

Back-UPS™ SX3800CI/SX31K1CI User Manual

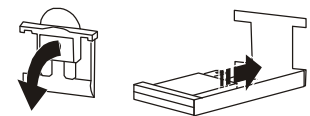
Important Safety Instructions

SAVE THESE INSTRUCTIONS - This manual contains important instructions that should be followed during installation and maintenance of the UPS and batteries.

- 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.
- Before replacing batteries, remove conductive jewelry such as chains, wrist watches, and rings. High energy through conductive materials could cause severe burns.
- Servicing of batteries should be performed by Schneider Electric IT (SEIT) Customer Support only.
NOTE: Servicing of user replaceable batteries should be performed or supervised by personnel knowledgeable about batteries and required precautions. In this case battery is not user replaceable.
- When replacing batteries, replace with the same type and number of batteries or battery packs.
- **CAUTION:** Failed batteries can reach temperatures that exceed the burn thresholds for touchable surfaces.
- **CAUTION:** Do not dispose of batteries in a fire. The batteries may explode.
- **CAUTION:** Do not open or mutilate batteries. Released material is harmful to the skin and eyes. It may be toxic.
- **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.
 - Disconnect the charging source prior to connecting or disconnecting battery terminals.
 - Do not wear any metal objects including watches and rings.
 - Do not lay tools or metal parts on top of batteries.
 - Use tools with insulated handles.
 - Wear rubber gloves and boots.
 - Determine if battery is either intentionally or inadvertently grounded. Contact with any part of a grounded battery can result in electric shock and burns by high short-circuit current. The risk of such hazards can be reduced if grounds are removed during installation and maintenance by a skilled person.

Connect the Battery

1. Connect the battery by pulling the battery connector handle down, and then pushing it into the unit.

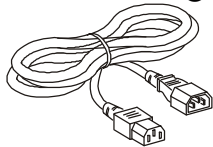


2. Connect the Back-UPS SX3800CI / SX31K1CI power cable directly to a wall outlet. Do not use surge protectors or extension cords.
3. Press the ON/OFF button to turn on the unit. The green “Power On” indicator confirms that the Back-UPS is on and ready to provide protection.

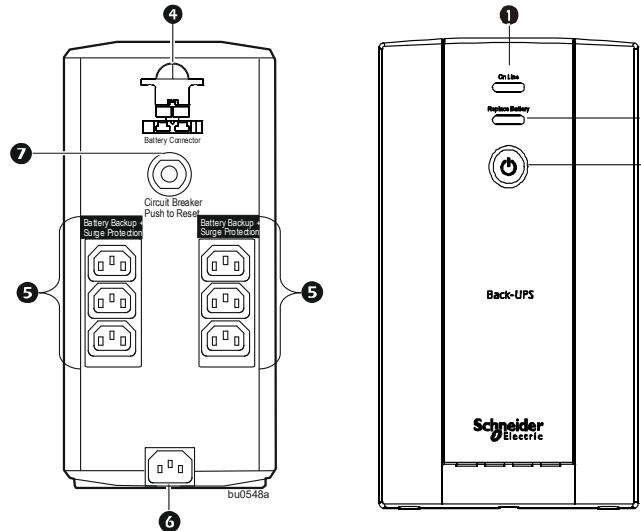
The Back-UPS should charge for at least 10 hours to ensure sufficient runtime. The unit is being charged whenever it is connected to AC power, whether the unit is turned ON or OFF.

Rear Panel and Front Panel Features

- ➊ Online LED
- ➋ Battery LED
- ➌ ON/OFF button
- ➍ Battery connector
- ➎ Battery Backup + Surge Protection outlets
- ➏ AC power inlet
- ➐ Circuit breaker



IEC jumper cable for PC connection



Adjust Transfer Voltage and Sensitivity Settings

Automatic Voltage Regulation boosts the AC voltage when it drops below expected levels. This allows the equipment plugged into the unit to operate during low 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 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. Verify that the Back-UPS battery is connected. Connect the Back-UPS to a wall outlet. The Back-UPS should be turned off.
2. Press and hold the ON/OFF button for 10 seconds. The LEDs will illuminate green and red alternately, to indicate that the Back-UPS is in Program mode.
3. The LEDs will flash either green, red or green and red alternately to indicate the current sensitivity level. The Back-UPS will beep to indicate that No-load Shutdown is enabled. Refer to the table for an explanation of the transfer voltage sensitivity levels.
4. To select *Low* sensitivity, press the ON/OFF button until the On Line LED flashes green.
5. To select *Medium* sensitivity, press the ON/OFF button until the Battery LED flashes red.
6. To select *High* sensitivity, press the ON/OFF button until the On Line and Battery LEDs flash green and red alternately.
7. To exit Program mode wait for five seconds and both LEDs will extinguish. Program mode is no longer active.

