

## Value1200ELCD/Value1500ELCD/Value2200ELCD **User's Manual**

K01-C000011-00

## **SAFETY WARNINGS**

#### (SAVE THESE INSTRUCTIONS)

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

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

CAUTION! To reduce the risk of overheating the UPS, do not cover the UPS' cooling vents and avoid exposing the unit to direct sunlight or installing the unit near heat emitting appliances such as space heaters or furnaces.

CAUTION! Do not attach non-computer-related items, such as medical equipment, life-support equipment, microwave ovens, or vacuum cleaners to UPS.

CAUTION! Do not plug the UPS input into its own output.

CAUTION! Do not allow liquids or any foreign object to enter the UPS. Do not place beverages or any other liquid-containing vessels on or near the unit.

**CAUTION!** In the event of an emergency, press the OFF button and disconnect the power cord from the AC power supply to properly disable the UPS.

CAUTION! Do not attach a power strip or surge suppressor to the UPS.

CAUTION! If the UPS is with metal chassis, for safety purpose, grounding is a must during UPS installation in order to reduce leakage current below 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 at the quick connectors of the battery when maintenance or service work inside the UPS is necessary. CAUTION! Internal battery voltage is 12Vdc. Sealed, lead-acid, 6-cell battery.

CAUTION! Servicing of batteries should be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries.

CAUTION! When replacing the batteries, use the same number and type of batteries.

CAUTION! Do not dispose of 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.

CAUTION! Unplug the UPS prior to cleaning and do not use liquid or spray detergent.

CAUTION! A battery can present a risk of electric shock and high short circuit current. The following precaution should be observed before replacing batteries: (1) Remove watches, rings, or other metal objects.(2) Use tools with insulated handles.(3) Wear rubber gloves and boots.(4) Do not lay tools or metal parts on top of batteries. (5) Disconnect charging source prior to connecting or disconnecting batteries terminal.

# **INSTALLING YOUR UPS SYSTEM**

# **UNPACKING**

Inspect the UPS upon receipt. The box should contain the following: (1)UPS Unit $\times$ 1; (2) Power Cord ( $\times$ 3 for IEC models,  $\times$ 1 for others); (3)USB Cable  $\times$ 1; (4)Telephone communication cable x1; (5)User Manual $\times$ 1; (6)Management software Disk $\times$ 1

# HOW TO DETERMINE THE POWER REQUIREMENTS OF YOUR EQUIPMENT

- 1. Insure that the equipment plugged into the battery power-supplied outlets does not exceed the UPS unit's rated capacity (1200VA/720W for Value1200ELCD, 1500VA/900W for Value1500ELCD, 2200VA/1320W for Value2200ELCD). If rated unit capacities are exceeded, an overload condition may occur and cause the UPS unit to shut down or the fuse blow.
- 2. If the power requirements of your equipment are listed in units other than Volt-Amps (VA), convert Watts (W) or Amps (A) into VA by doing the calculations below. Note: The below equation only calculates the maximum amount of VA that the equipment can use, not what is typically used by the equipment at any one time. Users should expect usage requirements to be approximately 60% of below value.

# **TO ESTIMATE POWER REQUIREMENTS**

- Amps (A) x 230 =
- 2. Add the totals up for all pieces of equipment and multiply this total by 0.6 to calculate actual requirements. There are many factors that can affect the amount of power that your computer system will require. The total load that you will be placing on the battery-powered outlets should not exceed 80% of the unit's capacity.

# HARDWARE INSTALLATION GUIDE

Before installation, <u>please</u> read and understand the following instructions:

# **Placement**

The UPS must be installed in a protected environment away from heat- emitting appliances such as a radiator or heat register. Do not install this product where excessive moisture is present.













#### Ventilation

The location should provide adequate air flow around the UPS with five inch minimum clearance on all sides for proper ventilation.

## **Charge the Battery**

Your new UPS may be used immediately upon receipt. However charge loss may occur during shipping and storage. So charging the battery for at least 8 hours is recommended to insure that the battery is fully charged. (To recharge the battery, simply leave the unit plugged into an AC outlet.)

This UPS can be charged even when UPS is not turn on.

## Connect to AC

Connect the UPS to a wall outlet. Please avoid using extension cords and adapter plugs. (To maintain optimal battery charge, leave the UPS plugged in at all

#### Connect the Load

Connect the equipment to your UPS outlets. Items such as copiers, laser printers, vacuums, space heaters, or other large electrical devices SHOULD NOT be connected to the UPS. Please make sure that the total loads of your equipments are less than the maximum total power load of your UPS.

PC

PLUG IN

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## **Connect to Computer:**

Install your software and accessories. To use the software, simply use the enclosed serial interface or USB cable to connect the UPS unit and your computer.

