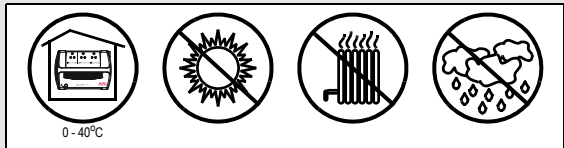# 1 Inspect/Place

Ensure the following items are inside the box:

- User's Manual
- Safety Manual
- Warranty Registration Card

Notify the reseller if damage is found. Please fill out the Warranty Registration Card, or fill out an on-line form at www.apc.com/in, to obtain warranty coverage.

Place the UPS:

- Provide 5 cm clearance at the top and sides for adequate airflow around the UPS.
- Avoid direct sunlight.
- Avoid excessive heat.
- Avoid excessive humidity or liquids.
- Avoid excessive dust.

0 - 40°C

2 Connect Equipment

Plug the Back-UPS ES power cord directly into a wall outlet; not a surge protector or power strip.
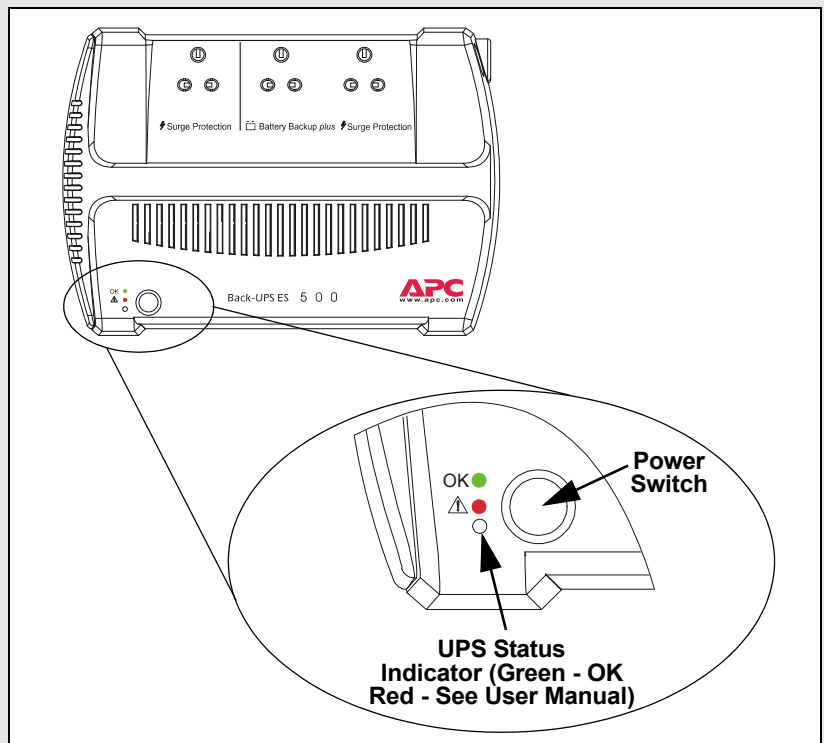
Battery Back-up *plus* ⚡ Surge Protection

These outlets are powered whenever the Back-UPS ES is switched ON. During a power cut or other utility problems (low and high voltages), these outlets will be powered for a limited time by the Back-UPS ES. Plug your computer and monitor into these outlets.

⚡ Surge Protection Only

This outlet provides full-time protection from surges even if the Back-UPS ES is switched OFF. Plug your printer, fax machine, scanner, or other peripheral that does not need battery power into this outlet.

3 Power On

Press the ON/OFF switch to power the unit ON.

A single short beep and the green "Power On" indicator confirms that Back-UPS ES is on and ready to provide protection.

The Back-UPS ES should charge for at least 16 hours to ensure sufficient runtime. The unit is being charged whenever it is connected to utility power.

Power Switch

UPS Status Indicator (Green - OK Red - See User Manual)

Status Indications

The Back-UPS ES indicates operating status using a combination of visual and audible indicators.

Status LED	Audible Indication	Status	Alarm Terminates When
Green	None	**On Line** - UPS is supplying conditioned AC power to the connected equipment.	n/a
Amber	4 beeps every 43 seconds	**On Battery** - UPS is supplying battery power to the equipment connected to the Battery outlets.	The UPS transfers back to On Line operation, or when the UPS is turned off.
Amber	Constant "beep..beep ..beep.."	**Low Battery Warning** - UPS is supplying battery power to the equipment connected to the Battery outlets and the battery is near exhaustion.	The UPS transfers back to On Line operation, or when the UPS is turned off.
Amber, flashing		**Start-up Self-Test** -UPS software is running a diagnostic test.	The UPS is turned off with the power switch or when the test is completed.
Red	Beeps for 1 minute every 5 hours.	**Replace Battery** - occurs when the battery fails self-test.	The UPS is turned off with the power switch or the battery is replaced.
Red	Constant "eeeeeee..." tone.	**Overloaded** - Occurs when one or more of the battery powered outlets is overloaded.	The UPS is turned off with the power switch, or the equipment connected to the overloaded outlet(s) is disconnected.