No-load Shutdown

The UPS will shut down to conserve energy if while operating on battery power the UPS detects that connected equipment is using less than 15 W of energy for more than 15 minutes.

LED Flashing	Audible Indicator	Voltage Sensitivity Setting	Input Voltage Range	No-load Shutdown	Description
Green	None	Low	150-280	Disabled	Use this setting with equipment that is less sensitive to fluctuations in voltage or waveform distortions.
Green	4 beeps per second	Low	150-280	Enabled	Use this setting with equipment that is less sensitive to fluctuations in voltage or waveform distortions.
Red	None	Medium	155-280	Disabled	Use this setting for normal operation conditions.
Red	4 beeps per second	Medium (factory default)	155-280	Enabled	Use this setting for normal operation conditions.

LED Flashing	Audible Indicator	Voltage Sensitivity Setting	Input Voltage Range	No-load Shutdown	Description
Green and Red	None	High	160-280	Disabled	Use this setting when connected equipment is sensitive to voltage fluctuations or waveform distortions.
Green and Red	4 beeps per second	High	160-280	Enabled	Use this setting when connected equipment is sensitive to voltage fluctuations or waveform distortions.

Status Indicators

Status	LED Indicator	Audible Alarm	Audible Alarm Terminates
Power On The Back-UPS is supplying AC power to connected equipment.	The On Line LED illuminates green.	None	N/A
On Battery The Back-UPS is supplying battery power to battery backup outlets.	The On Line LED illuminates green. The LED is not illuminated during the beeps.	Back-UPS beeps 4 times every 30 seconds.	The beeping stops when AC power is restored or the Back-UPS is turned off.
Low Battery Alarm The Back-UPS is supplying battery power to the battery backup outlets and the battery is near a total discharge state.	The On Line LED flashes green.	The Back-UPS emits rapid beeping. (once every second)	The beeping stops when AC power is restored or the Back-UPS is turned off.
Replace Battery The battery is disconnected. The battery needs to be charged or replaced.	<ul style="list-style-type: none"> The Battery LED flashes red. Battery and On Line LEDs flash alternately. 	Constant tone	The Back-UPS is turned off.
Overload Shutdown While operating on battery power an overload condition has occurred in one or more of the battery backup outlets.	None	Constant tone	The Back-UPS is turned off.
Sleep Mode While operating on battery power the battery is completely discharged. The Back-UPS will awaken once AC power is restored.	None	The Back-UPS beeps once every four seconds.	<ul style="list-style-type: none"> AC power is restored. AC power is not restored within 32 seconds. The Back-UPS is turned off.
Overload Alarm The equipment connected to the Back-UPS is drawing more power than the voltage rating allows.	The Battery LED illuminates red.	Constant tone	Alarm stops when nonessential equipment is disconnected from the Battery Backup outlets.

Battery Replacement

The battery in the Back-UPS 800CI/1100CI is not user-replaceable. Contact SEIT Technical Support for a list of authorized service centers near you.

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.

Specifications

Specification		SX3800CI	SX31K1CI
Input	Voltage	230 Vac, nominal	
	Frequency	50 Hz \pm 3 Hz, 60 Hz \pm 3 Hz	
	Brownout Transfer	155 Vac, typical	
	Over-voltage Transfer	280 Vac, typical	
Output	UPS Capacity (total)	800 VA/480 W	1100 VA / 660 W
	Voltage On Battery	230 Vac rms (step-approximated sinewave)	
	Frequency on Battery	50 Hz \pm 1 Hz, 60 Hz \pm 1 Hz	
	Transfer Time	8 ms typical	
Protection and Filtering	AC Surge Protection	Full time, 273 Joules	
	AC Input	Resettable circuit breaker	
Battery	Type (maintenance free)	12 V 9 Ah	Each battery 12 V 7.2 Ah
	Average Life	2 - 5 years depending on the number of discharge cycles and environmental temperature	
	Typical Recharge Time	8 Hours	
Physical	Net Weight	8 kg	12 kg
	Dimensions (H x W x D)	21.5 cm x 13 cm x 33.6 cm	
	Operating temperature	0° to 40°C (32° to 104°F)	
	Storage Temperature	-15° to 45°C (23° to 113°F)	
	Humidity	0 to 95 % Relative Humidity (non-condensing)	
	International Protection Code	IP20	
	Pollution degree	2	
Overvoltage category		II	
Applicable power grid power distribution system		TN Power system	
Applicable Standard		IEC 62040-1	

Troubleshooting and Service

- Consult the Troubleshooting from the Schneider Electric Web site, www.apc.com.
- If the problem persists, contact Schneider Electric IT (SEIT) Customer Support through the Schneider Electric Web site, www.apc.com.
 - 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.
 - 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#).
 - If the unit is under warranty, the repairs are free.
 - Service procedures and returns may vary internationally. Refer to the Schneider Electric Web site for country specific instructions.
- 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.

Schneider Electric IT Customer Support Worldwide

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