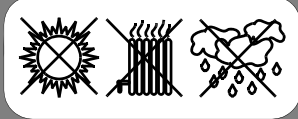


by Schneider Electric

1 Place and Power On

1 Place the Back-UPS ES to avoid:

- Direct sunlight
- Excessive heat
- Excessive moisture

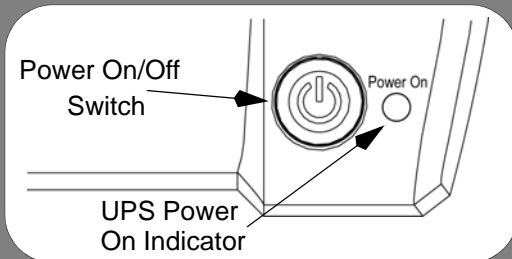


2 Plug the Back-UPS ES 500 power cord directly into a wall outlet; not into a surge protector or power strip.

3 Press the On / Off button to power the unit on. The indicator next to the On/Off button will illuminate green to confirm the Back-UPS ES is on and ready to provide protection.

Note: The Back-UPS ES must charge for 24 hours to ensure full runtime. The unit charges whenever it is connected to utility power and is switched on.

IMPORTANT: It is recommended that you DO NOT turn on your monitor until the UPS has been powered on and has completed self-test (approximately 16 seconds).



3 Back-UPS ES Status Indications and Specifications

Status	Visual Indication	Audible Indication	Alarm Terminates When
On Line - UPS is supplying conditioned utility power to the load	Power On LED - ON	None	Not Applicable
On Battery - UPS is supplying battery power to the load connected to the Battery outlets	Power On LED - ON (off during beep)	Beeping 4 times every 30 seconds	UPS transfers back to On Line operation, or when UPS is turned off.
Low Battery Warning - UPS is supplying battery power to the load connected to the Battery outlets and the battery is near exhaustion	Power On LED - Flashing	Rapid beeping (1 second intervals)	UPS transfers back to On Line operation, or when UPS is turned off.
Overload Shutdown - During On Battery operation a battery power supplied outlet overload was detected.	Power On LED - OFF	Constant tone	UPS turned off with the power switch.
Sleep Mode - During On Battery operation the battery power has been completely exhausted and the UPS is waiting for utility power to return to normal.	Power On LED - OFF	Short beeping 2 times every 4 seconds	UPS transfers back to On Line operation, or when UPS is turned off.
Replace Battery - Battery needs to be replaced.	Power On LED - flashing 2 times per second	Continuous tone	Unit is turned OFF and then ON and it passes a subsequent battery test. If it cannot pass the test, user should contact SEIT for service options. When unit is ON, this test occurs automatically every 14 days.

Specifications

Feature	Item	Specification
Input	Voltage / Frequency	230 VAC / 47-63 Hz
	Low Voltage Transfer	165 VAC
	High Voltage Transfer	266 VAC
Output	UPS Capacity (battery powered outlets) 4 for PH and 3 for AS	500 VA / 300 Watts
	Voltage (on battery)	230 Vrms +8/-8%
	Frequency (on battery)	50/60 Hz +/- 1 Hz
	Transfer Time (ms)	8 ms typical, 12 ms max.
Surge Protection	AC Surge Protection	160 Joules
	Telephone Surge Protection	None
	AC Input Protection	Circuit Breaker Switch
Battery	Battery Type	Sealed Lead Acid
	Recharge Time	24 Hours
	Average Life Span	2-4 Years
Physical	Net Weight	5.9 kg (13 lb)
	Size	27.3 x 17.4 x 9.6 cm (10.74 x 6.85 x 3.78 in)

Service

1. Consult the Troubleshooting table above to eliminate common problems.
2. If problems persist, contact Schneider Electric IT (SEIT) Technical Support; and be prepared to provide: date of purchase, model number and serial number (on bottom of UPS).
3. Prepare to troubleshoot the problem over the phone. If this is not successful, and the unit is still under warranty, the Technical Support Representative will provide all necessary information to return the unit for replacement.

Warranty

The standard warranty is two (2) years from the date of purchase. SEIT standard procedure is to replace the original unit with a factory reconditioned unit. Customers who must have the original unit back due to the assignment of asset tags and set depreciation schedules must declare such a need at first contact with an SEIT Technical Support representative. SEIT will ship the replacement unit once the defective unit has been received by the repair department, or cross-ship upon the receipt of a valid credit card number. The customer pays for shipping the unit to SEIT. SEIT pays ground freight transportation costs to ship the replacement unit to the customer.

