

# Back-UPS<sup>™</sup> BX700U Series User Guide

by Schneider Electric

# Safety and General Information

Inspect the package contents upon receipt. Notify the carrier and dealer if there is any damage.

Read the following reminders before installing the UPS.

- This UPS is intended for indoor use only.
- Connect the UPS power cable directly to a wall outlet. Do not use surge protectors or extension cords. When grounding cannot be verified, disconnect the equipment from the AC power outlet before
- installing or connecting to other equipment. Reconnect the power cord after all connections are made.
- Servicing of batteries should be performed by Schneider Electric IT (SEIT) Customer Support only.When replacing battery the UPS must be OFF, and its AC inlet unplugged.
  - Do not dispose of batteries in a fire. The batteries may explode.
  - Do not open or mutilate batteries. They contain an electrolyte that is toxic and harmful to the skin and eyes.
  - To avoid harmful injury due to energy hazard, remove wrist watches and jewelry such as rings when replacing the batteries. Use tools with insulated handles.
  - Replace batteries with the same number and type of batteries as originally installed in the equipment.

## Features

**D** USB port

O

- A Power buttonB Battery connector
- B Battery connector
  - Circuit breaker
- Telephone/Network port (*BX700UI/BX700U-AZ/BX700U-MS only*)
   AC Power Inlet
- Battery Backup + Surge Protection outlets See outlet type and quantity breakdown for each model on the graphic below.



# **5** Operational Features

### Install PowerChute<sup>™</sup> Software

To install PowerChute Personal Edition (PCPE) software, connect a USB cable to the data port on the UPS and the other end to a computer with access to the web.

On the computer, go to **www.apc.com/tools/download**. Select "**Software Upgrades - PowerChute Personal Edition**" in the "**Filter by Software/Firmware**" drop down menu. Select the appropriate operating system. Follow directions to download the software.

#### **Automatic Voltage Regulation**

Automatic Voltage Regulation boosts/trims the AC voltage when it drops/exceeds safe levels. This allows the equipment plugged into the unit to operate during low/high voltage conditions, conserving the battery power in the event of a power cut.

The Back-UPS will switch to battery power if the input voltage level becomes too low/high for the Automatic Voltage Regulation to compensate, or if the AC power is distorted.

If the Back-UPS switches to battery power too frequently or too infrequently, adjust the transfer voltage and sensitivity settings:

- 1. Ensure the Back-UPS is off. Plug it into AC power.
- $2\,.$  Press and hold the ON/OFF button until the LED repeatedly flashes. The unit is now in Program Mode.
- 3. Release the button. The LED will indicate the current setting by flashing once, twice, or three times per second, and emitting audible beeps.
- 4. If the button is not pressed within five seconds, the Back-UPS will exit the Program Mode.

#### **No-load Shutdown**

If the UPS is operating on battery power and detects that the connected equipment is using less than 15 W of energy for more than 15 minutes, it will shut down to conserve energy.

# Connect the Battery

- 1 Connect the battery by pulling the battery connector handle down, and then pushing it into the unit.
- Connect the Back-UPS BX700U- FR/GR/AZ models power cable directly to a wall outlet. Do not use surge protectors or extension cords.
   For BX700UI and BX700U-MS, replace PC's input cord with the jumper cable and use PC's input cord to connect UPS



- Note: BX700LI-MS comes with an extra power cord for connection to a wall outlet.
  Press the ON/OFF button to turn on the unit. The green "Power On" indicator confirms that the Back-UPS is on and ready to prove the second se
- The green "Power On" indicator confirms that the Back-UPS is on and ready to provide protection.

The Back-UPS should charge for at least 10 hours to ensure sufficient runtime. The unit is being charged whenever it is connected to AC power, whether the unit is turned ON or OFF.

