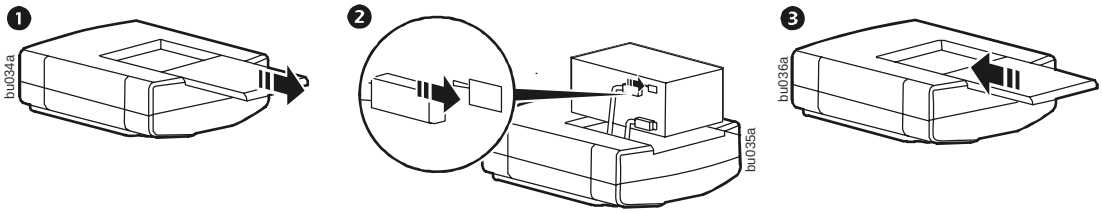
by Schneider Electric

Back-UPS® ES 550/700 Operation

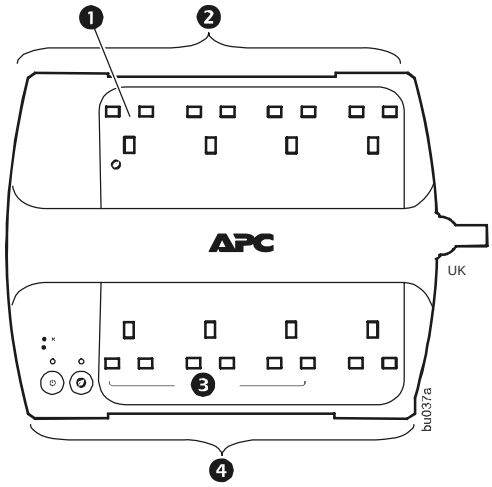
Caution

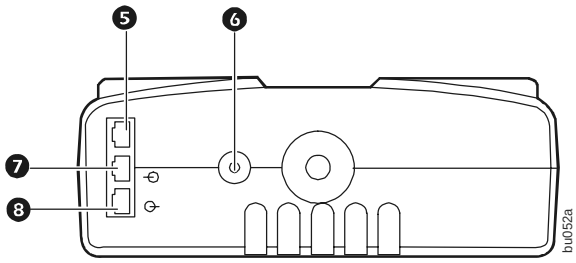
- For safety, the Back-UPS ES is shipped with one battery wire disconnected. Small sparks may occur during battery connection.
- Do not install the unit in direct sunlight, in excessive heat or humidity, or in contact with fluids.
- Connect the power cord directly to a wall outlet; not a surge protector or power strip. The outlet must be located near the equipment and easily accessible.

Connect the Battery



Overview





❶ **Master Outlet—**Connect a master device, such as a computer. See "Using the power-saving outlets" on page 2.

❷ **Battery Backup and Surge Protection—**These outlets receive power whenever the unit is ON. During a power outage or other utility problems (brownouts, over-voltages), these outlets will receive power from the unit for a limited time. Connect a computer, monitor, and two other data-sensitive devices into these outlets. Note that one of these outlets is the Master outlet. See "Using the power-saving outlets" on page 2.

❸ **Controlled Outlets—**Connect peripheral devices. See "Using the power-saving outlets" on page 2.

❹ **Surge Protection—**These outlets provide full-time protection from surges even if the unit is OFF, but will only supply power when the unit is ON. Connect a printer, fax machine, scanner, or other peripherals that do not need battery power during power outages. Note that if the power-saving feature is enabled, three of these outlets are controlled by the Master outlet.

❺ **Data Port—**Use the supplied RJ45/USB cable to connect the Back-UPS unit to a computer to install the software. See "Install the PowerChute® Personal Edition software" on page 2.

❻ **Circuit Breaker**—Push to re-set the circuit breaker.

❼ **Modem/Phone/Fax**—Connect a DSL or dial-up modem, phone, fax machine, or 10/100 Base-T ethernet equipment. **Note: Do not connect the UPS telephone protection ports to both the telephone and network system cables at the same time.**

❽ **Wall outlet**—Connect the unit to a data line wall outlet.

Turn on the Back-UPS

Press the ON/OFF switch to turn 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 UPS will automatically perform a self-test when power is applied to the unit, the green LED will flash during the self-test.

Note: Prior to first use, charge the Back-UPS for at least 16 hours to ensure sufficient runtime. The unit is charging whenever it is connected to utility power, whether the unit is turned ON or OFF.

Install the PowerChute® Personal Edition software

Using the supplied USB cable, connect the data port of the unit to the USB port on a computer. Install the PowerChute Personal Edition software using the enclosed CD.

