



Smart-UPS[®] XL
External Battery Pack

SUA48RMXLBP3U

SUA48RMXLBPJ3U

English

Introduction

About this Unit

The SUA48RMXLBP3U/SUA48RMXLBPJ3U connects to the APC Smart-UPS XL. Together these units provide extended protection from utility power blackouts, brownouts, sags and surges from reaching your electronic equipment.

Unpack

Read the Safety Guide before installing the unit.

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:

- External battery pack with two battery modules installed
- Bezel
- Rail kit
- Literature kit containing:
 - Two rack-mount brackets
 - Eight flathead screws
 - Four cage nuts
 - Product documentation
 - Safety information
 - Warranty information

NOTE: The model and serial numbers are located on a small, rear panel label. For some models, an additional label is located on the chassis under the front bezel.

Specifications

Temperature Operating Storage	0° to 40° C (32° to 104° F) -15° to 45° C (5° to 113° F) charge the battery module(s) every six months	This unit is intended for indoor use only. Select a location sturdy enough to handle the weight. Do not operate the UPS where there is excessive dust or the temperature or humidity are outside the specified limits. Be sure the air vents on the UPS are not blocked. Environmental factors impact battery life. High temperatures, poor utility power, and frequent, short duration discharges will shorten battery life.
Maximum Elevation Operating Storage	3,000 m (10,000 ft) 15,240 m (50,000 ft)	
Humidity	0 to 95% relative humidity, non-condensing	
Weight	18 kg (40 lbs) without battery module 68 kg (150 lbs) with battery module 25 kg (55 lbs) each battery module	68 kg (150 lbs) 
Dimensions H x W x D	133 mm x 283 mm x 660 mm 5.24 in x 11.14 in x 26 in	
Maximum Number of External Battery Packs Supported by the Smart-UPS XL	10	
Voltage	48 V	

Installation

Your external battery pack and UPS may vary in appearance from the examples depicted in this manual.



The UPS and the battery modules are heavy. Remove the battery modules to lighten the UPS during installation.

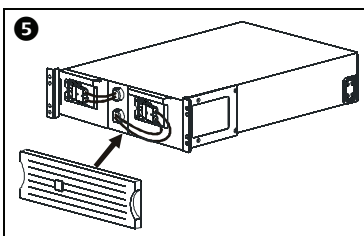
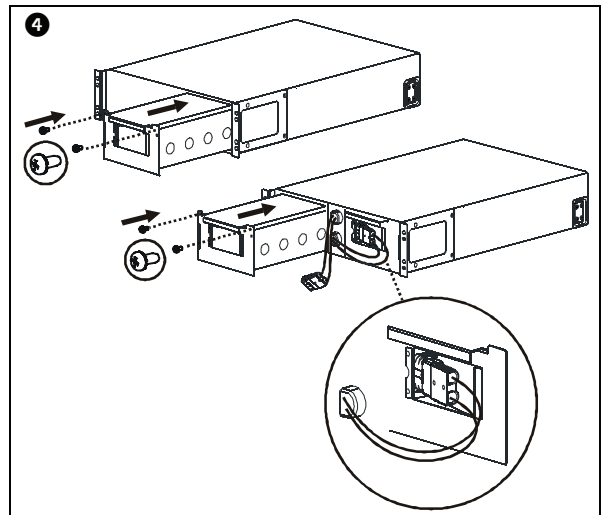
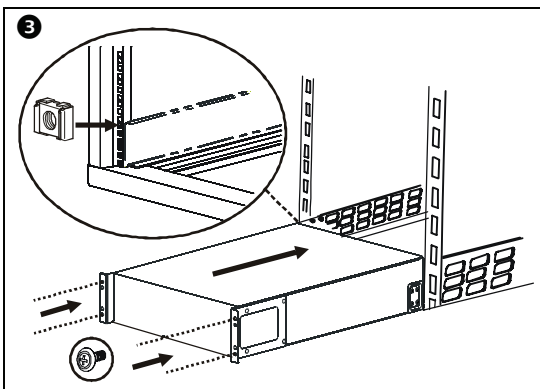
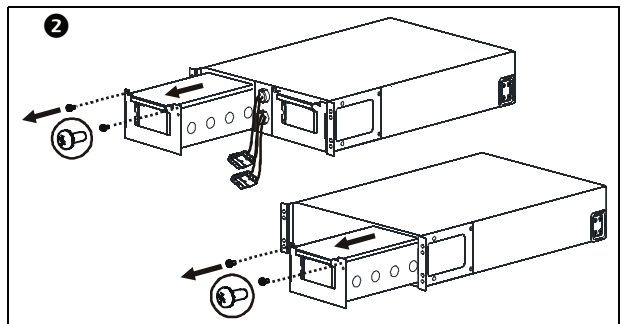
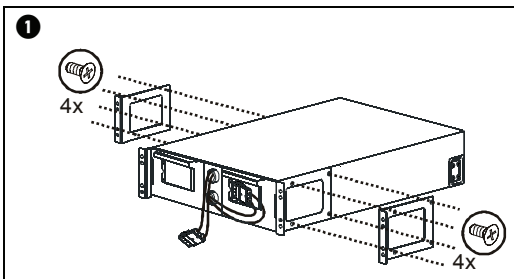
Install the Rails in the Rack

