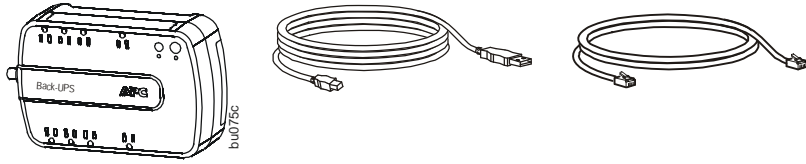


Inventory



Safety

- This unit is intended for indoor use only.
- Do not operate this unit in direct sunlight, in contact with fluids, or where there is excessive dust or humidity.
- Connect the Back-UPS power cord directly to a wall outlet. Do not use a surge protector or an extension cord.

Specifications

Input	Voltage	120 Vrms nominal
	Frequency	50/60 Hz ± 3 Hz (auto sensing)
	Brownout transfer	92 Vrms typical
	Over-voltage transfer	139 Vrms typical
Output	Total Amperage (8 outlets)	12 A (including UPS output)
	Voltage - On Battery	115 Vrms ± 8% (step-approximated sine wave)
	Frequency - On Battery	60 Hz ± 1 Hz
	Transfer time	6 ms typical, 10 ms maximum
Protection and Filter	Utility power surge protection	Always on, 340 Joules
	Phone surge protection	Single line, 2-wire
	EMI/RFI filter	Always on
	Utility input	Resettable circuit breaker
Battery	Type	Sealed, maintenance-free lead-acid
	Average life	3-5 years typically
Physical	Net weight	5.4 kg (12 lb)
	Dimensions H x W x D	28 cm x 18 cm x 9 cm (11 in x 7 in x 3 in)
	Operating temperature	0° C to 40° C (32° F to 104° F)
	Storage temperature	-5° C to 45° C (5° F to 113° F)
	Operating relative humidity	0 to 95% non-condensing
EMC compliance	Operating elevation	0 to 3,000 m (0 to 10,000 ft)
	<p>Notice: This device complies with part 68 and part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.</p> <p>"Locate the label on the bottom of this device that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this device. If requested, this information must be provided to the telephone company."</p>	

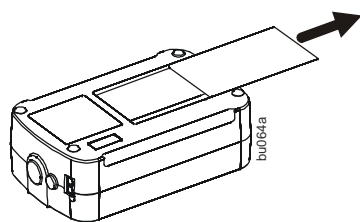
Warranty

The standard warranty is 3 years in the USA and Canada, 2 years in all other regions from the date of purchase. APC 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 freight transportation costs back to the customer.

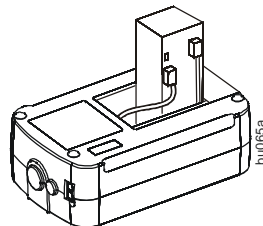
Connect the Battery

The Back-UPS is shipped with one battery cable disconnected. Remove the "Stop! Connect the Battery" label that covers the outlets. Prior to connecting any equipment to the unit, connect the battery cable to the unused battery terminal. It is normal for small sparks to be seen when the battery cable is connected to the battery terminal.

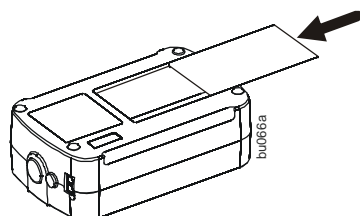
- Press the battery compartment cover release tab located on the rear side of the unit. Slide the battery cover off.



- Remove the battery from the compartment. Connect the battery cable securely to the battery terminal.



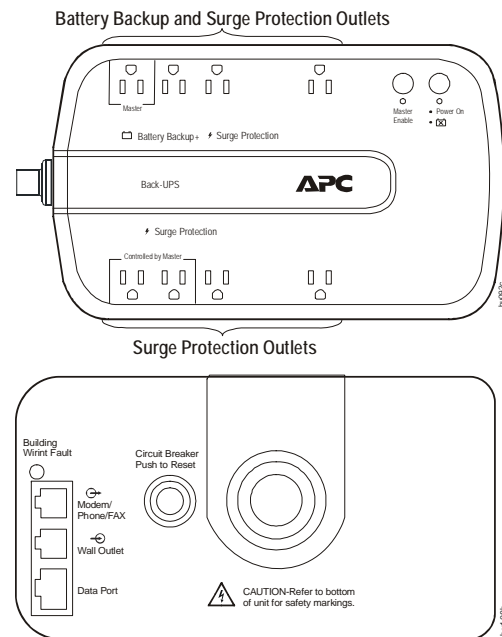
- Insert the battery into the compartment. Replace the battery cover. Ensure the release tab locks into place.



Replace Battery

- Use only approved APC replacement battery cartridges.
- Deliver used batteries to a battery replacement facility in the packaging provided by APC with the replacement battery cartridge.
- To order replacement battery cartridges contact APC through the Web site www.apc.com

Connect Equipment



Battery backup outlets provide protection to connected equipment when the Back-UPS is turned on and connected to utility power.

Battery backup outlets receive power from the Back-UPS for a limited period of time when a power outage or brownout condition occurs.

