Installation

1. Connect the Battery
   - In compliance with Department of Transportation (DOT) regulations, the Back-UPS is shipped with the internal red battery wire disconnected. The Back-UPS will not operate until the internal red wire is connected to the battery. Once connected, allow the Back-UPS 8 hours to charge.
   - Note: Small sparks may occur during battery connection. This is normal.
   - a. Open the battery compartment, as shown.
   - b. Pull the battery about half way out, as shown.
   - c. Connect the red battery wire to the positive battery terminal.
   - d. Push the battery into the battery compartment and re-install the cover, as shown.

2. Connect Equipment to the Back-UPS
   - The rear panel of the Back-UPS consists of the following Connectors:
   - Battery Back Up Outlets (Qty of 3). These outlets provide battery back-up, surge protection, and Electro-Magnetic Interference (EMI) filtering. In case of power outage, battery power is automatically provided to these outlets. Power utility or battery is not supplied to these outlets when the Back-UPS is switched OFF. Connect a computer, monitor, and external disk or CD-ROM drive to these outlets.
   - Surge Outlets (Qty of 3). These outlets are always on the utility power (is available) and are not controlled by the On/Off switch. These outlets do not provide power during a power outage. Connect a printer, fax machine or scanner to these outlets.

3. Check the Building Wiring Fault Indicator
   - If the red Building Wiring Fault indicator on the rear panel of the Back-UPS is lit, one of the following conditions exists:
   - Open or high resistance ground
   - Hot or neutral polarity reversed
   - Overloaded neutral circuit
   - A lit indicator means that a potential shock hazard exists. Improper building wiring should be corrected by a qualified electrician. Do not use the Back-UPS until the condition that caused the fault is corrected.
   - Note: Improper building wiring will not prevent the Back-UPS from operating, but it will limit its protection capability. It may also result in equipment damage that is not covered by the APC Back-Up Warranty.

4. Connect USB Cable and Install Software (optional)
   - To connect the Back-UPS to your computer:
     - a. Open the battery compartment, as shown.
     - b. Pull the battery about half way out, as shown.
     - c. Connect the red battery wire to the positive battery terminal.

5. Switch On the Back-UPS
   - Note: Allow the Back-UPS to charge for a full eight hours prior to use.
   - Press the push-button on the front panel of the Back-UPS.

6. Connect the Phone Line to Surge Protection
   - The telephone port provides lightning surge protection for telephone, fax, and modem lines attached to these outlets. The telephone port is compatible with Home Phone line Networking Alliance (HPNA) and Digital Security Line (DSL) standards, as well as all modern data rates. Connect as shown.

7. Status Indicators and Alarms
   - There are four static indicators (lights) on the front of the Back-UPS: (On Line, On Battery, Overload, and Replace Battery).
   - On Battery (yellow) - is lit whenever the battery is energizing equipment connected to the Battery Backup Outlets.
   - On Line (green) - is lit whenever utility power is powering the Battery Backup outlets.
   - Overload (red) - is lit whenever power-demand has exceeded the capacity of the Back-UPS.
   - Replacement Battery (red) - is lit whenever the batteries in the Back-UPS are reaching the end of useful life. If the battery is not connected (see above), a battery that is near the end of its useful life has insufficient runtime and should be replaced.

8. Placement / Power
   - Avoid placing the Back-UPS in:
     - Direct sunlight
     - Excessive humidity or in contact with fluids of any type
     - Excessive heat
   - The Back-UPS charges the internal battery any time it is connected to a wall outlet.
   - Plug the Back-UPS into a wall outlet, as shown.
   - • The red Battery indicator is on when the internal battery is charging.
   - • The red Battery indicator is off when the internal battery is fully charged.

9. Connect Equipment to the Back-UPS
   - The Back-UPS charges the internal battery and the internal red battery wire is disconnected. The Back-UPS will not operate until the internal red wire is connected to the battery. Once connected, allow the Back-UPS 8 hours to charge.
   - Note: Small sparks may occur during battery connection. This is normal.

10. Connect the Phone Line to Surge Protection
    - The telephone port provides lightning surge protection for telephone, fax, and modem lines attached to these outlets. The telephone port is compatible with Home Phone line Networking Alliance (HPNA) and Digital Security Line (DSL) standards, as well as all modern data rates. Connect as shown.

11. Connect USB Cable and Install Software (optional)
    - To connect the Back-UPS to your computer:
      - a. Open the battery compartment, as shown.
      - b. Pull the battery about half way out, as shown.
      - c. Connect the red battery wire to the positive battery terminal.

12. Switch On the Back-UPS
    - Note: Allow the Back-UPS to charge for a full eight hours prior to use.
    - Press the push-button on the front panel of the Back-UPS.

