## Safety and General Information

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

**Read the Safety Guide supplied with this unit before installing the UPS.**

- **This unit is designed for low power devices less than 75 Watts.** When the UPS is on battery, the unit will shut down automatically to protect itself once the load on the UPS exceeds 75 Watts.
- **This UPS is intended for indoor use only.**
- **Do not install UPS in direct sunlight, in contact with fluids, or where there is excessive dust or humidity.**
- **Be sure the air vents on the UPS are not blocked. Allow adequate space for proper ventilation.**
- **The battery typically lasts for three to five years. Environmental factors impact battery life.** Elevated ambient temperatures, poor quality AC power, and frequent short duration discharges will shorten battery life.
- **Connect the UPS power cable directly to a wall outlet. Do not use surge protectors or extension cords.**

## Specifications

### Input
- **Voltage:** 120 Vac Nominal
- **Frequency:** 50/60 Hz + 3 Hz auto-sensing
- **Brownout Transfers:** 92 Vac Typical
- **Over-voltage Transfer:** 139 Vac Typical

### Output
- **UPS Capacity:** 125 VA, 75 W
- **Total Amperage (AC outlets):** 1.04 A
- **Voltage - On Battery:** 115 Vac ± 3%
- **Frequency - On Battery:** 50/60 Hz + 3 Hz auto-sensing
- **Transfer Time:** 6 ms Typical, 10 ms maximum

### USB Ports
- **Charging Currents:**
  - **Total:** 2.5A (Total)
  - **USB (top):** 1.5A (Maximum)
  - **USB (bottom):** 1.0A (Maximum)
- **USB Battery Charging Specification:** 1.2
- **Power output is dependent on the connected device.** Check your device manufacturer to understand the maximum charging current for a given USB spec.

### Protection and Filtration
- **AC Input Filter:** Full time, 90 Joulles
- **EMI/RFI Filter:** Full time
- **Residual circuit breaker:** Sealed, maintenance-free, lead acid 12V (12x1)
- **Average Life:** 3 - 5 years depending on the number of discharge cycles and environmental temperature
- **Charging Time:** 6 hours. Using the USB ports while charging the battery will increase the amount of time required.

### Physical
- **Net Weight:** 6.6 lb (3.0kg)
- **Dimensions:** 9.9 in x 4.1 in x 5.2 in
- **Length x Width x Height:** 22.5 cm x 10.5 cm x 13.2 cm
- **Operating Temperature:** 32º F to 104º F (0º C to 40º C)
- **Storage Temperature:** 5º F to 113º F (–15º C to 45º C)
- **Relative Humidity:** 0 to 95% non-condensing humidity
- **Operating Relative Humidity:** 0 to 95% non-condensing humidity
- **Operating Elevation:** 0 to 10,000 ft (0 to 3008 m)

## Connect the Battery

1. **Remove the “Stop! Connect the Battery” label that covers the outlets.**
2. **Press the battery compartment cover release tabs located on the underside of the unit. Slide the battery cover off.**
3. **Connect the battery cable securely to the battery terminal.** It is normal for small sparks to be seen when the battery cable is connected to the battery terminal.
4. **Reinstall the battery compartment cover.** Be sure that the release tab locks into place.

## Connect Equipment

**Battery Backup Outlets**

Battery backup outlets provide protection from power surges and spikes for connected equipment when the Back-UPS is turned on and connected to AC power.

**USB charging ports**

The two USB ports provide a total of 2.5A of DC power. Both USB ports will provide power when the unit is on battery. To maximize charging efficiency the top port is used for tablets and the bottom port (closer to the power button) for smart phones although both can be used for either.

**Turn On the Back-UPS**

Press the **Power On button located on the top of the Back-UPS.** The **Power On/ Replace Battery LED will illuminate and a single short beep will be audible to indicate that the Back-UPS is providing protection for connected equipment.**

**Status Indicators**

<table>
<thead>
<tr>
<th>Status</th>
<th>Power Button LED</th>
<th>Audible Indicator On</th>
<th>Audible Indicator Terminates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power On</td>
<td>The LED illuminates green.</td>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td>On Battery</td>
<td>The Back-UPS supplies battery power to battery backup outlets.</td>
<td>The LED illuminates green.</td>
<td>The LED flashes once at the end of 2 seconds.</td>
</tr>
<tr>
<td>Low Battery warning</td>
<td>The Back-UPS is supplying battery power to the battery backup outlets and the battery is near a total discharge state.</td>
<td>The Back-UPS emits 4 rapid beeps, every 10 seconds.</td>
<td>Beeping stops when AC power is restored or the Back-UPS is turned off.</td>
</tr>
<tr>
<td>Replace Battery</td>
<td>The battery is disconnected.</td>
<td>The LED illuminates red only.</td>
<td>Constant tone</td>
</tr>
<tr>
<td></td>
<td>The battery needs to be charged, or replaced.</td>
<td>The LED alternately illuminates green-red.</td>
<td>Constant tone</td>
</tr>
<tr>
<td>Overload Shutdown</td>
<td>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.</td>
<td>None</td>
<td>Back-UPS is turned off.</td>
</tr>
<tr>
<td>Sleep Mode</td>
<td>While the Back-UPS is on battery power, the UPS will shut down when the battery is completely discharged. The Back-UPS will “awaken” once AC power is restored.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>USB Fault</td>
<td>An error has occurred in the USB charger.</td>
<td>The LED illuminates amber.</td>
<td>None</td>
</tr>
</tbody>
</table>
Wall Mount Installation
- Horizontal installation, use 2 screws 3/16" (5 mm) apart.
- Allow 5/16" (8 mm), of the screw to protrude from the wall.