Battery backup outlets provide protection from power surges and spikes.

Connect a computer, a monitor, and other peripheral devices to the battery backup outlets.

PowerChute® Personal Edition Software

Overview

PowerChute Personal Edition Software allows you to use your computer to access additional power protection and management features of the Back-UPS.

Using PowerChute, you can:

- Preserve work in progress during a power outage by putting your computer into Hibernate mode. When the power returns, the computer will appear exactly as it did before the power outage.
- Configure the Back-UPS management features, such as power-saving outlets, shutdown parameters, audible alarms, and more.
- Monitor and view the status of the Back-UPS, including the estimated runtime, power consumption, power event history, and more.

Available features will vary by Back-UPS model and operating system.

If you choose not to install PowerChute, the Back-UPS will still provide backup power and power protection to connected equipment. However, you will only be able to configure a limited number of features using the display interface.

Compatibility

PowerChute is compatible with Windows operating systems only. For a detailed list of supported operating systems, go to www.apc.com, select **Software & Firmware**.

For Mac operating systems, we recommend using the native shutdown application (within System Preferences) which recognizes your battery backup and allows you to configure shutdown of your system during power outages. To access this application, connect a USB cable from the Back-UPS DATA PORT (POWERCHUTE PORT) to a USB port on your computer, and see the documentation provided with your computer.

Installation

To install PowerChute Personal Edition (PCPE) software, connect the supplied USB cable between the data port on the UPS and 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.

Turn On the Back-UPS

Press the POWER ON button located on the top of the Back-UPS. The Power On LED will illuminate and a single short beep will be audible, indicating that the Back-UPS is providing protection for connected equipment.

To turn the Back-UPS off, press the POWER ON button.

The Back-UPS battery charges during the first 16 hours while connected to utility power. The Back-UPS battery will charge while the Back-UPS is connected to utility power and is turned on or off.

Power Saving Feature

This Back-UPS is equipped with power saving outlets that conserve electricity. Configure the Back-UPS to recognize a Master device, such as a computer or an A/V receiver, and Controlled by master peripheral devices, such as a printer, speakers, or a scanner. When the Master device goes into Standby or Hibernation mode, or is turned off, the Controlled by Master device(s) will be turned off.

The Back-UPS ships with this Power Saving feature disabled. To configure this feature, follow the instructions below or use PowerChute software.

Enable the Power Saving Controlled outlets. Press and hold MASTER ENABLE button for two seconds. The Back-UPS will beep to indicate the feature is enabled. The green LED will illuminate.

Disable the Power Saving Controlled outlets. Press and hold MASTER ENABLE button for two seconds. The Back-UPS will beep to indicate the feature is disabled. The green LED will extinguish.

Setting the threshold. The amount of power used by a device in Standby or Hibernation mode varies dependant on the connected device. If the Controlled outlets do not turn off when the Master device is in Standby or Hibernation mode, it may be necessary to adjust the threshold at which the MASTER outlet signals the CONTROLLED outlets to shut down.

- Be sure a master device is connected to the MASTER outlet. Place that device into Standby or Hibernation mode, or turn it off.
- Press and hold MASTER ENABLE button for six seconds, until the green LED flashes three times and the Back-UPS beeps three times.
- The Back-UPS will now recognize and save the threshold level as the new threshold setting for the master device.

Status Indicators

Status	LED Indicator	Audible Indicator On	Audible Indicator Terminates
Power On The Back-UPS is supplying utility power to connected equipment.	The green LED illuminates.	None	N/A
On Battery Back-UPS supplying battery power to battery backup outlets.	The green LED illuminates. The LED is not illuminated during the beeps.	Back-UPS beeps 4 times every 30 seconds.	Beeping stops when utility power is restored or the Back-UPS is turned off.
Low Battery warning The Back-UPS is supplying battery power to the battery backup outlets and the battery is near a total discharge state.	The green LED illuminates with rapid green flashes.	The Back-UPS emits rapid beeping, every 1/2 second.	Beeping stops when utility power is restored or the Back-UPS is turned off.
Replace Battery • The battery is disconnected. • The battery needs to be charged, or replaced.	• Replace Battery LED flashes. • Replace Battery and Power On LEDs flash alternately.	Constant tone Constant tone	Back-UPS is turned off.
Overload Shutdown While on battery power an overload condition has occurred in one or more of the battery backup outlets while the Back-UPS is operating on battery power.	None	Constant tone	Back-UPS is turned off.
Sleep Mode While on battery power the battery is completely discharged. The Back-UPS will “awaken” once utility power is restored.	None	The Back-UPS beeps once every four seconds.	The beeping stops when: • Utility power is restored • If utility power is not restored within 32 seconds • The Back-UPS is turned off
Building Wiring Fault The building wiring presents a shock hazard that must be corrected by a qualified electrical.	Building Wiring Fault LED illuminates red	None	The Back-UPS is unplugged from the wall outlet or is plugged into an improperly wired outlet.
Master Enable LED-illuminates when the power saving feature is enabled.	Master Enable LED-illuminates green when the power-saving feature is enabled.	N/A	N/A

