

PLUTO

Line Interactive UPS with Stabilizer

Specification

Model	PT800	PT1000	PT1050	PT1200	PT1500
Power Rate (VA/W)	800/480	1000/600	1050/630	1200/720	1500/900
Input Voltage	220 Vac -34%, +32% (145-290 Vac)				
Output Voltage (AVR)	220 Vac ±10% (198-242 Vac)				
Output Voltage (Backup)	220 Vac ±3% (213.4-226.6 Vac)				
Battery Capacity	SLA 12V 9.4Ah x 1		SLA 12V 9.4Ah x 2		
Backup Time	15-40min (Depended on Load)				
Charging Time	Batt. Cap.90% in 3-6 Hours				
Protection System	Over / Under Voltage, Over Load, Short Circuit Protection Low Battery Shutdown Fault and Battery Replacement				
Transfer Time	4-6 msec				
LED Display	Normal, Backup, Overload, Low Battery, Battery Replacement				
Audible Alarm	Backup mode, Low battery, Overload, Fault				
Control Program	USB port & Cable with PowerManager software				
AC Line Surge Protector	1,000,000W in 100µs / 160 Joules in 2 ms				
Tel / ADSL Surge TVSS	Tel / Fax / ADSL / RJ11 / RJ45				
Standard Certification	ISO9001/14001, TIS.1291 1-2553, 2-2553, 3-2555, CE : IEC62040				
Environment	-45°C / RH 0-90% Non condensing				
Dimensions (WxHxD) mm.	100x145x305		123x155x335		
Weight kg.	6.2	7.3	10	11	12

OPERATION AND TEST THE UPS

Test UPS on battery back-up, switch off utility supply and observe 'backup indicator' lights. Also your PC should continue to function normally.

1. Self-testing while Turn ON

Before turning on the UPS, the red/yellow/green led will be bright twice by turns. then the UPS will be ready for operation.

2. Silence Function

In Battery Mode, shortly press the switch will enable or disable the buzzer. But when UPS is low battery or overload, the buzzer can not be silenced.

3. Overload Protection

When UPS is overloaded while operating, which is not solved by the user in time, it will cut off the output automatically after short time.

4. Autorun DC Start & AC Start

In DC mode, UPS discharges till battery run out and cut off, UPS autorun when AC recover.

5. Low Battery shutdown

When the battery is about to be exhausted, UPS will shut down automatically to protect battery's life.

6. Turn Off UPS

- AC Normal UPS will cut off the output and goes to AC standby mode by pressing the switch.
- Backup Press the switch, the UPS will be turned off after a long beep.

7. Manual Self-testing

User need to check the UPS ready for operation, Press the botton two time quickly then UPS self test, UPS transfer AC to Backup and Backup to AC.

TROUBLE SHOOTING

The trouble shooting chart covers most of the difficulties that you may encounter under normal working conditions. If the UPS fails to operate properly, please review the following steps before calling the service center.

- Is the UPS plugged into a correct working outlet?
- Is the line voltage within the rating specified?
- Is the Fuse or Breaker / Circuit Protector on back panel open?
- UPS has used long time > 2 Year that is short backup time or fault.

Please submit the following information when you call for service.

- Model No. & Serial No.
- Date of problem.
- Full description of problem UPS.

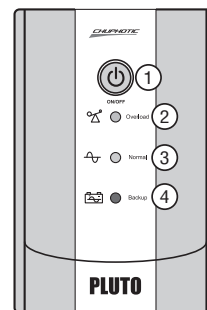
TROUBLE SHOOTING CHART

SYMPTOMS	POSSIBLE CAUSES	ACTIONS TO TAKE
UPS can not be turned ON	UPS is not connecting to AC and overloaded	Please connect to AC and reduce the load
	The input Fuse is burn or Breaker is off	Replace the Fuse or Reset the breaker, remove some load and check if the load is short-circuit or faulty
	AC Input voltage is too low	Please check the AC Input Voltage
	The UPS is failure	Please send to the agency to repair
Red LED continuous bright with a beep every 8 seconds	UPS suddenly turns to Battery mode in spite of utility line present	Save the data promptly and Shut down the operating system
Red LED continuous bright with a beep every 1 seconds	Backup time less than 1 minute (low battery)	Close load and recharge immediately
	Battery problem	Replace the new battery
Back-up time less than specified	Use more load over	Recharge the battery for atleast 12 hours and retest the backup time
	Battery is not fully charged	
	Use UPS > 2 year	Replace the new battery
	Charging unit fault	Please send to the agency to repair

Front Panel



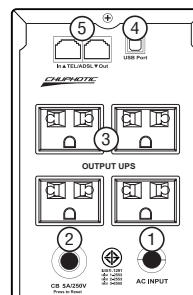
PT800/PT1000



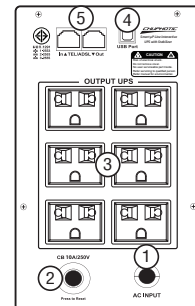
PT1050/PT1200/PT1500

1. Power 2. Overload 3. Normal 4. Backup

Rear Panel



PT800/PT1000



PT1050/PT1200/PT1500

1. AC Input 2. Auto reset CB 3. Outlets 4. USB Port 5. Tel/Fax Surge

THIS MANUAL CONTAINS IMPORTANT SAFETY INSTRUCTIONS. KEEP THIS MANUAL HANDY FOR FUTURE REFERENCE.

