 80% charge			
	Battery Mode	Green LED and Orange LED off, Red LED flash, buzzer slow beep			
	Battery Low	Green LED and Orange LED off, Red LED on, buzzer fast beep			
APPROVALS	CE				

SHIPPING LIST

- (1) UPS
- (1) User's and Installation Manual
- (1) Intelligent monitoring software
- (1) USB computer port cable

OBTAINING SERVICE

If the UPS requires Service:

1. Use the TROUBLESHOOTING section in this manual to eliminate obvious causes.
2. Verify there are no circuit breakers tripped.
3. Call your dealer for assistance. If you cannot reach your dealer, or if they cannot resolve the problem, call Xtreme Power Conversion Corp Technical Support at +1.720.292.1217. Technical support inquiries can also be made at support@xpcc.com. Please have the following information available BEFORE calling the Technical Support Department:
 - a. Your name and address.
 - b. The serial number of the unit.
 - c. Where and when the unit was purchased.
 - d. All of the model information about your UPS.
 - e. Any information on the failure, including LED's that may or may not be illuminated.
 - f. A description of the protected equipment, including model numbers if possible.

A technician will ask you for the above information and, if possible, help solve your problem over the phone. In the event that the unit requires factory service, the technician will issue you a Return Material Authorization number (RMA).

If you are returning the UPS to Xtreme Power for service, please follow these procedures:

1. Pack the UPS in its original packaging. If the original packaging is no longer available, ask the Technical Support Technician about obtaining a replacement set of packaging material. It is important to pack the UPS properly in order to avoid damage in transit. Never use Styrofoam beads for a packing material.
2. Include a letter with your name, address, daytime phone number, RMA number, a copy of your original sales receipt, and a brief description of the problem.
3. Mark the RMA number on the outside of all packages. Xtreme Power cannot accept any package without the RMA number marked on the outside of the boxes.
4. Return the UPS by insured, prepaid carrier to the address provided by the Technician.
5. Refer to the Warranty statements in this manual for additional details on what is covered.