Troubleshooting

Problem and Possible Cause	Solution
The Back-UPS will not turn on	
The Back-UPS has not been turned on.	Press the POWER ON button.
The Back-UPS is not connected to utility power, there is no utility power available at the wall outlet, or the utility power is experiencing a brownout or over voltage condition.	Make sure the power cord is securely connected to the wall outlet, and that there is utility power available at the wall outlet. Where applicable, check that the wall outlet is switched on.
The battery is not connected.	Connect the battery. Refer to “Connect the Battery” on page 1 of this manual. In the event that the Back-UPS receives no utility power and the battery is connected, a cold-start can be initiated. Press and hold the POWER ON button until the Back-UPS emits two beeps.
The Back-UPS is on, the Replace Battery LED flashes and the unit emits a constant tone	
The battery is disconnected.	Refer to the “Connect the Battery” on page 1 in this guide.
Connected equipment loses power	
A Back-UPS overload condition has occurred.	Remove all nonessential equipment connected to the outlets. One at a time reconnect equipment to the Back-UPS.
The Back-UPS battery is completely discharged.	Connect the Back-UPS to utility power and allow the battery to recharge for eight hours.
PowerChute software has performed a shutdown due to a power failure.	This is normal Back-UPS operation.
Connected equipment does not accept the step-approximated sine waveform from the Back-UPS.	The output waveform is intended for computers and peripheral devices. It is not intended for use with motor driven equipment.
The Back-UPS may require service.	Contact APC Technical Support for more in depth troubleshooting.
The Power On LED is illuminated and the Back-UPS beeps 4 times every 30 seconds	
The Back-UPS is operating on battery power.	The Back-UPS is operating normally on battery power. At this point the user should save all open files, and shutdown the computer. When utility power is restored the battery will recharge.
The Power On LED flashes once every second while the Back-UPS beeps once every second	
The Back-UPS battery has approximately two minutes of remaining runtime.	The Back-UPS battery is near a total discharge state. At this point the user should save all open files, and shutdown the computer. When utility power is restored the battery will recharge.
The Building Wiring Fault LED illuminates	
The building wiring presents a shock hazard that must be corrected by a qualified electrical.	Do not operate the Back-UPS. Call a qualified electrician to correct the building wiring fault.
The Back-UPS has an inadequate battery runtime	
The battery is not fully charged. The battery is near the end of useful life and should be replaced.	Leave the Back-UPS connected to utility power for 16 hours while the battery charges to full capacity. As a battery ages, the runtime capability decreases.
The connection from the Back-UPS to the internet is lost during a power outage	
The modem has lost power.	Connect the modem cable into one of the Battery Backup + Surge Protection outlets.

Voltage Sensitivity Adjustment (optional)

The Back-UPS detects and reacts to line voltage distortions by transferring to battery backup power to protect connected equipment. In situations where either the Back-UPS or the connected equipment is too sensitive for the input voltage level it is necessary to adjust the transfer voltage.

1. Connect the Back-UPS to a wall outlet. The Back-UPS will be in **Standby** mode, no indicators will be illuminated.
2. Press and hold the ON/OFF button for 10 seconds. The **OnLine** LED will illuminate alternately green-amber-red, to indicate that the Back-UPS is in **Program** mode.
3. The **Power On/Replace Battery** LED will flash either green, amber, or red to indicate the current sensitivity level. Refer to the table for an explanation of the transfer voltage sensitivity levels.
4. To select LOW sensitivity, press and hold the ON/OFF button until the LED flashes green.
5. To select MEDIUM sensitivity, press and hold the ON/OFF button until the LED flashes red.
6. To select HIGH sensitivity, press and hold the ON/OFF button until the LED flashes amber.
7. To exit **Program** mode wait five seconds and all LED indicators will extinguish. **Program** mode is no longer active.

LED Flashes	Sensitivity Setting	Input Voltage Range (Utility Operation)	Recommended Use
Green	LOW	88 Vac to 142 Vac	Use this setting with equipment that is less sensitive to fluctuations in voltage or waveform distortions.
Red	MEDIUM	92 Vac to 139 Vac	Factory default setting. Use this setting under normal conditions.
Amber	HIGH	96 Vac to 136 Vac	Use this setting when connected equipment is sensitive to voltage and waveform fluctuations.

Service

If the unit requires service, do not return it to the dealer. Follow these steps:

1. Review the Troubleshooting section of the manual to eliminate common problems.
2. If the problem persists, contact APC Customer Support through the 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 APC 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 APC Web site for country specific instructions.
3. Pack the unit properly to avoid damage in transit. Never use foam beads for packaging. Damage sustained in transit is not covered under warranty.

Note: When shipping within the United States, or to the United States always DISCONNECT A UPS BATTERY before shipping in compliance with U.S. Department of Transportation (DOT) and IATA regulations. The internal batteries may remain in the UPS.
4. Write the RMA# provided by Customer Support on the outside of the package.
5. Return the unit by insured, pre-paid carrier to the address provided by Customer Support.

APC Worldwide Customer Support

Internet	http://www.apc.com
Telephone	888 272 3858