

### 1 Inspection/Placement

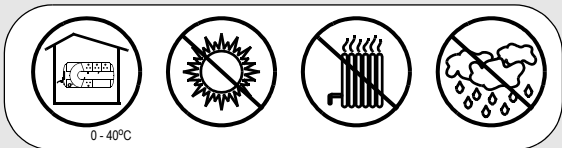
Ensure the following items are inside the box:

- Operation Manual
- USB Cable
- Safety Manual
- Warranty Registration Card
- PowerChute® Personal Edition Software CD-ROM

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/ru, to obtain warranty coverage.

Place the UPS as follows:

- 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.



### 3 Operation and Software Installation

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 initially charge for at least 16 hours to ensure sufficient runtime. The unit is being charged whenever it is connected to utility power, whether the unit is turned ON or OFF.

#### Install PowerChute® Personal Edition Software

Place the PowerChute Personal Edition Software CD into your computer and follow the installation instructions on the screen.

The Back-UPS ES provides automatic voltage regulation (AVR) by compensating for lower input power. This is done automatically, there is no visual or audio indication of this action.

### 2 Connect Equipment

Plug the Back-UPS ES power cord directly into a wall outlet; not a surge protector or power strip.

#### Connect Universal Serial Bus (USB) Cable

The supplied USB cable and software provide automatic file saving and shutdown of the operating system in the case of a sustained power cut.

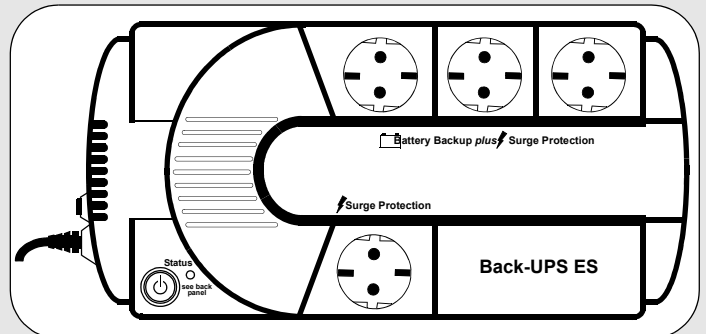
Connect the USB cable to the Back-UPS ES Data Port. Connect the other end of the cable to computer's USB port. When installed the software will automatically find the USB Port of your computer.

If your computer has a serial port, instead of a USB port, you can request a serial cable from APC for use in connecting to the Back-UPS ES 525. Contact the office closest to you (see APC Contact Information below). A serial cable will be sent to you at no charge.

#### Battery Back-up plus Surge Protection

These outlets are powered whenever the Back-UPS ES is switched ON. During a power outage 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, monitor, and one other device into these outlets.

**Caution:** The plug on the supply cord is the disconnect device for this product. The socket-outlet that you plug into shall be located near the equipment and shall be easily accessible. The socket-outlet must be a grounding type.

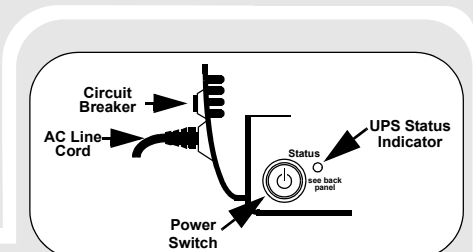
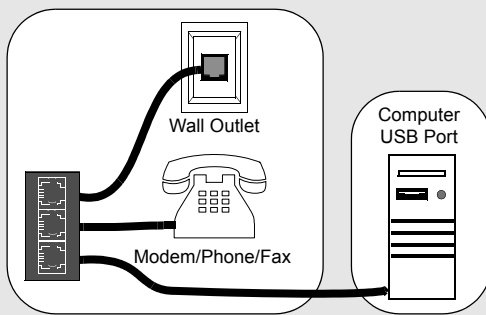


#### Surge Protection

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.

#### Connect FAX/Modem/Phone

Back-UPS ES protects a single line (2-wire) fax, modem or phone from surges when it is connected through the Back-UPS ES as shown.

