There are four status indicators (lights) on the front panel of the Back-UPS (On Line, On Battery, Overload, and Replace Battery).

- **On Line (green)** - is lit whenever the Back-UPS is running on line power.
- **On Battery (yellow)** - is lit whenever the Back-UPS is running on battery power.
- **Overload (red)** - is lit whenever the load exceeds the capacity of the Back-UPS.
- **Replace Battery (red)** - is lit if the internal battery is near the end of its useful life or if the battery is not connected (see Step 1 above).

#### Status Indicators and Alarms

**On Battery (yellow)**

- When running on battery power, the On Battery indicator will be lit.

**Overload (red)**

- The Overload indicator will be lit whenever the load exceeds the capacity of the Back-UPS.

**Replace Battery (red)**

- The Replace Battery indicator will be lit if the internal battery is near the end of its useful life or if the battery is not connected.

**Continuous Tone**

- A continuous tone will sound whenever the Battery Backup outlets are overloaded.

**Chirps for 1 Minute Every 5 Hours**

- A chirping sound will be heard whenever the battery has failed the automatic diagnostic test.

**Four Beeps Every 30 Seconds**

- A four-beep alarm will sound whenever the Battery Backup outlets are overloaded.

**Continuous Beeping**

- A continuous beeping sound will be heard whenever a low battery condition is reached.

**Chips for 3 Minutes Every 5 Hours**

- A series of chips will be heard whenever the battery has reached its end-of-life condition.

**On Line (green)**

- The On Line indicator will be lit whenever utility power is powering the Battery Backup outlets.

**Continuous Beeping**

- A continuous beeping sound will be heard whenever a low battery condition is reached.

**Replace Battery (red)**

- The Replace Battery indicator will be lit if the internal battery is near the end of its useful life or if the battery is not connected.

**Chirps for 1 Minute Every 5 Hours**

- A chirping sound will be heard whenever the battery has failed the automatic diagnostic test.

#### Operating Environment

- **Temperature**: 0 to 40°C (32 to 104°F)
- **Humidity**: 10 to 90% non-condensing

#### Connect TVSS Ground (optional)

- The Back-UPS features a transient voltage surge-suppression (TVSS) screw for connecting the ground lead on additional surge suppression devices such as network and data line surge protectors.

### Connect Equipment / Power

- **Input**: 220-240V~, 7A, 50-60Hz
- **Output**: 220-240V~, 3A, 50-60Hz, 540W

### Connect Interface Cable

- **To Computer USB Port**: RJ-45
- **To Computer USB Port**: RJ-45

### Connect 10/100 Base-T or VOIP

- **RJ-45**: Network Port

### Connect Phone/Modem/Fax

- **Modem Port**: RJ-45

### Connect Battery Cartridge

- **CONNECT BATTERY CARTRIDGE**

### Install Software on Computer

- **NOTE**: Macintosh Users - for full USB performance, use Mac OS 10.1.5 or higher.
- **If Autoplay is not enabled on the computer, proceed as follows:**
  1. On the computer desktop of the display, double-click on My Computer.
  2. Double-click on the CD-ROM drive icon and follow the on-screen instructions.

### Switch on the Back-UPS

- **Note**: Allow the Back-UPS to charge for a full eight (8) hours prior to use.
- **Press the front panel Power ON/OFF switch and observe that the following events occur after pressing and releasing the switch:**
  - The green On Line indicator flashes.
  - The yellow On Battery indicator lights while a Self-Test is being performed.
  - When Self-Test has successfully completed, only the green On Line indicator will be lit.
  - If the internal battery cartridge is not connected (see Step 1 above), the green On Line indicator and red Replace Battery indicators will light. The Back-UPS will also emit a chirping sound.