See the Troubleshooting section for additional assistance.

Order Replacement Battery

Replace with an APC qualified battery. Replacement batteries can be ordered from APC Global Services. Have your Back-UPS ES model number available when ordering. Your model number can be found on the bottom of the unit.

Transfer Voltage and Sensitivity Adjustment

In situations where the Back UPS or connected equipments appears to sensitive to input voltage, It may be necessary to adjust the transfer voltage. This is very simple task requiring use of top panel Pushbutton. To adjust the transfer voltage proceed as follows:

1. Plug the Back UPS into the utility power source. The back UPS will be in a standby mode(no indicators lit).

2. Press the Top panel pushbutton fully inwards for 10 seconds. The LED will start glowing in a cyclic order GREEN- AMBER-RED. Indicating going in to programming mode.

3. The Back UPS will then indicate the current sensitivity as shown in following table.

Indicators Flashing	Sensitivity Setting	Input Voltage Range (For utility operation)	Use when
Green Flashing	LOW	156 - 290	Input voltage is extremely low or high. Not recommended for computer loads
Amber Flashing	MEDIUM (Factory default)	160- 280	Back UPS frequently goes On Battery
Red Flashing	High	166 - 270	Connected equipment is sensitive to voltage fluctuations (Recommended)

4. To select the low Sensitivity setting, Press the push button until the LED turns to GREEN Flashing

5. To select the Medium sensitivity setting. Press the push button until the LED turns to AMBER Flashing

6. To select the High sensitivity setting Press the Push button until the LED turns to RED flashing.

7. The unit will exit from programming mode automatically after the sensitivity selection is done. The LED will start glowing in cyclic order GREEN-AMBER-RED twice indicating the Exit from the programming mode.

Troubleshooting

Use the table below to solve minor Back-UPS ES installation or operation problems. Consult APC Online Technical Support or call APC Technical Support for assistance with problems that cannot be resolved using the table below:

Problem	Probable Cause	Solution
Back-UPS ES will not turn on.	Battery is disconnected and utility power is not available at the wall outlet.	Connect the battery (see *Battery Replacement*) and ensure power is available at the wall outlet.
No power available at the Surge Protection outlet.	Surge Protection outlet has been overloaded. Utility power not available at the wall outlet.	Move equipment plugged into Surge Protection outlet to Battery Backup *plus* Surge Protection outet. Ensure that the fuse or circuit breaker for the outlet is not tripped, and that the wall switch controlling the outlet (if any) is in the ON position.
Connected equipment loses power.	Equipment is connected to the "Surge Protection" outlet. The Back-UPS ES is overloaded. The PowerChute Personal Edition software has performed a shutdown due to a power failure. The Back-UPS ES has exhausted its available battery power. Connected equipment does not accept the step approximated sine waveform the Back-UPS ES. The Back-UPS ES may require service.	Ensure that the equipment you want to stay powered during a power failure is plugged into the "Battery Backup *plus* Surge Protection" outlets and NOT the "Surge Protection" outlet. Make sure the equipment plugged into the outlets of the unit are not overloading the capacity of the unit. Try disconnecting some of the equipment and see if the problem continues. The Back-UPS ES is operating normally. The Back-UPS ES can only operate on battery power for a limited amount of time. The unit will eventually turn off when the available battery power has been used. Allow the unit to recharge for 5 hours before continuing use of the unit. The output waveform is designed for computers and computer-related equipment. It is not designed for use with motor-type equipment. Contact APC Technical Support for further troubleshooting.
The Status indicator is lit (amber) and the Back-UPS ES is beeping four times every 43 seconds. The Status indicator	The Back-UPS ES is operating on battery.	The Back-UPS ES is operating normally and using battery power. Once On Battery, you should save your current work, power down your equipment, and turn the unit OFF. Once normal power is restored, you may turn the unit back ON and power your equipment.
The Status indicator flashes (amber) once per second and the Back-UPS ES beeps once per second at the same time.	Battery capacity is low (about 2 minutes of use remaining).	The Back-UPS ES is about to shut off due to a low battery charge condition! When the unit beeps once every seond, the battery has about 2 minutes of power remaining. Immediately power down your computer and turn the unit OFF. When normal power returns, the unit will recharge the battery.
Inadequate runtime.	The battery is not fully charged. Battery is near the end of useful life.	Allow the unit to charge by leaving it plugged into the wall at least 16 hours. As a battery ages, the amount of runtime available will decrease. You can replace the battery by ordering one at www.apc.com/in. Batteries also age prematurely if the Back-UPS ES is placed near excessive heat.