Power-saving Master and Controlled Outlets

To conserve electricity, configure the Back-UPS to recognize a Master device, such as a desktop computer or an A/V receiver, and Controlled peripheral devices, such as a printer, speakers, or a scanner. When the Master device goes into Sleep or Standby mode, or turns OFF, the Controlled device(s) will shut down as well, saving electricity.

Using the power-saving outlets

Note: The Back-UPS ships with the power saving feature DISABLED. To use this feature, the outlets must be enabled.

Enable the power-saving outlets. Press and hold MASTER ENABLE for 2 seconds. The unit will beep to indicate the feature is enabled. The green LED above the MASTER ENABLE button will illuminate.

Disable the power-saving outlets. Press and hold MASTER ENABLE for two seconds. The unit will beep to indicated the feature is disabled. The green LED above the MASTER ENABLE button will darken.

Setting the threshold

The amount of power used by a device in Sleep or Standby mode varies between devices. It may be necessary to adjust the threshold at which the Master outlet signals the Controlled outlets to shut down. When the threshold is set, the power-saving outlets are enabled.

1. Ensure a master device is connected to the Master outlet. Put that device into Sleep or Standby mode, or turn it OFF.
2. Press and hold the Master Enable button for six seconds. After the first 2 seconds the unit will beep, continue holding the button down until the unit three beeps times in a row. Release the Master Enable button.

The Back-UPS unit will now recognize the threshold level of the Master device and save it as the new threshold setting.

Status Indicators

LED	Visual Indicator	Audible Alarm	Action
Power On - UPS is supplying conditioned utility power to the load.	Green LED - ON	None	Not applicable.
On Battery - UPS is supplying battery power to the load connected to the Battery outlets.	Green LED - ON (off during beep)	Beeping 4 times every 30 seconds	UPS transfers back to Power On 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.	Green LED - flashing	Rapid beeping (every 1/2 second)	UPS transfers back to normal operation, or when UPS is turned off.
Replace Battery is in need of charging or is at the end of its usual life and must be replaced	Green/Red alternating LED - flashing	Constant tone	UPS turned off with the power switch.
Battery Disconnected - The battery is disconnected or bad battery.	Red LED - flashing	Constant tone	UPS turned off with the power switch.
Overload Shutdown - During On Battery operation a battery power supplied outlet overload was detected.	None	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.	None	Beeping once every 4 seconds.	Utility power is restored, or if utility power is not restored within 32 seconds, or the UPS is turned off.
Master Function Enabled	Master Enable LED - ON	None	

LED	Visual Indicator	Audible Alarm	Action
Master Function Disabled	Master Enable LED - OFF	None	

Troubleshooting

Problem	Probable Cause	Solution
Back-UPS will not turn on.	Battery is disconnected or utility power is not available at the wall outlet.	Connect the battery and ensure power is available at the wall outlet.
No power available at the Surge Protection Only outlets.	Surge Protection Only outlets have been overloaded and disconnected by the circuit breaker.	Reduce the amount of equipment plugged into Surge Protection Only outlets and re-set the circuit breaker.
	Utility power not available at the wall outlet.	Ensure 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 Only outlets.	Ensure the equipment you want to stay powered during a power failure is plugged into the Battery Backup/Surge Protection outlets and NOT the Surge Protection Only outlets.
	The Back-UPS is overloaded.	Make sure the equipment plugged into the Battery Backup/Surge Protection outlets of the unit are not overloading the capacity of the unit. Try removing some of the equipment and see if the problem continues.
	PowerChute Personal Edition software has performed a shutdown due to a power failure.	The Back-UPS is operating normally.
	The Back-UPS has exhausted its available battery power.	The Back-UPS 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. Re-charge for a minimum of 16 hours.
	Connected equipment does not accept the step-approximated sine waveform of the Back-UPS.	The output waveform is designed for computers and computer-related equipment. It is not designed for use with motor-type equipment.
	The Back-UPS may require service.	Contact APC Technical Support.
The Power On indicator is lit and the Back-UPS is beeping four times every 30 seconds.	The Back-UPS is using battery.	The Back-UPS 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 beeps once per second at the same time.	Battery capacity is low (about 2 minutes of use remaining).	The Back-UPS 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.	Allow the unit to charge by leaving it plugged into the wall for at least 16 hours.
	Battery is near the end of useful life.	As a battery ages, the amount of runtime available will decrease. You can replace the battery by ordering one at www.apc.com. Batteries also age prematurely if the Back-UPS is placed near excessive heat.
The device connected to the Master outlet goes into Sleep or Standby mode, but the equipment connected to the Controlled outlets do not turn off.	The “green” function is turned off or the threshold setting is incorrect.	Re-configure the Master and Controlled outlets. See “Enable the oulets” on page 2.
	The threshold setting of the device connected to the Master outlet is not configured properly.	Re-configure the threshold settings of the device connected to the Master outlet.
Power is not supplied to some outlets.	The Controlled Outlets may be turned OFF.	Disable the Master/Controlled outlets.
The Controlled Outlets are not supplying power, even though the Master device is not in sleep mode.	The Master Outlet threshold may be incorrectly set.	Re-configure the Master Outlet, ensure the device connected to the Master Outlet is in sleep or standby mode, or is OFF, when the threshold is set.

