PCE®

UPS SYSTEMS

YUPPIE Series

Uninterruptible Power Supply

USER'S MANUAL

For Models

Yuppie-300, Yuppie-500, Yuppie-700, Yuppie-850, Yuppie-1000

Table of Contents

IMPORTANT SAFETY INSTRUCTIONS
SAVE THESE INSTRUCTIONS

- **WARNING - (SAVE THESE INSTRUCTIONS):** This manual contains important instructions that should be followed during installation and maintenance of the UPS and batteries.

- **WARNING - (Controlled Environment):** This unit is intended for installation in a temperature-controlled indoors area free of conductive elements.

- **CAUTION - Risk of electric shock -** Do not remove cover. No user serviceable parts are inside. Please delegate servicing to qualified service personnel.

- **CAUTION -** Do not dispose of batteries in a fire; the batteries may explode.

- **CAUTION -** Do not open or mutilate the battery; the released electrolyte is harmful to the skin and eyes.

- **CAUTION -** Do not dispose of batteries in a fire; the batteries may explode.Batteries present the risk of electric shock and high short circuit current. The following precautions should be observed when working with batteries:

    - Remove watches, rings or other metal objects.
    - Use tools with insulated handles.
    - Wear rubber gloves and boots.
    - Do not lay tools or metal parts on top of batteries.
    - Disconnect charging source prior to connecting or disconnecting battery terminals.

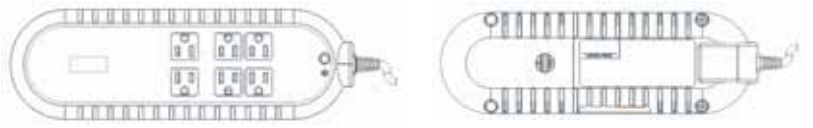
- Servicing of batteries should be performed or supervised by personnel knowledgeable in batteries and their required precautions. Please keep unauthorized personnel away from the batteries.

- When replacing battery, replace with same type.

- Do not connect any additional batteries by yourself.

1) PRODUCT OVERVIEW

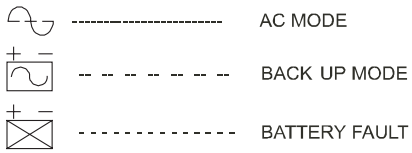
The following is a diagram showing the top and rear views of the Yuppie UPS. Please note that the type and number of receptacles varies by model and by country.



TOP VIEW REAR VIEW

1.1 “Power On” Indicator

The “Power On” indicator illuminates when utility power is normal. The indicator also illuminates once every 4 seconds under back up mode. A rapid flash (once every 1 sec) means that the inner battery should be replaced.
Attention: The internal battery has to be replaced when rapid flash occurs under AC mode.

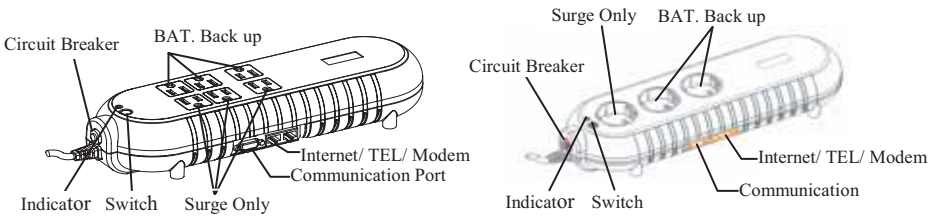


1.2 Outlets Design for AC Adapters

The design of the outlet receptacles on the Yuppie UPS allows for two AC power adapter blocks to be plugged into the UPS without blocking adjacent outlets.

1.3 Battery Power-Supplied Outlets

The Yuppie UPS provides instantaneous back up power and full-time bypass protection to your equipment. It ensures temporary uninterrupted operation of your equipment during a power failure.



1.4 Full-time Bypass Protection Outlets

The Yuppie UPS also provides full-time bypass protection to your equipment. It prevents surges from traveling from the noisy output to your protected peripherals.

1.5 Power Button (ON/OFF/TEST/SILENCE)

The Yuppie UPS automatically turns on when connected to the utility power. After the UPS is turned on, it conducts a self-test and enters Normal mode. Press the power button for 1 second at any time under Normal mode to start the self-test function manually. The Silence function can be enabled or disabled by pressing the power button for 1 second under back up mode.
In addition, the Power button can be used as the master On/Off switch for your equipment by leaving the equipment switched on while connected to the UPS. To turn off the UPS and all the connected equipment, please press the Power button until the buzzer stops (about 2 seconds).