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-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 (AC 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. | Change to a more sensitive setting.
Red MEDIUM | 92 Vac to 139 Vac | Factory default setting. Use this setting under normal conditions. | Change to a more sensitive setting.
Amber HIGH | 96 Vac to 136 Vac | Use this setting when connected equipment is sensitive to voltage and waveform fluctuations. | Change to a less sensitive setting.

Replace Battery
Replace the used battery with an APC by Schneider Electric approved battery. Replacement batteries can be ordered through the APC by Schneider Electric Web site, www.apc.com. Battery replacement part for Back-UPS BGE90M/90M-CA is APCRCB116.

Warranty
The standard warranty is three (3) years from the date of purchase. Schneider Electric IT (SEIT) standard procedure is to replace the original unit with a factory reconditioned unit. Customers must have the original unit back due to the assignment of asset tags and asset 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 the SEIT. SEIT pays ground freight transportation costs to ship the replacement unit to the customer.

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.
   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 APC by Schneider Electric Web site for country specific instructions.
3. Pack the unit in the original packaging whenever possible to avoid damage in transit. Never use foam beads for packaging. Damage sustained in transit is not covered under warranty.
4. Always DISCONNECT THE UPS BATTERIES before shipping. The United States Department of Transportation (DOT), and the International Air Transport Association (IATA) regulations require that UPS batteries be disconnected before shipping. The internal batteries may remain in the UPS.
5. Write the RMA# provided by Customer Support on the outside of the package.
6. Return the unit by insured, pre-paid carrier to the address provided by Customer Support.

Troubleshooting

<table>
<thead>
<tr>
<th>Problem and Possible Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Back-UPS will not turn on</td>
<td>Press the Power On button.</td>
</tr>
<tr>
<td>The Back-UPS is not connected to AC power, there is no AC power available at the wall outlet, or the AC power is experiencing a brownout or over voltage condition.</td>
<td>Make sure the power cord is securely connected to the wall outlet. Where applicable, check that the wall outlet is switched on. In the event that the Back-UPS receives no AC 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.</td>
</tr>
<tr>
<td>The Back-UPS is on, the Replace Battery LED flashes and the unit emits a constant tone</td>
<td>The battery is disconnected. Refer to “Connect the Battery” on page 1.</td>
</tr>
</tbody>
</table>

Connected equipment loses power
A Back-UPS overload condition has occurred. Remove all nonessential equipment connected to the outlets. Reconnect equipment to the Back-UPS, one device at a time.

The Back-UPS battery is completely discharged. Connect the Back-UPS to AC power to allow the battery to recharge.

Connected equipment does not accept the step-approximated sine waveform from the Back-UPS.

The Back-UPS may require service.
Contact Schneider Electric IT (SEIT) Technical Support for more in depth troubleshooting.

The Power On LED and flashes once at the end of every 2 seconds
The Back-UPS is operating on battery power.
The Back-UPS is operating normally on battery power. When AC power is restored the battery will recharge.

The Power On LED flashes green in rapid succession while the Back-UPS emits 4 rapid beeps, every 30 seconds
The Back-UPS battery has approximately two minutes of remaining runtime. Using the USB ports while charging the battery will increase the amount of time required.

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 AC power for 6 hours while the battery charges to full capacity. As a battery ages, the runtime capability decreases. Contact APC by Schneider Electric at the Web site www.apc.com, to order replacement batteries.

USB charging is slow
Charging a device using the UPS's USB charger is slower than the device's original USB charger. The amount of power a device draws depends on its compatibility with the USB Battery Charging Specification 1.2. Compatible devices can draw more power than devices that are less compatible.

USB charging stops and the Power On LED illuminates amber
The USB ports are overloaded or has encountered an error. Disconnect device(s) from the USB port(s). USB charging will resume when the LED turns green. Contact SEIT Technical Support if the LED remains amber.

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.

EMC Compliance
This device complies with 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.

This UPS is certified to comply with California Battery Charger System regulations. For more information go to www.apc.com/site/recycle/index.cfm/energy-efficiency/cec-battery-charger/