## **BASIC OPERATION**

## FRONT PANEL DESCRIPTION

#### 1. LCD Display

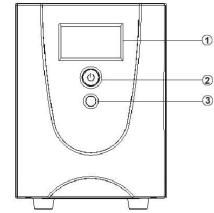
The LCD will display the UPS status including input voltage, output voltage, runtime, percentage of load and battery...etc.

#### 2. Power Switch

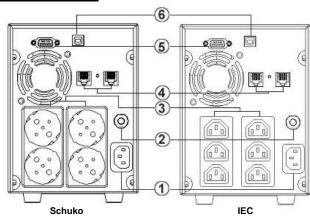
Press the power switch to turn the UPS ON or OFF.

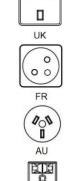
## **LCD Function Selected Switch**

The switch can be used to select the LCD display contents Including input/output voltage and estimated run time, etc.



## REAR PANEL DESCRIPTION





Connect to utility power through the input power cord

# Input Circuit Breaker

The circuit breaker provides optimal overload protection.

The UPS provides outlets for connected equipment to insure temporary uninterrupted operation during a power failure and against surges and spikes.

\*Note: 6 outlet types available including: Schuko, UK, French, Australian, IEC and ASEAN

# **Communication Protection Ports**

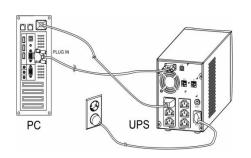
Communication protection ports will protect any standard modern, fax, telephone line, or network

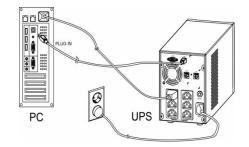
# Serial Port to PC

This port allows connection and communicates from the DB-9 serial on the computer to the UPS unit. The UPS communicates its status to the PowerPanel® Personal Edition software. This interface is also compatible with the LIPS service provided by Windows 98, Windows ME, Windows NT, Windows 2000, Windows XP, Windows Server 2003, Windows Vista.

# 6. USB Port to PC

This port allows connection and communication from the USB port on the computer to the UPS unit. The UPS communicates its status to the PowerPanel® Personal Edition software. This interface is also compatible with the LIPS service provided by Windows 98, Windows ME, Windows NT, Windows 2000, Windows XP, Windows Server 2003, Windows Vista. NOTE: Only one of these two ports can be used as communication and control of the UPS unit at one time.





## **FUNCTIONAL TEST**

#### AC Mode

The UPS delivers power to the loads derived from the utility and maintains proper battery charge. It also regulates the output voltage to within a narrow range.

## **On-Battery Mode**

The UPS operates on battery when the line voltage or frequency has fallen outside the limits. Local users are alerted to this mode of operation by visual and audible indicators. The UPS provides power to the load from the battery and through its inverter and the output voltage and frequency of the UPS are regulated within a narrow range

#### 1. Switch On

Press the power switch on the front panel then the status LCD will light up.

#### 2 Switch Off

Press again the power switch, the status LCD on the front panel will go off.

#### 3. Cold Start / Start on Battery:

This UPS can be turned on even when AC is not present. Press the power switch on the front panel then the status LCD will light up.

## **ROUTINE MAINTENANCE AND STORAGE**

## **ROUTINE MAINTENANCE**

- 1. Use dry soft clothes to clean the front panel and plastic parts. Do not use any detergent that contains alcoholic ingredient.
- 2. The expected lifetime of the battery is around 3 years. Improper operation and harsh environment will reduce the actual lifetime.
- 3. Unplug the UPS from power inlet if the UPS will not operate for long period of time.

## **STORAGE**

- 1. First turn off your UPS and disconnect its power cord from the wall outlet. Disconnect all cables connected the UPS to avoid battery drain.
- 2. The UPS should be stored in a cool dry location.
- 3. Make sure the battery is fully charged before the UPS is stored.
- 4. For extended storage in moderate climates, the battery should be charged for 12 hours every 3 months by plugging the power cord into the wall receptacle and turning on the main switch. Repeat it every 2 months in high temperature locations.

## **TROUBLE SHOOTING**

Problem	Possible Cause	Solution				
The UPS does not perform	Batteries are not fully charged.	Recharge the battery by leaving the UPS plugged in.				
expected runtime.	Battery is slightly worn out.	Contact CyberPower Systems Technical Support.				
	The unit is not connected to an AC outlet.	The unit must be connected to a 220-240V 50/60Hz outlet.				
The UPS will not turn on.	The battery is worn out.	Contact CyberPower Systems Technical Support.				
	Mechanical problem.	Contact CyberPower Systems Technical Support.				
Outlets do not	Circuit breaker is tripped due to overload	Turn the UPS off and unplug at least one piece connected equipment. Unplug the power cord of the UPS then press the circuit breaker knob.				
provide power to equipment	Batteries are discharged	Allow the unit to recharge for at least 4 hours.				
	Unit has been damaged by a surge or spike.	Contact CyberPower Systems Technical Support.				
PowerPanel® Personal Edition is inactive (all icons are gray).	The serial/USB cable is not connected.	Connect the serial/USB cable to the UPS unit and an open serial port on the back of the computer. You must use the cable that came with the unit.				
	The serial/USB cable is connected to the wrong port.	Try another serial/USB port of your computer.				
	The unit is not providing battery power.	Shutdown your computer and turn the UPS off. Wait 10 seconds and turn the UPS back on. This should reset the unit.				
	The serial cable is not the cable that was provided with the unit.	You must use the cable included with the unit for the software.				