1.6 Circuit Breaker (Fuse)

The Circuit Breaker serves as an overload and fault protection. It is a critical component of the Yuppie's advanced surge protection mechanism.

1.7 Communication Protection Ports (Optional)

The Yuppie's exclusive communication protection ports protect any standard modem, fax, PBX System, or 10Base-T Ethernet network devices.

1.8 RS-232 or USB Interface Port (Optional)

Certain models of the Yuppie UPS are equipped with an RS-232 or USB interface port as well as the PowerTrack™ software to enable UPS control and monitoring via an attached PC. PowerTrack™ support Windows 98/Me/NT/XP/2000/2003, Linux, Unix, Novell Netware, and other operating systems.

2) INSTALLATION

2.1 Recharge the battery

The Yuppie UPS is ready for use immediately upon removal from packaging. The battery is fully charged before being shipped from the factory. However, the user is strongly advised to recharge the battery for at least four hours before using the Yuppie UPS for the first time since the battery may be discharged during shipping or long storage periods. To recharge the battery, simply plug the Yuppie into an AC outlet and switch it on.

2.2 Connect the loads

Plug your primary equipment (e.g. computer, monitor and critical data storage devices) to the Battery back up outlets. Plug your non-critical peripheral equipment (e.g. printer, scanner, fax, or audio devices) to the Full-time Bypass Protection Outlets. Do not plug a laser printer to the UPS, as its power demand is much higher than typical peripherals and may cause the circuit breaker (or fuse) to trip.

2.3 Connect the telephone

If you wish to protect a fax or a modem, connect the telephone cable from the wall outlet to the "IN" jack. Connect the telephone cable (provided) from the "OUT" jack to the fax or modem.
To protect a10/100Base-T network interface, use UTP or STP cables to connect the UPS to the network card (via the 'OUT" socket) and to the main Ethernet switch (via the 'IN' socket).

2.4 Connect to the utility power

Plug the Yuppie UPS to a 2-pole, 3-wire grounding receptacle. Make sure the battery supply outlets of the UPS do not service equipment requiring heavy electricity (e.g. refrigerator, air conditioner, copier, etc.).
Attention: When using extension cords, make sure the total rating of the loads is suitable.

2.5 UPS self-test

The Yuppie UPS will conduct a self-test every time it is switched on. At this point, you may switch on your equipment while the self-test is being performed. The self-test function is disabled when the UPS is experiencing an overload.

2.6 Battery auto-charging

The internal battery is automatically charged by the internal charger when utility power is connected to the unit.

2.7 Auto restart feature

The UPS shuts down when the battery voltage gets too low and wakes up automatically when utility power is back to normal.

2.8 Overload protection

AC Mode: If the load exceeds 120% of nominal rating, the buzzer emits a continuous beep.
back up Mode: The UPS automatically shuts down if overload exceeds 120% of nominal rating for 10 seconds.

2.9 Optimal battery status

To maintain an optimal battery status, leave the UPS plugged in and switched on at all times.

2.10 “No Load Shutdown” feature

The UPS is equipped with a “No Load Shutdown” feature. If no loads are connected to the UPS, the unit will automatically shut down after one hour.

3) OPERATION

3.1 Simple test

It is recommended that the user performs a simulation test when using the UPS for the first time or when adding additional equipment: switch on the UPS and wait for the power indicator to light up, and then simply unplug the UPS to simulate a utility failure event.

3.2 Check the power requirements of your equipment

3.2.1. Make sure that the total power of your equipment does not exceed the capacity of your Yuppie UPS.

3.2.2. Also, make sure that the equipment plugged into the Battery Power-Supplied Outlets does not require total power exceeding the capacity of the UPS. Otherwise, an overload condition may occur causing the circuit breaker to trip. If the power units of your equipment is given in Watts rather than VA (Volt-Amperes convert the requirement power into VA by performing the calculation below:
___ Watt (W) x 1.81 = ___ VA (This formula is valid for the Yuppie UPS only. It is not a general conversion formula from Watts to VA.)

3.3 Limited rating power of UPS

When a utility power failure occurs, the battery power outlets supply power to your equipment from the battery, and the buzzer would beep once every 4 seconds. Be sure that your equipment is rated within the limited rating power.