### Connect TVSS Ground

- **TVSS GND**: The Back-UPS features a transient voltage surge-suppression (TVSS) screw for connecting the ground lead on additional surge suppression devices such as network and data line surge protectors.
Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back-UPS will not switch on.</td>
<td>Back-UPS not connected to AC power source.</td>
<td>Ensure the Back-UPS is correctly connected to an AC outlet.</td>
</tr>
<tr>
<td>Back-UPS circuit breaker &quot;tripped&quot;.</td>
<td>Disconnect non-essential equipment from the Back-UPS. Reset (push in) the rear panel circuit breaker. Switch the Back-UPS on and plug in devices one at a time. If the circuit breaker trips again, disconnect the device that caused the breaker to trip.</td>
<td></td>
</tr>
<tr>
<td>Utility input voltage quality is out of range.</td>
<td>Consider adjusting the transfer voltage and sensitivity. See Transfer Voltage and Sensitivity Adjustment.</td>
<td></td>
</tr>
<tr>
<td>Back-UPS does not power essential equipment during an outage.</td>
<td>Equipment plugged into a Surge Only outlet.</td>
<td>Unplug device from &quot;Surge Only&quot; outlet and move to a Battery Backup outlet.</td>
</tr>
<tr>
<td>Back-UPS operates on battery although utility power exists.</td>
<td>Back-UPS circuit breaker &quot;tripped&quot;.</td>
<td>Disconnect non-essential equipment from the Back-UPS. Reset (push in) the rear panel circuit breaker. Switch the Back-UPS on and plug in equipment in one at a time. If the circuit breaker trips again, disconnect the device that caused the breaker to trip.</td>
</tr>
<tr>
<td>Back-UPS does not provide expected backup time.</td>
<td>Back-UPS battery cartridge is discharged due to recent power outage and has not had time to recharge.</td>
<td>Charge the battery cartridge for 8 hours. Back-UPS runtime is reduced until the battery cartridge is fully charged.</td>
</tr>
<tr>
<td>Battery has reached the end of its life.</td>
<td>Replace battery cartridge (see Order Replacement Battery Cartridge).</td>
<td></td>
</tr>
<tr>
<td>Red Replace Battery indicator is flashing.</td>
<td>Internal battery cartridge is not connected.</td>
<td>Connect battery cartridge (see Connect Battery Cartridge).</td>
</tr>
<tr>
<td>Red Overload indicator is on or flashing.</td>
<td>Connected equipment is drawing more power than the Back-UPS can provide.</td>
<td>Move one or more equipment power plugs from Battery Backup outlets to Surge Only outlets.</td>
</tr>
<tr>
<td>Green On Line indicator is on and all other front panel indicators are flashing.</td>
<td>Internal UPS fault.</td>
<td>Contact APC Technical Support (see Contact Information).</td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-line Input Voltage Range</td>
<td>176 - 294 Vac</td>
</tr>
<tr>
<td>Automatic Voltage Regulation (AVR)</td>
<td>5% deviation (52.8 VAC - 166.8 VAC)</td>
</tr>
<tr>
<td>On-battery Waveform</td>
<td>Stepped Sin Wave</td>
</tr>
<tr>
<td>Maximum Load</td>
<td>500 VA - 540 W</td>
</tr>
<tr>
<td>Typical Runtime</td>
<td>8 Hours</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0o to 40oC (32o to 104oF)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-5o to 45oC (23o to 113oF)</td>
</tr>
<tr>
<td>On-battery Voltage Range</td>
<td>52.8 to 166.8 VAC</td>
</tr>
<tr>
<td>Size (H x W x D)</td>
<td>23 x 10 x 32 cm (9 x 4 x 12.75 inch)</td>
</tr>
<tr>
<td>Weight</td>
<td>3.8 kg (8.4 lbs)</td>
</tr>
<tr>
<td>Shipping Weight</td>
<td>5.9 kg (13 lbs)</td>
</tr>
<tr>
<td>TMI Classification</td>
<td>EN 50091-3, EN 60950, EN 50951-2, EN 601,000-2-3, EN 601,000-3-3, EN 55022 Class B</td>
</tr>
<tr>
<td>On Battery Run-Time</td>
<td>See <a href="http://www.apc.com/product">http://www.apc.com/product</a></td>
</tr>
</tbody>
</table>

Transfer Voltage and Sensitivity Adjustment

In situations where the Back-UPS or connected equipment appears too sensitive to input voltage, it may be necessary to adjust the transfer voltage. This is a simple task requiring use of the front panel pushbutton. To adjust the transfer voltage, proceed as follows:

1. Plug the Back-UPS into the utility power source. The Back-UPS will be in a Standby Mode (no indicators lit). |
2. Press the front panel pushbutton fully inward for 10 seconds. All indicators (except the Red Replace Battery indicator) are flashing. On Battery Run-Time See http://www.apc.com/product |
3. The Back-UPS will then indicate its current Sensitivity Setting, as shown in the following table.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Sensitivity Setting</th>
<th>Input Voltage Range (for utility operation)</th>
<th>Use When</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (yellow)</td>
<td>Low</td>
<td>156 - 300 Vac</td>
<td>Input voltage is extremely low or high. Not recommended for computer loads.</td>
</tr>
<tr>
<td>2 (yellow, and red)</td>
<td>Medium (factory default)</td>
<td>176 - 294 Vac</td>
<td>Back-UPS frequently goes On Battery</td>
</tr>
<tr>
<td>3 (yellow, red, and red)</td>
<td>High</td>
<td>176 - 288 Vac</td>
<td>Connected equipment is sensitive to voltage fluctuations (recommended).</td>
</tr>
</tbody>
</table>

4. To select the Low Sensitivity setting, press the pushbutton until the yellow indicator is flashing.
5. To select the Medium Sensitivity setting, press the pushbutton until the yellow and red indicators (second and third from the top) are flashing.
6. To select the High Sensitivity setting, press the pushbutton until yellow and both red indicators (bottom three) are flashing.
7. To exit without changing the Sensitivity Setting, press the pushbutton until the green indicator is flashing.
8. Once in Programming Mode, if the pushbutton is not pressed within 5 seconds, the Back-UPS will exit Programming Mode; all indicators will extinguish.

Order Replacement Battery Cartridge

The battery cartridge typically lasts 3-6 years, shorter if subjected to frequent outages or elevated temperatures. Order part number RBC32. Please recycle spent battery cartridges.

Technical Support

http://www.apc.com/support

Contact Information

http://www.apc.com

Worldwide: +1.401.789.5735

Limited 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 the assignment of asset tags and set 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, or cross-shipped 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 unit to the customer.

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