This UPS is intended for installation in a 19" rack.

For details on rail installation refer to the instructions in the rail kit.

Install the Battery Pack in the Rack

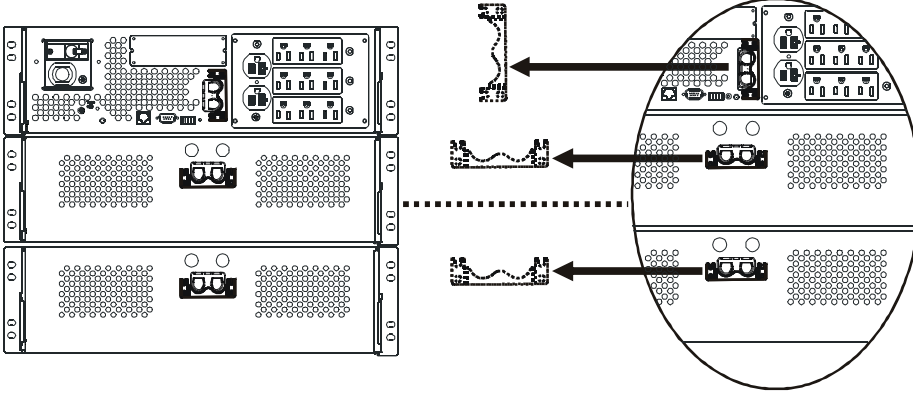
The external battery pack should be mounted below the UPS in the rack. Install the UPS and the external battery pack at or near the bottom of the rack. If the UPS and the external battery pack are to be mounted in adjacent racks use an APC approved extension cable. Refer to the APC Web site, www.apc.com for ordering approved cables.



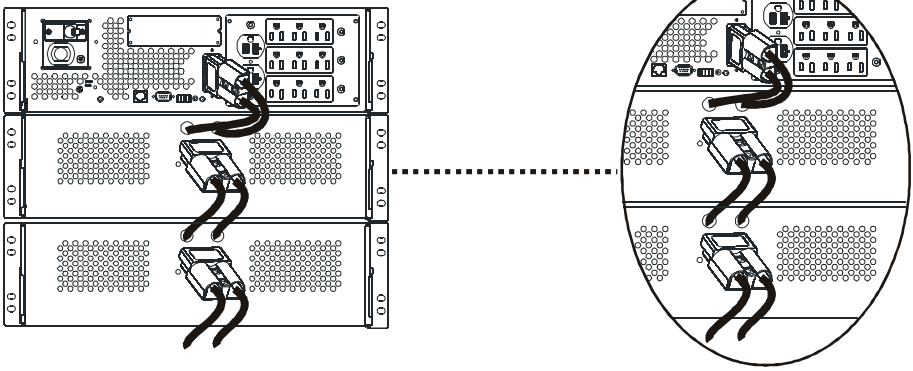
Connect the External Battery Pack(s)

1

Remove the two screws that secure the strain relief to the external battery connector.

