



User Manual

English

**APC SUM48RMXLBP2U
Extended Life (XL) Battery Pack**

**For Use With APC Smart-UPS® Modular
Uninterruptible Power Supply**

990-1736 01/2004

Introduction

The SUM48RMXLBP2U connects to the APC Smart-UPS Modular Uninterruptible Power Supply (UPS). Together, these units provide **extended** protection for your equipment from blackouts, brownouts, sags, and surges.

For battery replacement and service information, see the UPS *User Manual*.

1: INSTALLATION

The User Manual and Safety Guide are accessible on the supplied User Manuals CD and on the APC website, www.apc.com.

Note: Illustrations in this document might differ slightly from the actual hardware.

Unpack

Attention: Read the safety instruction sheet before installation.

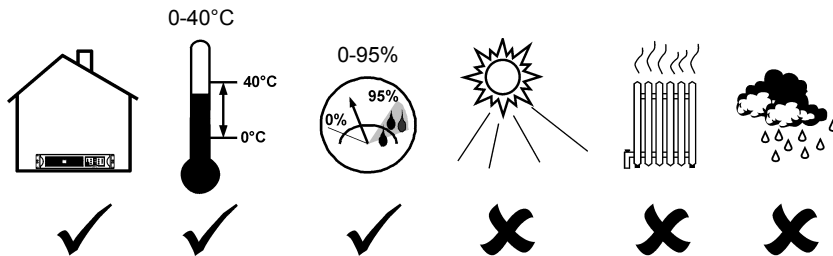
Inspect the unit upon receipt. Notify the carrier and dealer if there is damage.

The packaging is recyclable; save it for reuse or dispose of it properly.

Check the package contents:

- Battery pack
- Bezel
- Rail Kit
- Tower conversion top panels and expansion pieces for mounting stabilizers
- Extended Life Battery Pack literature kit containing:
 - Product documentation, safety, and warranty information
 - Smart-UPS User Manuals CD
 - Mounting hardware

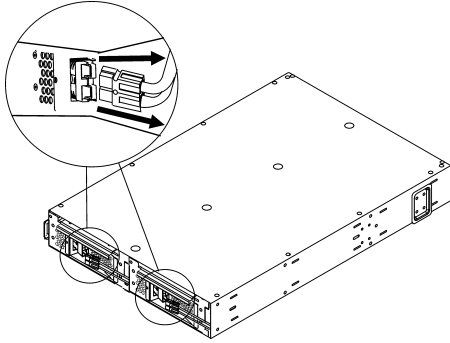
Position the Battery Pack in the Specified Environment



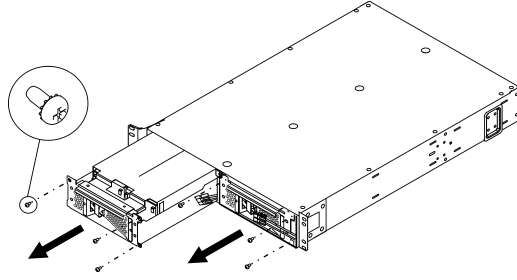
Mount the Battery Pack in the Rack

Attention: Install the rails following the instructions in the rail kit.