3.4 Buzzer, LED, and Status Table

Buzzer	Power-on LED (GREEN)	
OFF	ON	
OFF	ON: 0.5 S OFF: 0.5 S	
ON	AC MODE ON BACKUP MODE ON: 1 S OFF: 4 S	
ON: 1 S OFF: 4 S	ON: 1 S OFF: 4 S	
ON: 1 S OFF: 1 S	ON: 1 S OFF: 1 S	
ON: 0.5 S OFF: 0.5 S	ON	CHARGER ABNORMAL

4) SOFTWARE AND COMPUTER INTERFACE (OPTIONAL)

Note: This section only applies to the Yuppie models that contain a built-in RS-232 or USB communication port.

Power Monitoring Software

The PowerTrack™ software included with the UPS utilizes a standard RS-232 (serial) or USB port in your PC to perform UPS monitoring functions and provide an orderly computer shutdown in the event of a power failure. Moreover, PowerTrack™ provides you with a visual display of all the diagnostic parameters, such as Voltage, Frequency, Battery Level and so on. The software is available for Windows 98/ME/NT/2000/2003/XP, Novell Netware, Linux, and others. Please call your dealer for more information on solutions tailored for your operating system.

Interface Kits

The Yuppie UPS comes with an interface kit that includes the special interface cable required to connect the UPS to the computer. The interface cable must be connected to REMOTE PORT on the UPS. At the PC end, the interface cable must be connected to the serial port (COM1 or COM2) or a USB port, depending on your UPS model. For more detailed instructions, please refer to the READ.ME file on the PowerTrack™ software installation disk.

Communication Port Features

The communication port on the Yuppie UPS provides the following features:
The port may be connected to a host computer to allow the computer to monitor the status of the UPS and control its operation in some cases. Its major functions include the following:

- Broadcasting a warning to the PC when the power fails
- Closing any open files and gracefully shutting down the computer before the battery is exhausted
- Shutting down the UPS

Some computers may not have their serial port properly set up. Please make sure that the serial port is properly installed and configured before attempting to communicate with the UPS.

Some operating systems may need special UPS monitoring software other than Powertrack™. Please contact your dealer for the details on the various interface kits and software solutions.

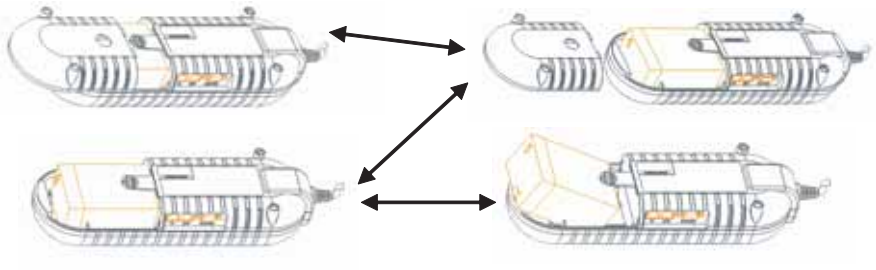
5) BATTERY MAINTENANCE AND REPLACEMENT

5.1 Battery Maintenance

For preventive maintenance, please keep the area around the UPS clean and dust-free. Also, please keep the UPS at an ambient temperature of 25°C (77°F). It is recommended that the batteries charge for 24 hours after long storage periods.

5.2 Battery replacement

The battery should be replaced within 30 to 90 days if the Power-on indicator starts flashing. To verify that the batteries need to be replaced, conduct a self-test by pressing Power button. If the Power-on indicator continues to flash, please replace the inner battery according to the following procedure.



BATTERY REPLACEMENT PROCEDURE

5.3 Storage

To stow away the UPS, cover it and store it with the battery fully charged. During extended storage periods, connect the utility power to recharge the battery every three months to ensure battery life does not degrade.

6) APPENDIX A TROUBLESHOOTING

Problems	Possible Reasons	Solutions
Full-time Bypass Protection Outlets stop providing power to the equipment.	Circuit breaker button popped up as a result of overload.	Unplug at least one piece of equipment from the Full-time Surge Protection Outlets. Switch off UPS, wait 5 seconds, reset the circuit breaker (press down breaker button), then switch on UPS.
UPS doesn't perform to its expected run time.	Battery undercharged or depleted due to frequent power outages.	Recharge the battery by leaving the UPS plugged in and switched on.
	The power required by your equipment slightly exceeds the capacity of the UPS.	Unplug at least one piece of equipment from the UPS outlets.
	The battery is worn-out.	Consider replacing the battery.
UPS cannot be turned on.	UPS is designed to prevent damage from flipping.	Switch UPS off, wait for 5 seconds, then switch UPS on.
	The battery is worn-out.	Replace the battery.
	Mechanical problem.	Contact your sales representative.