Specifications

Model		BE500Y-IN
Input	On-Line Input Voltage Range (Default settings)	160 - 280 Vac
	Frequency	50/60 Hz +/-3 Hz Autosensing
Output	Battery Backup with Surge Capacity (2 outlets)	500 VA / 300 W
	Surge Only Capacity (1 outlet)	7 Amps (including UPS output)
	Voltage - On Battery	230 V AC $\pm$ 8% (step-approximated sine wave)
	Transfer Time	5 ms typical, 10 ms maximum
Protection and Filter	AC Surge Protection	Full time, 320 joules
	EMI/RFI Filter	Full time
	AC Input	Resettable circuit breaker
Battery	Type	Sealed, maintenance-free lead acid
	Typical Life	3 - 6 years depending on the number of discharge cycles and environmental temperature
Physical	Net Weight	13.66 lb. (6.2 kg.)
	Size (UPS only)	4.15" (H) x 11.41" (W) x 8.0" (D) (10.56 x 29.0 x 20.34 cm)
	Operating Temperature	+32°F to 104°F (0°C to 40°C)
	Storage Temperature	+5°F to 113°F (-15°C to 45°C)
	Operating Relative Humidity	0 to 95% non-condensing
	Operating Elevation	0 to 10,000 ft (0 to 3,000m)

Battery Replacement

The Back-UPS ES is shipped with battery connected. Typical battery life is 3 to 6 years. Battery replacement is a safe procedure isolated from electrical hazards. Do not replace the battery when the UPS is On Battery (amber indicator is lit). NOTE: Small sparks may occur during battery connection. This is normal.

Warranty

The standard warranty is 2 years from the date of purchase. APC's standard procedure is to replace the original unit with a factory reconditioned unit.

APC wil ship the replacement unit once the defective unit is received by the repair department.

Service

1. Consult the Troubleshooting section to eliminate common problems.

2. Verify the battery is connected (see *Battery Replacement*) and the Circuit Breaker is not tripped (see *Troubleshooting* section).

If you still have problems or questions, please contact APC via the internet or at one of the phone numbers listed below.

3. Before contacting APC, please be sure to record the date purchased, UPS model, and serial number (on bottom of unit).

4. Be prepared to troubleshoot the problem over the telephone with a Technical Support Representative. If this is not successful, the representative will issue a Return Material Authorization Number (RMA#) and a shipping address.

Pack the unit in its original packaging. If the original packaging is not available, ask APC Technical Support about obtaining a new set. Pack the unit properly to avoid damage in transit. Never use foam beads for packaging. Damage sustained in transit is not covered under the warranty (insuring the package for full value is recommended).

5. Write the RMA# on the outside of the package.

6. Return the unit by insured carrier to the address given to you by the APC Technical Support representative.
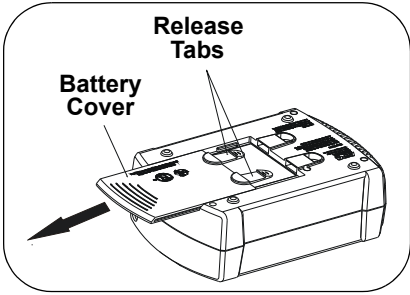
APC Contact Information

APC Corporate Office (India)
27 Lavelle Road, Bangalore 560 001
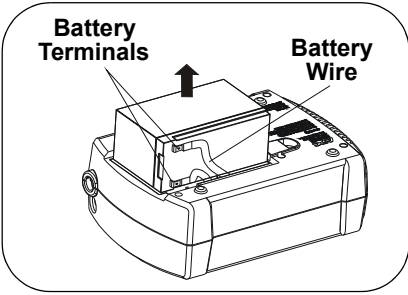Phone: 080 - 3987 2000
www.apc.com/in

APC Corporate Office (USA)
132 Fairgrounds Rd.
West Kingstown, RI 02892, USA
Phone: 401-789-0204
www.apc.com/in

Toll Free Helplines.................MTNL: 1800 4254 877, 1800 4254 272,
All other operators: 39022272 (add STD code of the city you're calling from when using your mobile)
Customer Service Email.......indiainfo@apcc.com
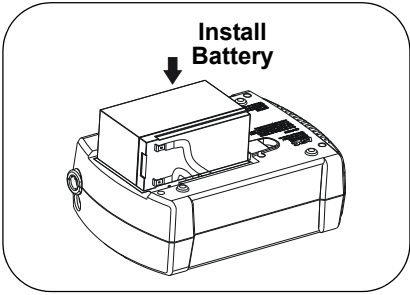Technical Support Email......isbtech@apcc.com

1. Turn the Back-UPS over. Press down on the two release tabs. Slide the battery cover completely off of the unit.

2. Lift the battery out of the UPS. Note the wire color at each terminal. Disconnect the two wires from the battery terminals.

3. Connect the two wires to the replacement battery and install the battery into the unit.

4. Slide the battery cover on the unit until it locks in place.

Release Tabs
Battery Cover

Battery Terminals
Battery Wire

Install Battery

Install Battery Cover