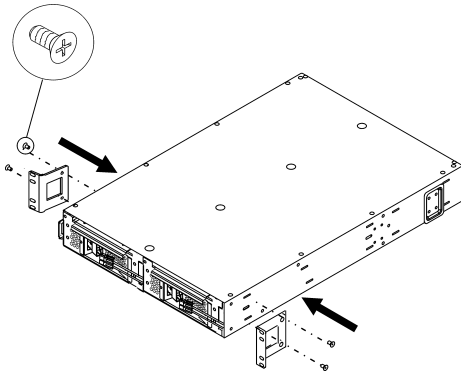
1



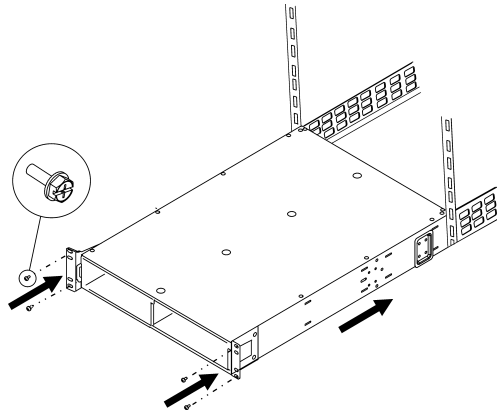
2



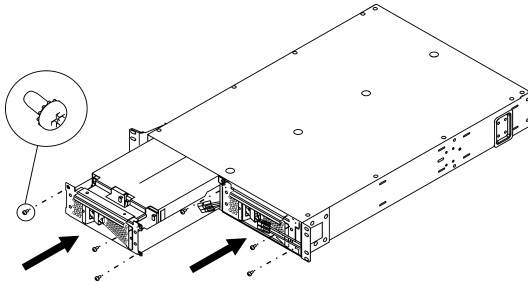
3



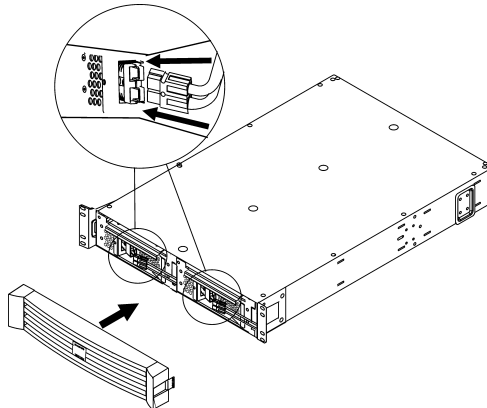
4



5

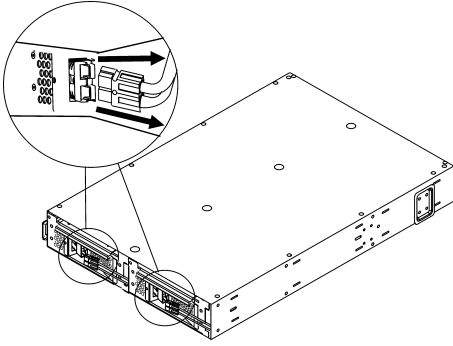


6

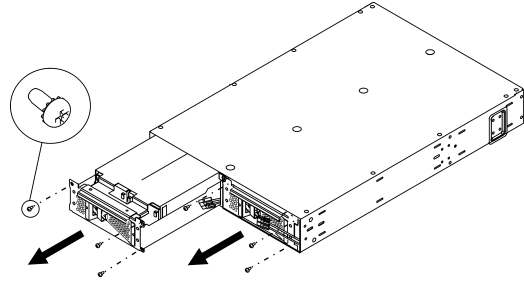


TOWER CONFIGURATION

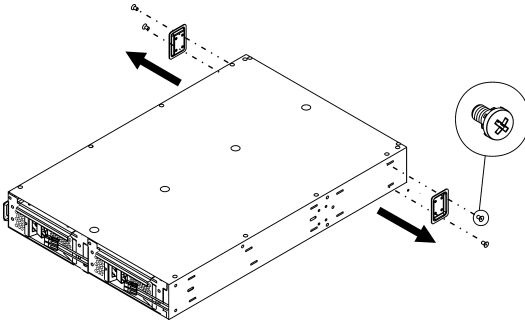
1



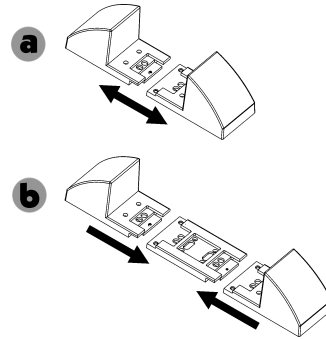
2



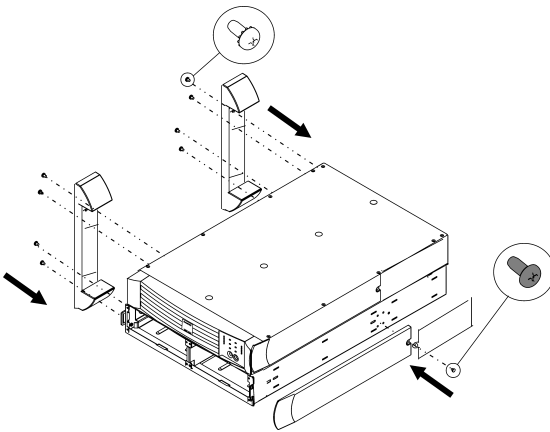
3



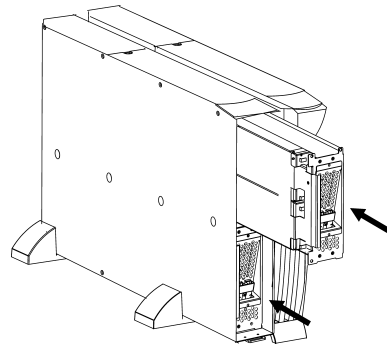
4



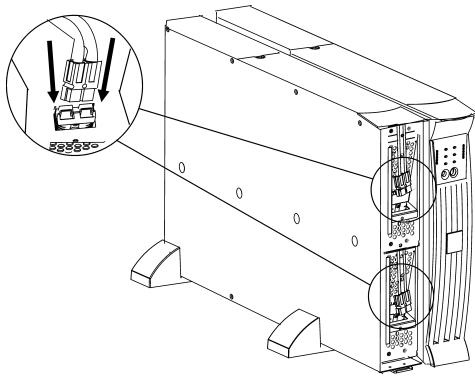
5



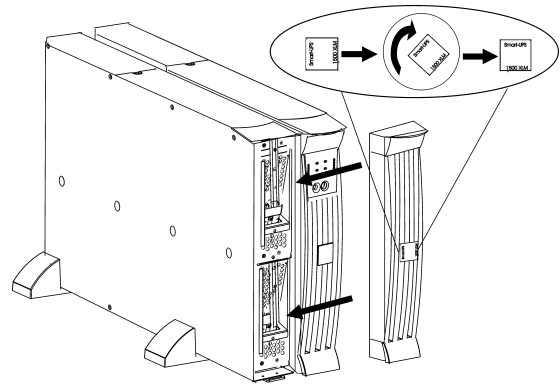
6 Note: Place in final operating location prior to battery reinstallation.



7



8



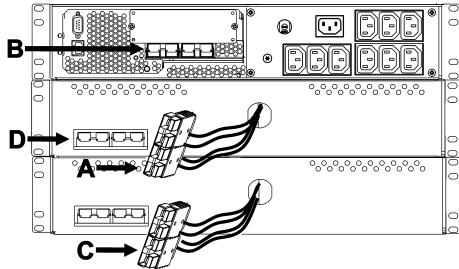
2: CONNECTION TO THE UPS

Connect the Battery Pack(s) to the UPS

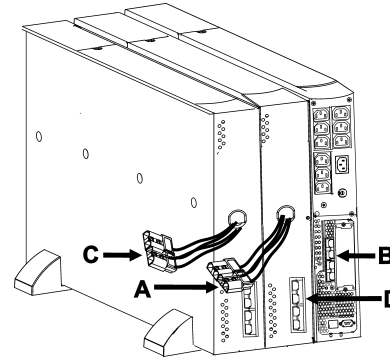
Connect A to B. (For additional packs, connect C to D.)

Note: The UPS can be powered during connection.

RACK-MOUNT CONNECTION:



TOWER CONNECTION:



Program the UPS to Recognize the Correct Number of Battery Pack(s)

Attention: This configuration affects the accuracy of the runtime calculations that the UPS performs while running on battery power.

Program the UPS with the appropriate number of external battery pack(s) in one of the following three ways.

- **VIA THE NETWORK**

See the documentation packaged with the UPS to connect to a network.

1. Use any network console to gain access to the UPS.
2. The following menu options (in order) will allow for entering the number of external battery packs.
 - A. Select the device manager option and/or UPS name ('Smart-UPS [nnnn] XLM').
 - B. Select the configuration option.
 - C. Select the battery option.
 - D. Select the external batteries option.
3. Enter the number of external battery packs, and select accept/apply changes option.

- **VIA POWERCHUTE®**

See the documentation packaged with the UPS to install PowerChute.

1. Use any PCBE Console to log on to the PCBE Server monitoring the UPS system.
2. Double-click on the UPS system in the Status display's device list to access the 'Device Properties' dialog box for the UPS.

3. Click 'Battery Status' under 'General'.
 4. Type in the number of external battery packs in the 'Battery Packs' dialog box and click 'Apply'.
- **ALLOW THE UPS TO DETERMINE THE NUMBER OF EXTERNAL BATTERY PACKS BY CONDUCTING A RUNTIME CALIBRATION TEST**

In order for the UPS to conduct a valid runtime calibration test, the following conditions must be met.