 $\label{thm:condition} \mbox{Visit } \underline{\mbox{www.cpsww.com}} \mbox{ ,to find more trouble shooting information under support session.}$ 

CyberPower warrants to you, the original purchaser, that CyberPower UPS will be free from defects in design, assembly, materials and workmanship for two years (battery is only one year) from the date of original purchase. Any warranty services, please contact your local dealers or distributors.

## **TECHNICAL SPECIFICATIONS**

Model	Value1200ELCD	Value1500ELCD	Value2200ELCD							
Capacity (VA)	1200VA	1500VA	2200VA							
Capacity (Watts)	720W	900W	1320W							
Input										
Frequency Range		47~63 Hz								
Output										
On Battery Output	Simulated Sine Ways at 220\/ac 1/79/									
Voltage	Simulated Sine Wave at 230Vac +/-7%									
On Battery Output	50/60 Hz 1/ 40/									
Frequency	50/60 Hz +/-1%									
Overload Protection	On Utility: Circuit	Breaker, On Battery: Intern	nal Current Limiting							
Physical			<b>-</b>							
Total # of UPS	(C) for IEC models ((4) for	on Cabrilea IIII Francis A	tualian ACEAN mai dala							
Receptacles	(6) for IEC models / (4) for	or Schuko · UK · French · A	ustralian · ASEAN models							
Maximum Dimensions	180m	$nm(H) \times 140mm(W) \times 326r$	mm(D)							
Weight	11.2 kg	13.2 kg	14.5 kg							
Battery										
Sealed Maintenance										
Free Lead Acid	12V / 7Ah x2	12V / 8.5Ah x2	12V / 9Ah x2							
Battery										
Typical Recharge		0 Hours								
Time	8 Hours									
<b>Warning Diagnostics</b>										
Indicators	Power On, UPS Status Display, Capacity Display, Digital Value Display									
Audible Alarms	On Battery, Low Battery, Overload									
Environmental										
Operating		0°C to 40°C								
Temperature		0-0 10 40-0								
Operating Relative	0.45.000/									
Humidity		0 to 90%								
Communication										
PowerPanel <sup>®</sup>										
Personal Edition	Windows 7/Vista/XP/2000/Server 2003/2008									
Software										
Management										
Auto-Charger		Yes								
Auto-Restart	Yes									
USB		Yes								

## **DEFINITIONS FOR ILLUMINATED LCD INDICATORS**

LCD Indication



# Line mode

Select SW Press	UPS Status Display				Capacity Display		Digital Value Display				
	Ĉ	(IIII)	Ø	*	Load Cap.	Battery Cap.	Input Voltage	Output Voltage	Run Time	% of Load	% of B
Initial	V	Х		Х	V	Х		V			
1st	V	Х		Х	V	Х			V		
2nd	V	Х		Х	V	Х				V	
3rd	V	Х	-	Х	X	V					V
4th	V	Х	-	Х	V	X	V				
5th(Return)	V	Х	-	Х	V	X		V			
Press >3sec (Sound Disable)	٧	Х	V	Х							
Press >3sec again (Sound Enable)	٧	x	х	Х	-						-
(Overload)	V	Х		V							-

<sup>&</sup>quot;V" : Illuminated, "X" : Not Illuminated, "--" : Either

# Battery mode

Select SW Press	UPS Status Display				Capacity Display		Digital Value Display				
	Ą	(IIII)	Ø	*	Load Cap.	Battery Cap.	Input Voltage	Output Voltage	Run Time	% of Load	% of Batt.
Initial	Х	V		Χ	Χ	V		V			
1st	Х	V		Х	X	V			V		
2nd	Х	V		Х	V	Х				V	
3rd	Х	V	-	Х	X	V					V
4th	Х	V	-	Х	X	V	V				
5th(Return)	Х	V		Х	X	V		V			
Press >3sec (Sound Disable)	Х	V	V	Х	-						
Press >3sec again (Sound Enable)	х	>	х	Х	-						
(Overload)	Х	V		V							

 $<sup>\</sup>text{``V"}: Illuminated, \qquad \text{``X"}: Not Illuminated, \qquad \text{``--"}: Either$ 

Visit <u>www.cpsww.com</u> for more product information and the nearest CyberPower local contact for your region.

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