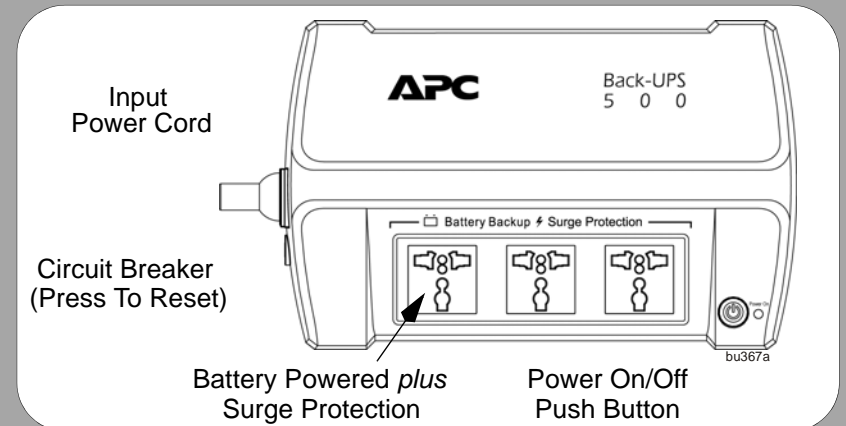
APC by Schneider Electric
IT Customer Support Worldwide

For country specific customer support, go to the APC by Schneider Electric Web site, www.apc.com.

2 Connect Equipment

Battery Powered plus Surge Protection

These outlets are powered whenever the Back-UPS ES is switched on. During a power outage or other utility problem (brownouts, over-voltages), these outlets are powered for a limited time by the Back-UPS ES. Plug a computer and monitor into these outlets. Once the equipment is connected to the Back-UPS ES, power on the connected equipment.



4 Troubleshooting and Battery Replacement

Use the table below to solve minor Back-UPS installation or operation problems. Consult Schneider Electric IT (SEIT) Online Technical Support or call SEIT Technical Support for assistance with problems that cannot be solved using the table below.

Problem	Problem Cause	Solution
Back-UPS ES will not turn on.	Battery is discharged and utility power is not available at the wall outlet.	Ensure power is available at the wall outlet. If the Back-UPS ES does not turn on, contact SEIT Technical Support (see <i>SEIT Customer Support Worldwide</i>).
Connected equipment loses power.	Utility power not available at the wall outlet. The Back-UPS ES is overloaded. PowerChute plus 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 fuse or circuit breaker for the wall outlet is not tripped, and that the wall switch controlling the outlet (if any) is in the ON position. Make sure that the equipment plugged into the outlets of the unit are not overloading the capacity of the unit. Try removing 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 16 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 SEIT Technical Support for further troubleshooting (see <i>SEIT Customer Support Worldwide</i>).
The On Line indicator is lit and the Back-UPS ES is beeping four times every 30 seconds.	The Back-UPS ES is using 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 Power On indicator flashes 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 and switched on for at least 24 hours. As a battery ages, the amount of runtime available will decrease. Batteries also age prematurely if the Back-UPS ES is placed near excessive heat. You can replace the battery by ordering one at our website: www.apc.com .

Battery Replacement

Battery replacement must be performed by **qualified service personnel** using the following procedures:

Caution: A battery can present a risk of electrical shock and high short circuit current. The following precautions should be observed when working on batteries: Remove watches, rings, or other metal objects. Use tools with insulated handles.

1. Disconnect all equipment plugged into the Back-UPS.
2. Turn off the Back-UPS and disconnect it from the wall outlet.
3. Lay the Back-UPS on a flat, stable surface with the wall mounting holes facing upward.
4. Loosen fully, the five screws which secure the rear cover to the Back-UPS.
5. Lift the rear cover straight up and off of the Back-UPS. To avoid losing the screws, do not invert the rear cover. Do not touch the printed circuit board or the outlets.
6. Disconnect the red wire from the battery terminal by grasping the black portion of the wire and pull straight back from the connector.
7. Grasp the battery and rotate it 90 degrees (stand it upright).
8. Disconnect the black wire from the battery terminal by grasping the black portion of the wire and pull straight back from the connector.
Caution: Do not dispose of the battery in a fire. The battery may explode. Do not open or mutilate the battery. Released electrolyte is harmful to the skin and eyes. It may be toxic.
9. Recycle or dispose of the old battery in accordance with local requirements, or return it to APC by Schneider Electric to ensure proper recycling.
10. Unpack and inspect the replacement battery. Ensure the replacement battery is not cracked or leaking. If the battery is damaged, contact SEIT Customer Service.
11. Set the replacement battery in the Back-UPS with the terminals facing upward.
12. Connect the black wire to the negative (-) terminal of the battery.
13. Lay the replacement battery into the Back-UPS chassis. Ensure the black wire is not pinched under the battery.
14. Connect the red wire to the positive (+) terminal of the battery. Ensure the red wire is fully in the battery enclosure.
15. Place the rear cover on the Back-UPS chassis and tighten the five screws loosened in step 4.
16. Plug the Back-UPS into the wall outlet, press the Power push button on the Back-UPS to turn it on, and allow the battery to charge for 24 hours.
17. Plug equipment to be protected into the Back-UPS and resume normal operation.