- ✓ The UPS must be 100% charged. This can be accomplished if the UPS is left online, without power interruption for at least three hours, plus eight hours per external battery module.
- ✓ The load on the UPS must remain constant. A computer or other electronic load connected to the UPS is usually a good source. Whenever possible, use the load that is expected to be supported by the UPS.

The runtime calibration test will discharge all connected batteries to 25% of their original capacity.

See the product documentation packaged with the UPS to install PowerChute.

1. Use any PCBE Console to log on to the PCBE Server that is monitoring the UPS system.
2. Double-click on the UPS system in the Status display's device list to access the 'Device Properties' dialog box for the UPS.
3. Click 'Diagnostics' to display the 'UPS Calibration' option.
Note: If the 'Diagnostics' selection is not shown, select the 'Show Advanced Items' option at the bottom of the dialog box.
4. Click 'UPS Calibration'.
5. Click 'Start'.



If you are unable to install or access PowerChute, or if there is no computer connected to the UPS, you can conduct a manual calibration by pulling the plug powering the UPS until the UPS automatically shuts down due to a low battery.

3: REGULATORY, WARRANTY, AND CONTACT INFORMATION

Regulatory Agency Approvals

See User Manual for Smart-UPS Modular Uninterruptible Power Supply for complete regulatory approval listings.

Declaration of Conformity

2004 <small>Date of product declaration</small>		EC Declaration of Conformity	
We, the undersigned, declare under our sole responsibility that the equipment specified below conforms to the following standards and directives:			
Standards to Which Conformity Declared:	EN62040-1-1, EN55022, EN55024, EN61000-3-2, 3-3, 4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11, EN60950-1, IEC60950-1		
Application of Council Directives:	73/23/EEC, 93/68/EEC		
Type of Equipment:	Power Supply		
Model Numbers:	SUM48RMXLBP2U		
Manufacturer's Name and Address:			
American Power Conversion (A. P. C.) b. v. Ballybritt Business Park Galway, Ireland		American Power Conversion 132 Fairgrounds Road West Kingston, Rhode Island, 02892, USA	
APC (Suzhou) UPS Co., Ltd 339 Suhong Zhong Lu Suzhou Industrial Park Suzhou Jiangsu 215021 P R China		American Power Conversion 2nd Street PEZA Cavite Economic Zone Rosario, Cavite Philippines	
American Power Conversion Lot 3, Block 14, Phase 3 PEZA, Rosario, Cavite Philippines		American Power Conversion Lot 10, Block 16, Phase 4 PEZA, Rosario, Cavite Philippines	
Importer's Name and Address:			
American Power Conversion (A. P. C.) b. v. Ballybritt Business Park Galway, Ireland			
Place:	N. Billerica, MA U.S.A.	Richard J. Everett, Sr. Regulatory Compliance Engineer	
		 5 Jan 03	
Place:	Galway, Ireland	Ray S. Ballard, Managing Director, Europe	
		 5 Jan 03	

Contact Information

U.S. Customers - Refer to www.apc.com/support.

International Customers - Refer to www.apc.com, select the appropriate country from the country selection field, and select the *Support* tab at the top of the web page.

Limited Warranty

American Power Conversion (APC) warrants its products to be free from defects in materials and workmanship for a period of two years from the date of purchase. Its obligation under this warranty is limited to repairing or replacing, at its own sole option, any such defective products. To obtain service under warranty you must obtain a Returned Material Authorization (RMA) number from customer support. Products must be returned with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment that has been damaged by accident, negligence, or misapplication or has been altered or modified in any way. This warranty applies only to the original purchaser who must have properly registered the product within 10 days of purchase.

EXCEPT AS PROVIDED HEREIN, AMERICAN POWER CONVERSION MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

EXCEPT AS PROVIDED ABOVE, IN NO EVENT WILL APC BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. Specifically, APC is not liable for any costs, such as lost profits or revenue, loss of equipment, loss of use of equipment, loss of software, loss of data, costs of substitutes, claims by third parties, or otherwise.

Entire contents copyright © 2004 by American Power Conversion Corporation. All rights reserved.
Reproduction in whole or in part without permission is prohibited.

APC, Smart-UPS, and PowerChute are registered trademarks of American Power Conversion Corporation. All other trademarks are the property of their respective owners.