Inspect items inside box:

- User's Manual & Warranty Card
- UPS & Packaging Material
- Mains Power Cord
- Program & Communication(Option)

CAUTION :

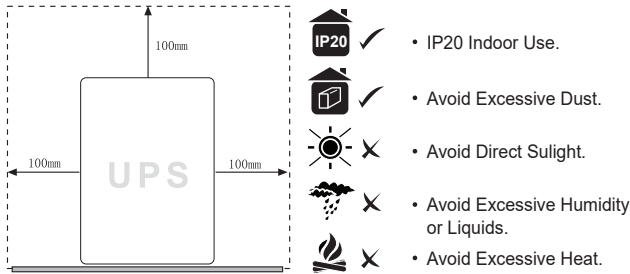


BEFORE INSTALLATION & OPERATION

Examine the packing carton for damage. Notify your dealer immediately if damage is observed. Store the packing in a safe place for possible future trans-shipment of the UPS.

PLACE LOCATION THE UPS

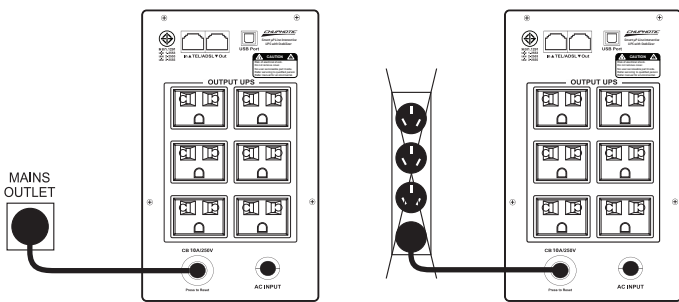
Place location the UPS on a sturdy, dry surface in a wellventilated area away from direct sources of heat. Leave at least 100mm clearance all around the UPS to provide adequate ventilation.



The UPS is intended for indoor use only. Although your UPS is very rugged, its internal components are not sealed from the environment. Kindly note the following.

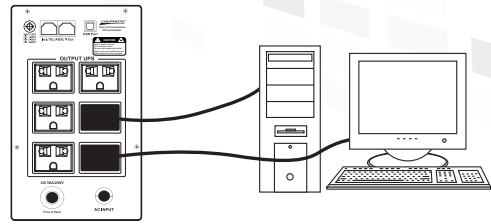
CONNECT UPS TO POWER LINE

Connect the Power Cord, to a verified grounded 3-wire receptacle. Do not power the UPS using a surge suppressor or power strip. The utility power Turn ON.

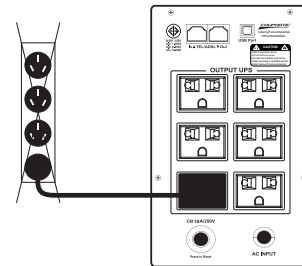


CONNECT EQUIPMENT TO UPS

Connect the Power Cord, to a verified grounded 3-wire receptacle. Do not power the UPS using a surge suppressor or power strip. The utility power Turn ON.



- Do not connect a surge suppressor, power strip, or extension cord to the UPS outlet.



Enable the UPS by turning on the Power ON/OFF switch, which is situated on the front panel. The UPS is now ready to use. Switch on your equipment and you are ready to function.

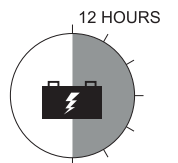
CAUTION AND WARNING



- Product contains voltages, which are potentially hazardous.
- Qualified service personnel should perform all repairs.
- Do not try to open the cover and to service the system yourself, on user serviceable parts inside.
- Refer servicing to qualified service personnel only and warranty Condition
- Product has its own internal energy source (battery).
- Outlet receptacles may be Hot even when the product is not connected to an AC supply.
- In case of fire risky, please change the Fuse with the same kind and same rate or Reset breaker.
- Product is intended for indoor use only.
- Kindly note to avoid excessive heat, dust, humidity

BATTERY MAINTENANCE / BATTERY CHARGING

AFTER SHIPMENT FROM THE FACTORY THE BATTERY NEEDS RECHARGING. IF NOT USED FOR A LONG PERIOD OF TIME, THE BATTERY WILL START SELF-DISCHARGING, WHICH MAY RESULT IN A SHORT SERVICE LIFE OF THE BATTERY OR MAY EVEN CAUSE DAMAGE TO IT DURING WARRANTY PERIOD. CARE SHOULD ALSO BE TAKEN TO AVOID EXCESSIVE TEMPERATURE AROUND THE UPS, WHICH COULD ALSO RESULT IN REDUCING SERVICE LIFE OF THE BATTERY. TO ACHIEVE MAXIMUM SERVICE LIFE FROM THE BATTERY THE ABOVE INSTRUCTIONS SHOULD BE FOLLOWED.



UPS INDICATORS AND CONTROLS



ON / OFF SWITCH

- Turn ON this button to supply power to the UPS outlets. To switch off power to the UPS outlets
- Turn OFF the switch. This switch is situated on the front panel of the UPS.



BACKUP INDICATOR

(Red LED continuous bright)
 The buzzer beeps every 8 seconds. The battery is powering the UPS outlets. The expected runtime for a typical personal computer (PC) is about 10 to 40 minutes.



LOW BATTERY INDICATION

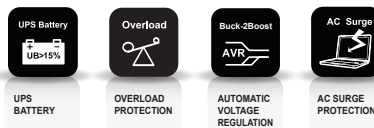
(Red LED continuous bright)
 The buzzer beeps fast whenever the battery is near the end of its runtime. Promptly save your data and exit all applications and shutdown the operating system.



AC NORMAL INDICATOR

(Green LED continuous)
 The UPS is supplying conditioned utility power to its outlets.

FEATURE



OVERLOAD INDICATION

The Yellow LED flashes, with continuous beeping. UPS protects itself at this time. Please move some load.