13. Connect the Phone Line to Surge Protection
    - The telephone port provides lightning surge protection for telephone, fax, and modem lines attached to these outlets. The telephone port is compatible with Home Phone line Networking Alliance (HPNA) and Digital Security Line (DSL) standards, as well as all modern data rates. Connect as shown.

14. Connect USB Cable and Install Software (optional)
    - To connect the Back-UPS to your computer:
      - a. Open the battery compartment, as shown.
      - b. Pull the battery about half way out, as shown.
      - c. Connect the red battery wire to the positive battery terminal.

15. Switch On the Back-UPS
    - Note: Allow the Back-UPS to charge for a full eight hours prior to use.
    - Press the push-button on the front panel of the Back-UPS.

16. Connect the Phone Line to Surge Protection
    - The telephone port provides lightning surge protection for telephone, fax, and modem lines attached to these outlets. The telephone port is compatible with Home Phone line Networking Alliance (HPNA) and Digital Security Line (DSL) standards, as well as all modern data rates. Connect as shown.

17. Connect USB Cable and Install Software (optional)
    - To connect the Back-UPS to your computer:
      - a. Open the battery compartment, as shown.
      - b. Pull the battery about half way out, as shown.
      - c. Connect the red battery wire to the positive battery terminal.

18. Switch On the Back-UPS
    - Note: Allow the Back-UPS to charge for a full eight hours prior to use.
    - Press the push-button on the front panel of the Back-UPS.

19. Connect the Phone Line to Surge Protection
    - The telephone port provides lightning surge protection for telephone, fax, and modem lines attached to these outlets. The telephone port is compatible with Home Phone line Networking Alliance (HPNA) and Digital Security Line (DSL) standards, as well as all modern data rates. Connect as shown.

20. Connect USB Cable and Install Software (optional)
    - To connect the Back-UPS to your computer:
      - a. Open the battery compartment, as shown.
      - b. Pull the battery about half way out, as shown.
      - c. Connect the red battery wire to the positive battery terminal.
Troubleshooting

Use the table below to solve minor Back-UPS installation and operation problems. Consult APC On-line Technical Support or call APC Technical Support for assistance with problems that cannot be resolved using this document.

<table>
<thead>
<tr>
<th>Possible Cause</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back-UPS will not switch on</td>
<td>Check that the Back-UPS power plug is securely connected to the wall outlet.</td>
</tr>
<tr>
<td>Back-UPS circuit breaker “tripped”</td>
<td>Disconnect non-essential equipment from the Back-UPS. Reset the circuit breaker located on the rear panel of the Back-UPS by pushing the circuit breaker button fully inward until it catches. If the circuit breaker resets, unplug the Back-UPS and reconnect the equipment one at a time. If the circuit breaker trips again it is likely that one of the connected devices is causing the overload.</td>
</tr>
<tr>
<td>Battery requires replacement</td>
<td>Check the wall outlet that supplies power to the Back-UPS using a table lamp. If the lamp bulb is very dim, the utility voltage checked by a qualified electrician.</td>
</tr>
<tr>
<td>Back-UPS does not power computer/monitor/external drive during an outage</td>
<td>Check the battery connections. (See &quot;Connect the Battery&quot; under &quot;Installation&quot; on the front page of this document.)</td>
</tr>
<tr>
<td>Battery requires replacement</td>
<td>More computer, monitor, or external drive power cord plug to the Battery Backup outlets.</td>
</tr>
<tr>
<td>Back-UPS operates on battery although normal utility voltage exists</td>
<td>The wall outlet that the Back-UPS is connected to does not supply utility power to the unit.</td>
</tr>
<tr>
<td>Back-UPS will not switch on</td>
<td>Connect the Back-UPS to another wall outlet or have a qualified electrician check the building wiring.</td>
</tr>
<tr>
<td>Back-UPS does not provide expected backup time</td>
<td>Unplug non-essential Battery Backup connected equipment, such as phones and plug them into Surge Only outlets. Note: Devices that have motors or dimmer switches (laser printers, heaters, fans, and vacuum cleaners, for example) should not be connected to the Battery Backup outlets.</td>
</tr>
<tr>
<td>Battery requires replacement</td>
<td>Charge the battery. The battery charges whenever the Back-UPS is connected to a wall outlet. Typically, eight hours of charging time are needed to fully charge the battery from total discharge. Back-UPS runtime is reduced until the battery is fully charged.</td>
</tr>
<tr>
<td>A red indicator is lit</td>
<td>Check the battery connections. Consult &quot;Connect the Battery&quot; under &quot;Installation&quot; on the front page of this document. It shows how to access the battery and connect the wires.</td>
</tr>
<tr>
<td>Battery requires replacement</td>
<td>The overload indicator is lit if equipment connected to the Battery Backup outlets is drawing more power than the Back-UPS can provide.</td>
</tr>
<tr>
<td>Red indicators are flashing</td>
<td>Charge the battery. Consult &quot;Connect the Battery&quot; under &quot;Installation&quot; on the front page of this document. It shows how to access the battery and connect the wires.</td>
</tr>
<tr>
<td>Replace Battery indicator lit and an alarm sounds when the Back-UPS is turned on</td>
<td>More one or more equipment power plugs to the Surge Only outlets.</td>
</tr>
</tbody>
</table>