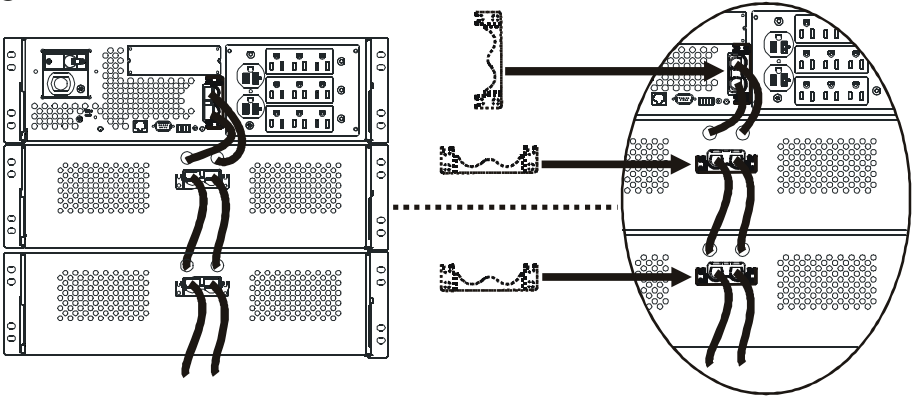


2



3

Reinstall the strain relief securing it with the two screws removed in step **1** above.



Configure UPS parameters

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

Smart-UPS XL models must be programmed to recognize the number of external battery packs connected to the UPS.

There are five options available for configuring the UPS to recognize the number of external battery packs

1. PowerChute[®] *Business Edition*: Refer to the instructions included with the software
2. Network Management Card (NMC) Web interface: Refer to the instructions included with NMC
3. Network Management Card (NMC) terminal mode: Refer to the instructions below
4. UPS terminal mode
5. Download the Smart-UPS Battery pack utility program from the APC Web site, <ftp://ftp.apcc.com/apc/public/hardware/smartups/xbattpack/>

Configure UPS connection settings using NMC terminal mode

Connect the serial cable to the serial port on the back of the UPS. If using USB communication to the UPS, disconnect the USB cable prior to connecting the serial cable.

1. Open a terminal program, such as HyperTerminal[®].
From the Desktop, go to: **Start, Programs, Accessories, Communication, HyperTerminal**
2. Follow the prompts to choose a name and select an icon. Disregard the message, "...must install a modem," if it is displayed, click **Cancel**.
3. Go to **File, Properties**. Select the COM port that is connected to your UPS. The port settings are:
 - **bits per second - 9600**
 - **data - bits 8**
 - **parity - none**
 - **stop bit - 1**
 - **flow control - none**
4. Click **OK** in each of two windows
5. Press **ENTER** to initiate the connection to the UPS.

Configure the number of external battery packs using NMC terminal mode

1. Once the blank terminal window is open:
2. Press **ENTER** to initiate terminal mode. Press **ENTER** multiple times, until the prompt User Name: is displayed. Follow the prompts. Type slowly, waiting until each character appears on the screen prior to typing the next character.
Network Management Card defaults:
 - **User Name: apc**
 - **Password: apc**

3. Press **1** and **ENTER** to select Device Manager.
Select the model by entering the corresponding number, then press **ENTER**.
4. Press **3** and **ENTER** to select **Configuration**.
5. Press **1** and **ENTER** to select **Battery**.
6. Press **2** and **ENTER** to change **Battery Settings**.
7. Type in the number of external battery packs then press **ENTER**.
Number of external battery packs:
1=1 external battery pack; 2=2 external battery packs; 3=3 external battery packs etc.
8. Press **3** and **ENTER** to accept the changes.
9. Press **ESC** multiple times (5) to return to the main menu.
10. Press **4** and **ENTER** to log out.

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From the Desktop, go to: **Start, Programs, Accessories, Communication, HyperTerminal**
2. Follow the prompts to choose a name and select an icon. Disregard the message, "...must install a modem," if it is displayed. Click **Cancel**
3. Go to **File, Properties**. Select the COM port that is connected to your UPS. The port settings are:
 - **bits per second - 2400**
 - **data - bits 8**
 - **parity - none**
 - **stop bit - 1**
 - **flow control - none**
4. Click **OK** in each of two windows
5. Press **ENTER**

Configure the number of external battery packs using UPS terminal mode

1. Once the blank terminal window is open, follow these steps to enter the number of external battery packs:

NOTE: Letter key commands are case sensitive. Use capital letters when using letter key commands.