Specifications

Input	Voltage	230 Vrms Nominal
	Frequency	50/60 Hz (auto sensing)
	Brownout Transfer	180 Vrms, typical
	Over-voltage Transfer	266 Vrms, typical
Output	Voltage On Battery	230 Vac rms +/- 8%
	Total Amperage (8 outlets)	10 Amps (including UPS output)
	UPS Capacity (4 outlets)	550VA/330W 700VA/405W
	Frequency - On Battery	50/60 Hz +/-1 Hz
	Transfer Time	6 ms typical, 10 ms maximum
Protection and Filter	AC Surge Protection	Full time, 451 joules
	Phone/fax/DSL Surge Protection	Single line (2-wire)
	Network Surge Protection	10/100Base-T Ethernet
	EMI/RFI Filter	Full time
	AC Input	Resettable circuit breaker
Battery	Type	Sealed, maintenance-free lead acid
	Average Life	3 - 5 years depending on the number of discharge cycles and environmental temperature
Physical	Net Weight	6.4kg 6.8kg
	Dimensions (H x W x D)	285 x 230 x 86 mm (11.2 x 9.1 x 3.4 in)
	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 3000 m (0 to 10,000 ft)
Safety/ Regulatory	**SKU**	**Approval**
	BE550G-AZ/BE750G-AZ	A-Tick & C-Tick
	BE550G-RS/BE750G-RS	GOST
	BE550G-GR/BE700G-GR	GS
	BE550G-FR/BE700G-FR	CE per IEC62040-1-1 & IEC60884-1, GS, GOST-PCT
	BE550G-UK/BE700G-UK	
	BE550G-IT/BE700G-IT	
	EMC Compliance	CE per EN62040-2/EN55022 & C-Tick

UPS Wall Installation

The UPS can be installed vertically or horizontally to a wall. Use the template to assist with installation and a fastener (not included) that can support at least 6.8 kg.

1. Hold the template against the wall surface and use a nail or pin to mark the center of each hole.
2. Install a fastener into the wall at the marked locations. Allow 8 mm of the fastener to protrude from the wall.
3. Install the unit on the wall, using the fasteners.

Order Replacement Battery

Replace with a genuine APC battery. Replacement batteries can be ordered from www.apc.com (valid credit card required). For Back-UPS BE 550, order RBC110. For Back-UPS BE 700, order RBC17.

Warranty

The standard warranty is 3 years from the date of purchase in the EU, 2 years outside of the EU. 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, and APC pays ground

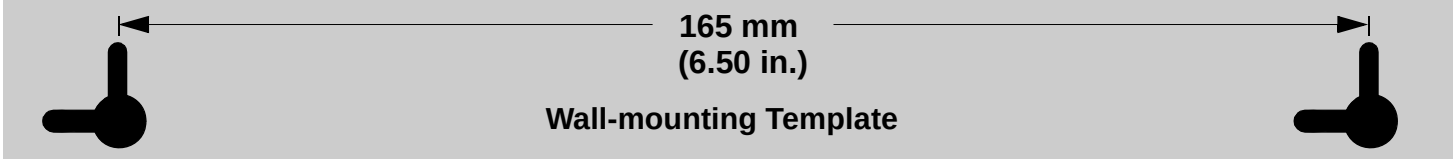
Service

DO NOT RETURN Back-UPS to the place of purchase under any circumstances.

1. Verify the battery is connected and that the circuit breaker is not tripped.
2. If there are still problems or questions, contact APC.
3. Before contacting APC, have the purchase date, UPS model, and serial number (on bottom of unit) available.
4. If the Technical Support Representative cannot solve the problem, the representative will issue a Return Material Authorization Number (RMA#) and a shipping address.
5. 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 warranty (insuring the package for full value is recommended).
6. Write the RMA# on the outside of the package.
7. Return the unit by insured carrier to the address given to you by APC Technical Support.

APC Worldwide Customer Support

Technical Support	http://www.apc.com/support
Internet	http://www.apc.com
Worldwide	+1 800 555 2725
Australia	1 800-652725
European Union	000 353 91 7020002725



Wall-mounting Template

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