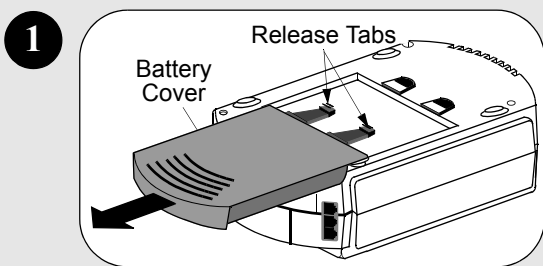


### Battery Replacement

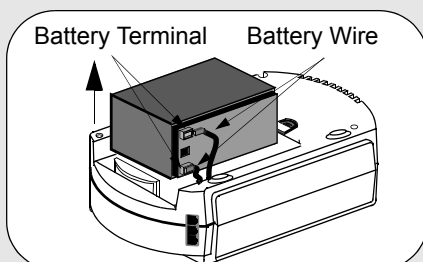
The Back-UPS ES is shipped with battery connected. Typical battery life is 3 to 6 years. Battery replacement is a safe procedure isolated from electrical hazards. Do not replace the battery when the UPS is On Battery (amber indicator is lit).

NOTE: Small sparks may occur during battery connection. This is normal.

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.



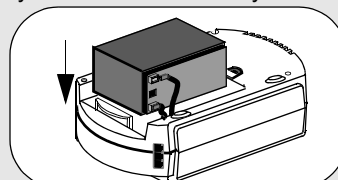
### Status Indications

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

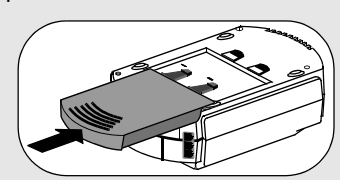
Status LED	Audible Indication	Status	Alarm Terminates When
Green	None	<b>On Line</b> - UPS is supplying conditioned AC power to the connected equipment.	n/a
Amber	4 beeps every 30 seconds	<b>On Battery</b> - UPS is supplying battery power to the equipment connected to the Battery outlets.	The UPS transfers back to On Line operation, or when the UPS is turned off.
Amber	Rapid beeping	<b>Low Battery Warning</b> - 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	None	<b>Start-up Self-Test</b> - 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.	<b>Replace Battery</b> - occurs when the battery fails self-test.	The UPS is turned off with the power switch or the battery is replaced.
Red	Constant tone	<b>Overloaded</b> - 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.
Alternating Amber and Green	None	<b>Shutdown</b> - Occurs when the UPS is operating On Battery and has shutdown the applications running on the connected computer and has shutdown the computer.	n/a
Green and Amber, flashing	Beeps every 2 seconds.	Unit is online and battery is disconnected.	UPS power switch is turned OFF or when the battery is connected.

See the Troubleshooting section for additional assistance.

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.



# 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 <i>Battery Replacement</i> ) 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 <i>plus</i> Surge Protection outlet.  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 stepapproximated 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 <i>plus</i> 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 30 seconds.	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 second, 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 <a href="http://www.apc.com/ru">www.apc.com/ru</a> . Batteries also age prematurely if the Back-UPS ES is placed near excessive heat.

## Specifications

Model		BE525_RS
Input	Voltage	230 V AC Nominal
	Frequency	47 - 53 Hz
	Brownout Transfer	160 V AC, typical
	Over-voltage Transfer	280 V AC, typical
Output	Battery Backup with Surge Capacity (3 outlets)	525 VA / 300 W
	Surge Only Capacity (1 outlet)	6 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, 150 joules
	Telephone Surge Protection	Single line (2-wire)
	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	7.3 kg (16 lb)
	Size (UPS only)	12 x 28.5 x 19.7 cm (4.72" (H) x 11.2" (W) x 7.8" (D))
	Operating Temperature	0°C to 40°C (+32°F to 104°F)
	Storage Temperature	-15°C to 45°C (+5°F to 113°F)
	Operating Relative Humidity	0 to 95% non-condensing
	Operating Elevation	0 to 10,000 ft (0 to 3,000m)

## 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.

## 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. Customers who must have the original unit back due to assigned asset tags and set depreciation schedules must declare such a need at first contact with APC Technical Support. APC will ship the replacement unit once the defective unit is received by the repair department, or cross-ship upon the provision of a valid credit card number. The customer pays for shipping to APC. APC pays ground freight transportation costs back to the customer.

## 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](http://www.apc.com/in)

APC Corporate Office (USA)  
132 Fairgrounds Rd.  
West Kingstown, RI 02892, USA  
Phone: 401-789-0204  
[www.apc.com/in](http://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](mailto:indiainfo@apcc.com)