Specifications

- **Input Voltage (range):** 94–112 Vac
- **Frequency Limits (on line):** 47–63 Hz (auto ranging)
- **On Battery Surge Spike:** Stopped Site Spike
- **Maximum Load:** 350 VA – 210 W / 500 VA – 500 W
- **Typical Recharge Time:** 8 Hours
- **Operating Temperature:** 32° to 104° F (0° to 40°C)
- **Storage Temperature:** 23° to 71° F (-5° to 22°C)
- **Output Frequency:** 60 Hz
- **Input Mains:** 120 Vac
- **EML Classification:** FCC/DOC Class B Certified
- **On Battery Run-Time:** 20 Minutes typical - desktop computer and 15 inch (38.1 cm) monitor

Back-UPS Storage

Before storing, charge the Back-UPS for at least eight hours. Store the Back-UPS covered and upright in a cool, dry location. During storage, recharge the battery in accordance with the following table:

<table>
<thead>
<tr>
<th>Storage Temperature</th>
<th>Recomcharge Frequency</th>
<th>Charging Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>23° to 80°F (-5° to 30°C)</td>
<td>Every 6 months</td>
<td>8 hours</td>
</tr>
<tr>
<td>80° to 113°F (30° to 45°C)</td>
<td>Every 3 months</td>
<td>8 hours</td>
</tr>
</tbody>
</table>

Please contact APC Technical Support to troubleshoot the unit before returning it to APC.

Order Replacement Battery

Battery replacement is a safe procedure. The Back-UPS can be left on with the equipment connected during this procedure. It is not necessary to replace the battery when the Back-UPS is in Battery mode. Refer to the APC Safety Information for additional information.

- Please consult the “Connect Battery” diagrams (a through d) on the front page of this document when performing the following procedures:
  1. While viewing the Back-UPS from the front, lay the Back-UPS on its left side (diagram a).
  2. Slide the battery compartment cover off of the Back-UPS (diagram a).
  3. Grasp the tab attached to the battery and slide the battery partially out of the case. Grab the battery firmly and pull it straight out. The battery wires will disconnect as the battery is pulled out (diagram b).
  4. Carefully unplug the new battery. Return the packing carton so that the old battery can be recycled.
  5. Insert the new battery halfway into the Back-UPS (diagram b). Check the wires to make sure the new battery is connected properly (diagram b).
  6. Red Wire - to red (positive) terminal
  7. Black Wire - to black (negative) terminal

Battery Replacement

- **Battery replacement**: A Back-UPS under warranty will be repaired at no cost. The standard warranty is two (2) years from the date of purchase. APC's standard procedure will be to replace the original unit with a factory reconditioned unit. APC 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 APC. APC pays ground freight transportation costs to ship the replacement to the customer. Customers who must have the original unit back due to assigned asset tags and sets depreciation schedules must declare such a need at first contact with an APC representative. Returns to APC in the packing carton that came with the new battery. Additional recycling information is provided with the new battery.

Service

- If the Back-UPS arrives damaged, notify the carrier.
- If the Back-UPS requires service, do not return it to the dealer. The following steps should be taken:
  1. Consult the Troubleshooting section to eliminate common problems.
  2. Verify that the circuit breaker is not tripped. A tripped circuit breaker is the most common Back-UPS problem.
  3. If the problem persists, contact APC On-line Technical Support or call APC Technical Support (see below).

Technical Support

- 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 sets depreciation schedules must declare such a need at first contact with an APC Technical Support representative. APC will ship the replacement unit once the defective unit has been received by the repair department. Additional recycling information is provided with the new battery. Additional recycling information is provided with the new battery.

Warranty

- The standard warranty is two (2) years from the date of purchase. 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 sets depreciation schedules must declare such a need at first contact with an APC Technical Support representative. APC will ship the replacement unit once the defective unit has been received by the repair department. Additional recycling information is provided with the new battery. Additional recycling information is provided with the new battery.

APC Contact Information

- USA/Cana: 1-800-846-4272
- Mexico: 292.2853 / 292.2859
- Brazil: 0800.12.7.21
- Worldwide: 1-441.789.5353
- Internet: http://www.apc.com
- Technical Support: http://www.apc.com/support

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