7) TECHNICAL SPECIFICATIONS - YUPPIE Series

Model		YUPPIE-300	YUPPIE-500	YUPPIE-700	YUPPIE-850	YUPPIE-1000
Output Power		300VA	500VA	700VA	850VA	1000VA
Input	Voltage	100V +20%/-15%, 110V/115V +/- 20%, 120V +/-15% 220V/230V +/-25%, 240V +15%/-20%				
	Frequency	50/60Hz +/- 10% (auto sensing)				
Output	Voltage (on battery)	Simulated sinewave at 100V/110V/115V/120V/220V/230V/240V +/-5%				
	Frequency (on battery)	50/60Hz +/- 0.3Hz				
Protection & Filtering	Spike protection	480 Joules, 2ms	600 Joules, 2ms		800 Joules, 2ms	
	Unit Input	Circuit breaker or fuse for overload & short circuit protection				
	Overload Protection	auto shutdown if overload > 110% at 1sec	auto shutdown if overload > 105% at 20sec, 120% at 10sec, 130% at 3sec			
	Transfer Time	2/4 milliseconds, including detection time				
	Short Circuit	UPS output cut off immediately				
	10 Base-T Cable Port	Network (UTP or STP) compatible jacks*				
Alarm	Battery Back up	Slow beeping sound every 4 sec				
	Battery Low	Rapid beeping sound every sec.				
	Charge abnormal	Rapid beeping sound every sec.				
	Overload	Continuous beeping sound				
Battery	Type	Sealed, maintenance-free lead acid batteries with 3-5 years typical lifetime				
	LED Indicator	No	Battery Check			
	Typical Recharge Time (to 90% full capacity)	4 hours	6 hours			
	Protection	Automatic self-test, over discharge protection, short circuit protection by fuse				
	Back up Time (a PC with 15" monitor)	4 - 6min	6 - 8min			18 - 20min
	(a PC with 15" LCD monitor)	8 - 12min	13 - 15min			38 - 40min
Interface	Dry contact*	Sends battery low & power failure signals and receives shutdown signal from computer				
	RS-232/USB*	Detect Battery Low, Schedule UPS On/Off, AC input/output power status display				
Physical	No. of sockets	Style A, C UPS x 3, Bypass x 3, Style E,F,G,I UPS x 2 Bypass x 1				
	Dimensions W x D x H mm (inch)	100 x 315 x 68 (3.9" x 12.4" x 2.7")	110 x 330 x 82 (4.33" x 13" x 3.23")		120 x 410 x 85 (4.7" x 16.1" x 3.35")	
	Net Weight kg (lbs)	1.9 (4.2)	2.58 (5.67)	2.6 (5.7)	3.6 (7.9)	3.7 (8.1)
Environment	Ambient Operation	3,500 meters max, elevation. 0-95% humidity (Non condensing water), 0-40°C				
	Audible Noise	<40dBA (1 meter from surface)				
Standards & Certifications	Safety	EN 50091-1-1/EN 60950 (RD), IEC 60950, TUV GC-Mark				
	Electromagnetic compatibility	EN 50091-2, EN 50022/B, IEC 62040-2, IEC 61000-3-2, IEC 61000-3-3				
	EMC (EMS/EMI)	IEC 61000-4-2/-3/-4/				
	Design, production & services	ISO 9001				
	Environment	ISO 14001 certified company				
	Marking & Certifications	CE,TUV/GS,UL,cUL, C-Tick				

* Optional feature

Service & Technical Notes

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

WWW.PCEUPS.COM

Please visit our website at **www.pceups.com** for updates and additional product information.

North America
PCE UPS SYSTEMS Inc.
4805 Colombo Cres.
Mississauga, Ontario
Canada

Europe
PCE – Pronergy SA
5 Rue Ampere
91380, Chilly Mazarin
France

Middle East
PCE UPS SYSTEMS FZCO
LOB 16 #236, Jebel Ali Free Zone
P.O.Box 261840, Dubai
UAE

Ref: UMYUPPIE0310ENQ207