# Status Indicators

LED	Audible Alarm	Condition		
On	Off	On-line - The Back-UPS is supplying AC power to the connected equipment		
	Constant Tone	On Line Overload - The power being used by the connected equipment has exceeded the capacity of the unit. Disconnect some equipment		
	Constant beeping	Over-temperature Warning - The unit is overheating and will shut down if the temperature is not lowered. Disconnect some of the connected equipment.		
On (Off during 4 beeps)	4 beeps repeated every 30 seconds	<b>On-Battery</b> - The Back-UPS is supplying battery power		
Flashing	Rapid Beeping (every 1/2 second)	Low Battery Warning - The Back-UPS has 2 minutes of runtime remaining		
	Constant tone	<b>Bad Battery Detected</b> - The battery needs to be charged, or is at end of life.		
	Chirp every 2 seconds	Charger Warning - The Back-UPS has experienced an internal problem, but is still providing power to the connected equipment. Contact Schneider Electric IT (SEIT) Technical Support		
Off	Short beep every 4 seconds	Low Battery Shutdown - During On Battery operation the battery power was almost completely exhausted, and the Back-UPS is waiting for AC power to return to normal		
	Constant Tone	On Battery Overload - The connected equipment requires more power than provided by the Back-UPS battery. Unplug devices one at a time to remove overload. If the problem is not corrected, contact SEIT Technical Support		
	Constant Tone	<b>Charger Fault</b> - Back-UPS has an internal problem. The AC input is present but is no powering the load. Contact SEIT Technical Support		
	Long beep every 4 seconds	Over-temperature Protected - The Back-UPS has overheated and has shut down. Unplug connected devices one at a time or wait a few hours for system to cool down.		

# Specifications

Input	Voltage	220 - 240 VAC	
	Frequency	$50/60 \text{ Hz} \pm 3 \text{ Hz}$ (Auto-sensing)	
	Brownout Transfer / Over-voltage Transfer	140 VAC, typical / 300 VAC, typical	
Output	UPS Capacity (total)	700 VA / 390 W	
	Voltage On Battery	230 Vac rms	
	Frequency - On Battery	50/60 Hz ± 1 Hz	
	Transfer Time	4ms typical	
Protection	AC Input	Resettable circuit breaker	
Battery	Type (maintenance-free, lead acid)	12V, 7.2 AH	
	Average Life	The battery typically lasts for three to five years. Environmental factors impact battery life. Elevated temperatures, high humidity, poor quality mains power, and frequent, short duration discharges will shorten battery life. <b>The battery in the Back-UPS BX700U</b> <b>Series is not user-replaceable. Contact SEIT Technical Support for a list of authorized service centers near you.</b>	
	Typical Recharge Time	6 hours	
Physical	Net Weight	6.0 kg	
	Dimensions (H x W x D)	19.9 cm x 11.5 cm x 25.6 cm	

When the UPS is reconnected to AC power, the UPS will automatically switch on.

LED Flashing	Audible Indicator	Voltage Sensitvity Setting	Input Voltage Range	No-load Shutdown	Description
Once per second	None	Low	140-300	Disabled	The Back-UPS will switch to battery power less often.
Once per second	4 beeps per second	Low	140-300	Enabled	The Back-UPS will switch to battery power less often.
Twice per second	None	Medium	140-300	Disabled	Use when the input AC power is normal, without any fluctuation in voltage levels.
Twice per second	4 beeps per second	Medium (factory default)	140-300	Enabled	Use when the input AC power is normal, without any fluctuation in voltage levels.
Three times per second	None	High	150-290	Disabled	The Back-UPS will switch to battery power during any small fluctuation in voltage.
Three times per second	4 beeps per second	High	150-290	Enabled	The Back-UPS will switch to battery power during any small fluctuation in voltage.

### Warranty

#### Register your product on-line. http://warranty.apc.com

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.

### **Troubleshooting and Service**

1. If the problem persists, contact Schneider Electric IT (SEIT) Customer Support through the Schneider Electric web site, **www.apc.com**.

- a. Note the model number and serial number and the date of purchase. The model and serial numbers are located on the rear panel of the unit and are available through the LCD display on select models.
- b. Call SEIT Customer Support and a technician will attempt to solve the problem over the phone. If this is not possible, the technician will issue a Returned Material Authorization Number (RMA#).
- c. If the unit is under warranty, the repairs are free.
- d. Service procedures and returns may vary internationally. Refer to the Schneider Electric web site for country specific instructions.
- 2. 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

### 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.

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