

# **USER'S MANUAL**



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*Uninterruptible Power Supply*  
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## INTRODUCTION

A Uninterruptible Power Supply is an advanced line interactive uninterruptible power system that is designed to protect your equipment like computer and telecommunication systems backup when power off. Under normal power condition, the UPS filters out all small fluctuations. During electrical power failure the unit immediately switches to its internal battery for continued power feed to the equipment it is linked to, thus allowing the system to be shutdown correctly which, for example on a computer would be prevent files from being open and result corruption.

## EASY OPERATION GUIDELINES

1. Plug the power cord from the UPS into a outlet. Paying attention to satisfy voltage, frequency of the input power that must be suitable for the UPS.

## CAUTION

1. Charge the battery for at least 8 hours before using the UPS. Battery will self-charge if only the UPS is connected.
2. Turn the main switch on (Press & hold for 2 seconds).
3. Plug the power cord of the system to be protected (e.g. computer, monitor, etc.) into the outlet of back panel and turn on the power.
4. Do not connect laser printer to the UPS. This is because the laser printers voltage load from these devices is very high and may cause a higher drain from the UPS than expected!
5. Ensure that the UPS is neither exposed to extremes of temperatures nor is placed in direct sunlight when in operation.

## IMPORTANT

The new UPS must be charged for at least 8 hours before use

1. Please make sure the UPS has no visible damage.
2. Plug the computer power cord into UPS outlet.

## OPERATION

1. Turn on the UPS from the front panel at least 2 seconds.
2. After the UPS has been switched on, the green light on.
3. If you wish to test UPS, you may turn off the input voltage to the UPS system. With the devices attached, the buzzer alarm on the UPS red light will on, which means the UPS is now on reserve power from its internal battery.
4. After completing the above test, please plug back the power cord of the UPS into the socket.

## TROUBLES SHOOTING

The following table provides a list of trouble shooting tips:

PROBLEMS	POSSIBLE CAUSES	SOLUTIONS
LED not glowing	Input power fault	Check input power
	Time pressing key to open UPS is too short	Pressing "OPEN" must be over 3 seconds
Without utility power indicator, alarm beeps every 6 seconds	Power failed	Check input power
Red LED light is on, beeping constantly	Overload / battery voltage is too low	Reduced load/charge UPS/call for service
Battery discharge is less than the standard	Battery charge not enough	After recharging 8 hours continuously, then test discharge time. If the trouble can't be solved yet, call for service.
	Battery fault	
	Charge fault	

In the event of UPS failure, please check the following and then contact you sales representatives:

1. Whether the UPS power cord is properly connected.
2. Make sure the input voltage is compatible with this UPS system.

When you call for services, please provide the following information:

1. The UPS type, series no of UPS.
2. The data of problem appearance.
3. Explanation of the problem.

## LED INDICATOR AND BUZZER WARNING

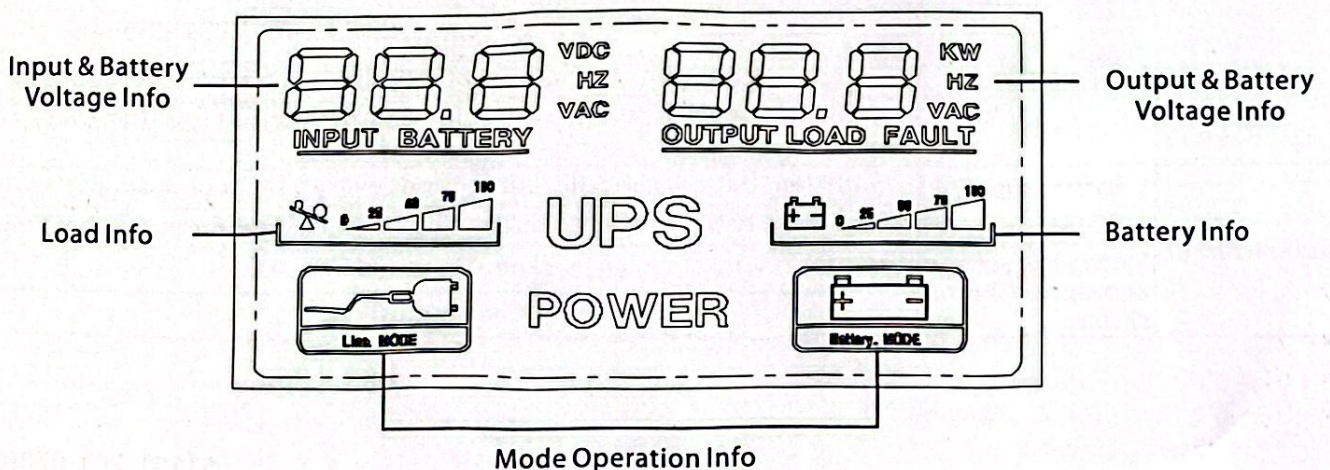
Green Light 

Red Light 

Yellow Light 

	Indicator Light		Buzzer Sound	Machine Status	Charging	Description
1	Green Light	Off	None	Power Off	None	UPS has stopped running
	Red Light	Off				
	Yellow Light	Off				
2	Green Light	Off	None	Standby	Normal	Mains power is within range, UPS is charging the battery
	Red Light	Off				
	Yellow Light	On, breathing every 20 seconds				
3	Green Light	Off	None	Standby	Fully Charged	Mains power is within range, UPS battery is fully charged
	Red Light	Off				
	Yellow Light	Steady On				
4	Green Light	Steady On	None	Normal	Normal	Mains power is within range, UPS is charging the battery
	Red Light	Off				
	Yellow Light	On, breathing every 20 seconds				
5	Green Light	Steady On	None	Normal	Fully Charged	Mains power is within range, UPS battery is fully charged
	Red Light	Off				
	Yellow Light	Steady On				
6	Green Light	Off	Rapid Beeping	Abnormal	Normal	Mains power is within range, output overload
	Red Light	Flashing				
	Yellow Light	Steady On or breathing every 20 seconds				
7	Green Light	Off	Beep every 6 seconds	Normal	Stopped	Mains power is interrupted, UPS is powered by battery
	Red Light	Flashing				
	Yellow Light	Off				
8	Green Light	Off	Rapid Beeping	Abnormal	Stopped	Low battery voltage or output overload when UPS is powered by battery
	Red Light	Flashing				
	Yellow Light	Off				
9	Green Light	Off	Continuous Beeping	Abnormal	Stopped	Output short circuit when UPS is powered by battery
	Red Light	Steady On				
	Yellow Light	Off				

## LCD panel



## LCD FAULT DISPLAY

Error Code Shows After UPS Power Off

Err	Phenomena	Code
Err	Short Circuit or Wrong Phase Setting	105
	Battery Low	134
	Overload	102
	Full load running time is approaching, UPS is about to shut down	123
	Inverter Output Low	104

## LCD DISPLAYS ON NORMAL MODE

Display interface is one page only, digital tube shows the input voltage and output voltage on the left and right sides. It will show the input voltage and output voltage all the time in normal. If the ups fault , voltage parameters are displayed for 7s, then alarm information is displayed for 3s.

Left digital tube	Alarm Cause	Right digital tube
ALA	Battery Voltage Too Low	27
	Battery Voltage Too High	28
	Overload	31
	Load time is enough to shut down	32
	Standard Model UPS With Loading 2 hours or Countdown of plan Shutdown time	33

In the event of UPS failure, please check the following and then contact your sales representatives:

1. Whether the UPS power cord is properly connected.
2. Whether the output fuse is blown.
3. Make sure the input voltage is compatible with this UPS system.

When you call for services, please provide the following information:

1. The UPS type, series no. of UPS.
2. The date of problem appearance.
3. Explanation of the problem.

## SPECIFICATIONS

MODEL		500VA-2000VA
Input	Voltage	220Vac±25%,(5% adjustable)
	Frequency	50Hz or 60Hz±6%
Output	Frequency	50Hz or 60Hz±1%
	Voltage	220Vac(±5% Adjustable)
	Transfer time	<10msec(10 msec on system check)
	Wave form	sine wave under municipal supply, square wave under battery operation
Protection	Short circuit	Fuse for overload & short circuit protection
	Load input	Fuse & current limited & cut off
Battery	Backup time	15-35 mins depend on the load
	Type	Sealed Lead-Acid battery
	Protection	Auto-inspection, discharge protection and battery fault caution.
	Battery	Normally battery is charged once three months; It isn't less than 6 hours once a time.
Audible Alarm	Battery supply power	Sufficient battery capacity, buzzer rings every 6 seconds red light flash.
		Insufficient battery capacity, buzzer rings every 1 second, red light flashing.
	Battery low voltage or overload/short circuit	Buzzer keep rings, red light on
		Continuously