

# USER MANUAL



**DIRECT**  
***XP UPS 400/600***



**Uninterruptible Power Supply**

**2nd Edition, 2004**

28-2MAX000005



## Important Safety Instructions Save These Instructions



- To replace the batteries by qualified service personnel. Use the same number and type of sealed lead-acid batteries.

### **WARNING!!!**

- Refer servicing to qualified service personnel only.
- To reduce the risk of fire or electric shock, install in a temperature and humidity controlled indoor area free of conductive contaminants.
- Risk of Electric Shock. Battery circuit is not isolated from AC input, hazardous voltage may exist between battery terminals and ground. Testing before touching.



## Runtime table

<b>Typical Runtimes in Minutes</b>	
<b>XP 400VA Battery Runtimes with Computer System</b>	<b>XP 600VA Battery Runtimes with Computer System</b>
 <b>5-18 Minutes</b>	 <b>7-30 Minutes</b>



## Important Safety Instructions Save These Instruction

### CAUTION!!

Please read the following information carefully and save this manual for future reference. Disregard of these safety notes may endanger life or health, as well as the function of the equipment and the safety of your data.

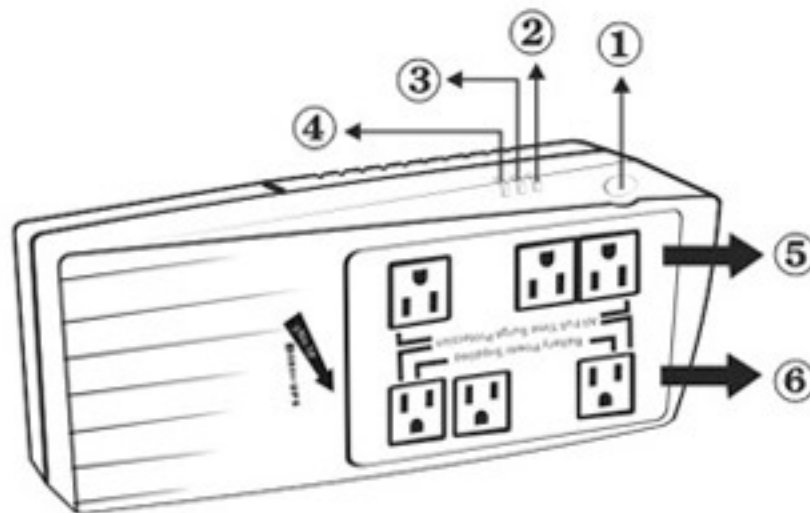
- Risk of Electric Shock Heatsinks are live. Disconnect unit before servicing.
- Risk of Electric Shock. This unit receives power from more than one source. Disconnection of AC sources and the DC source is required to deenergize this unit before servicing.
- Risk of Electric Shock. Hazardous live parts inside this unit are energized from the battery supply even when the input AC power is disconnected.
- Risk of Electric Shock. Do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
- To reduce the risk of fire, replace only with same type of fuse.
- The sum of the leakage current of the UPS and the connected equipment should not exceed 3.5mA.
- Do not dispose of batteries in a fire as they may explode.
- Do not open or mutilate the battery or batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.
- A battery can present a risk of electric shock and high short circuit current. The following precaution should be observed when working on batteries:
  - 1) Remove watches, rings or other metal objects from the handles.
  - 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.



## System Description

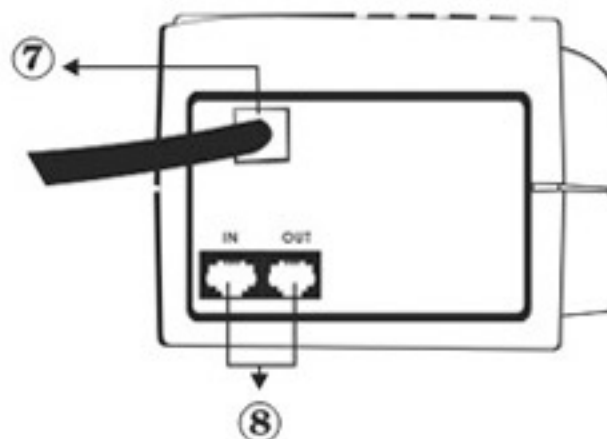
### Top

1. Power On/Off Switch
2. Green LED : AC Mode
3. Yellow LED : Battery Mode
4. Red LED: Fault LED
5. Surge protected only receptacles
6. Battery power supplied receptacles



### Side

7. AC Input
8. Modem/Phone Line Surge Protection





# Specification

MODEL		XP 400	XP 600
CAPACITY	VA/W	400VA/200W	600VA/300W
	INPUT	Voltage 120VAC or 220/230/240VAC	
OUTPUT (Inverter Mode)	Frequency	50/60 Hz	
	Phase	Single	
	Voltage Range	120VAC or 220/230/240VAC±10%	
TRANSFER TIME	Frequency	50Hz or 60Hz±1Hz	
	Waveform	Modified Sinwave	
BATTERY	Typical	2-6ms	
	Battery type	Sealed lead acid battery, maintenance free	
	Recharging Time	8 hours up to 90%	
DISPLAY	Backup Time (at a PC load with monitor)	10 minutes	20 minutes
	LED	Power on, Backup, Battery Defect, Site Wiring Fault	
AUDIBLE ALARM	Battery Mode	Sounding every 5 seconds	
	Low Battery	Sounding every second	
	Overload	Sounding every 0.5 second	
	Fault	Continuously Sounding	
PROTECTION	Full Protection	Overload, Deep Discharge, Overcharge, Short Circuit Protection RJ-11 Modem/Telephone Protection	
	PHYSICAL	Dimension (DxWxH) 300x125x85(mm)	
ENVIRONMENT	Net Weight	3.2kgs	3.5kgs
	Outlets	6 NEMA5-15R x 6 (3 for surge protection, 3 for battery backup)	
	Operation Temperature	0-40°C	
INTERFACE (Option)	Operation Humidity	0-90%	
	Smart RS-232	Support windows family, Linux, Sun Solaris, IBM-Aix, HP-UX, Compaq True64, FreeBSD, UnxiWare and MAC	
	USB Port	Windows 98/2000/ME/XP	





# Trouble Shooting

If the UPS failed to operate properly, please review the following points first.

Symptom	Possible Cause	Remedy
Green LED is lighting, but audible alarm is heard intermittently.	1. UPS is not connected properly to the mains. 2. Line breaker protected.	1. Connect the UPS according to the installation guide. 2. Press the breaker.
UPS is functioning but audible alarm is heard continuously.	Overload of the UPS.	Verify that the load matches the UPS capacity specified in the spec.
UPS shuts down after a few seconds and circuit breaker protected.	UPS output is short-circuited, possibly due to defective computer.	Disconnect your computer from the UPS and then press the breaker.