2. Press **Y**. The UPS will respond with **SM** in the command box. If the UPS does not respond to the **Y** command, ensure the serial cable is securely connected to the serial port on the UPS. Use only an APC supplied serial cable.
3. When **SM** appears in the command box press the **>** key. The UPS will respond with the number of external battery packs connected to the UPS. If the UPS has not been previously programmed to recognize the number of external battery packs this number will be zero.
4. Use the **+** or **-** keys to change the number of external battery packs. **OK** will appear in the command box.
5. Press **>** key. The number of external battery packs will appear in the command box.
NOTE: The **+** or **-** keys and the **>** key must be used again to change the number of external battery packs from this point in the programming.
6. Press **R**. The UPS will respond with **BYE** in the command box.

Maintenance and Service

Replacing the Battery Module

This unit has two replaceable, hot-swappable battery modules. Replacement is a safe procedure, isolated from electrical hazards. Leave the external battery pack(s) and connected equipment on during the replacement procedure.



Once the batteries are disconnected the connected equipment is not protected from power outages.

Refer to the appropriate replacement battery user manual for battery module installation instructions. See your dealer or contact APC at www.apc.com or <http://upgrade.apc.com> for information on replacement battery modules.



Be sure to deliver the spent battery(s) to a recycling facility or ship it to APC in the replacement battery packing material.

Service

If the unit requires service do not return it to the dealer. Follow these steps:

1. If the problem persists, contact APC Customer Support through the APC Web site, **www.apc.com**.
 - Note the model number of the unit, the serial number located on the back of the unit, and the date purchased. If you call APC Customer Support, a technician will ask you to describe the problem and attempt to solve it over the phone. If this is not possible, the technician will issue a Returned Material Authorization Number (RMA#).
 - If the unit is under warranty, repairs are free.
 - Procedures for servicing or returning products may vary internationally. Refer to the APC Web site for country specific instructions.
2. Pack the unit in its original packaging. If this is not available, refer to www.apc.com for information about obtaining a new set.
 - Pack the unit properly to avoid damage in transit. Never use Styrofoam beads for packaging. Damage sustained in transit is not covered under warranty.
 - **Always DISCONNECT THE BATTERY before shipping in compliance with U.S. Department of Transportation (DOT) and IATA regulations.** The battery(s) may remain in the unit.
3. Mark the RMA# on the outside of the package.
4. Return the unit by insured, prepaid carrier to the address given to you by Customer Support.

APC Worldwide Customer Support

Customer support for this or any other APC product is available at no charge in any of the following ways:

- Refer to the APC Web site to access documents in the APC Knowledge Base and to submit customer support requests.
 - **www.apc.com** (Corporate Headquarters)
Connect to localized APC Web sites for specific countries, each of which provides customer support information.
 - **www.apc.com/support/**
Global support searching APC Knowledge Base and using e-support.
- Contact an APC Customer Support center by telephone or e-mail.
Local, country-specific centers:
go to **www.apc.com/support/contact** for information.

Contact the APC representative or other distributor from whom you purchased your APC product for information on how to obtain local customer support.

Two-Year Limited Warranty

The limited warranty provided by American Power Conversion (APC®) in this statement of Limited Factory Warranty applies only to products you purchase for your commercial or industrial use in the ordinary course of your business.

Terms of warranty

APC warrants its products to be free from defects in materials and workmanship for a period of two years from the date of purchase. The obligation of APC under this warranty is limited to repairing or replacing, at its sole discretion, any such defective products. 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. Repair or replacement of a defective product or part thereof does not extend the original warranty period. Any parts furnished under this warranty may be new or factory-remanufactured.

Non-transferable warranty

This warranty extends only to the original purchaser who must have properly registered the product. The product may be registered at the APC Web site, www.apc.com.

Exclusions

APC shall not be liable under the warranty if its testing and examination disclose that the alleged defect in the product does not exist or was caused by end user or any third person misuse, negligence, improper installation or testing. Further, APC shall not be liable under the warranty for unauthorized attempts to repair or modify wrong or inadequate electrical voltage or connection, inappropriate on-site operation conditions, corrosive atmosphere, repair, installation, start-up by non-APC designated personnel, a change in location or operating use, exposure to the elements, Acts of God, fire, theft, or installation contrary to APC recommendations or specifications or in any event if the APC serial number has been altered, defaced, or removed, or any other cause beyond the range of the intended use.

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