



User Manual

English

APC Smart-UPS[®] XL

SUA48XLBP

Tower/Rack-Mount 5U
External Battery Pack

Introduction

About this unit

The American Power Conversion (APC®) SUA48XLBP external battery pack connects to the APC Smart-UPS®. Together these units provide extended protection for electronic equipment from utility power blackouts, brownouts, sags and surges. The UPS and the external battery pack together provide continuous power from the batteries until utility power returns to safe levels or the batteries are fully discharged.

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
- Front bezel
- Literature kit containing:
 - Eight ornamental screws for securing the unit in the rack
 - Eight 5/16 in (.8 cm) pan-head screws for attaching cleats to the chassis rails (required for four post rack only)
 - Eight 5/8 in (1.6 cm) pan-head screws for attaching rack-mount brackets to the unit
 - Eight snap-on speed nuts
 - Two cleats (required for four post rack only)
 - Two rack-mount brackets
 - Product documentation
 - Smart-UPS® User Manuals CD
 - Safety information
 - Warranty information

Specifications

Temperature Operating Storage	32° to 104° F (0° to 40° C) 5° to 86° F (-15° to 30° C) charge the batteries every six months 86° to 113° F (30° to 45° C) charge the batteries every three months	This unit is intended for indoor use only. Select a location sturdy enough to handle the weight. Do not operate the unit where there is excessive dust or the temperature or humidity are outside the specified limits. Environmental factors impact battery life. High temperatures, poor utility power, and frequent, short duration discharges will shorten battery life.
Maximum Elevation Operating Storage	10,000 ft (3,000 m) 50,000 ft (15,240 m)	
Humidity	0 to 95% relative humidity, non-condensing	
Weight	150 lbs (68 kg) with battery module 40 lbs (18 kg) without battery module 27 lbs (12 kg) each battery module	150 lbs (68 kg) 
Maximum Number of External Battery Packs Supported by the Smart-UPS XL	10	

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.

APC Worldwide Customer Support

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

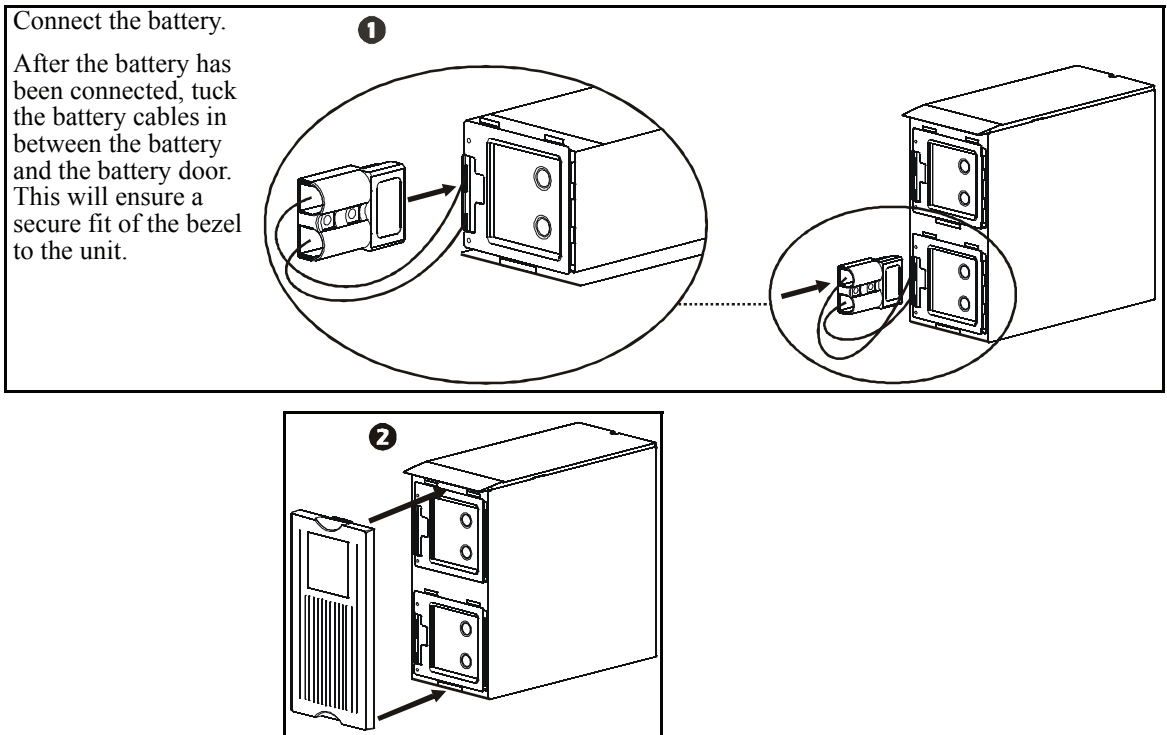
- Refer to the APC Web site to access documents in the APC Knowledge Base and to submit customer support requests.
 - **www.apc.com** (Corporate Headquarters)
Connect to localized APC Web sites for specific countries, each of which provides customer support information.
 - **www.apc.com/support/**
Global 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.

Installation

The unit is shipped in tower configuration.

Tower configuration

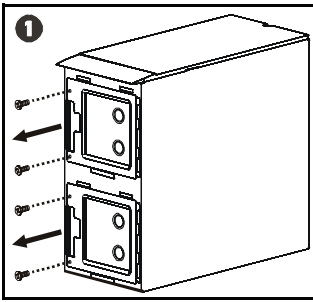


Rack-mount configuration

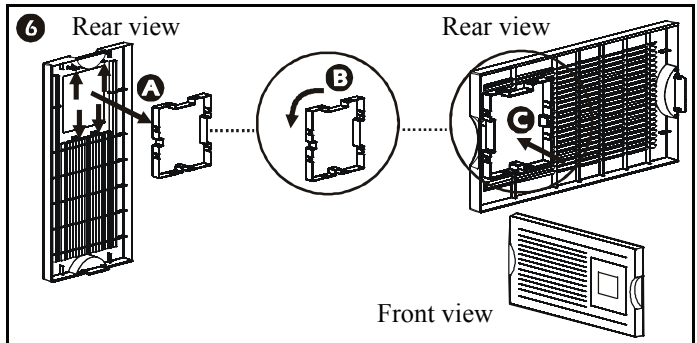
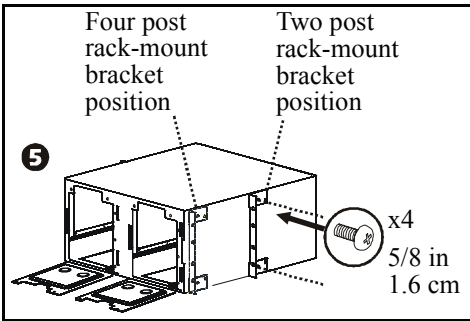
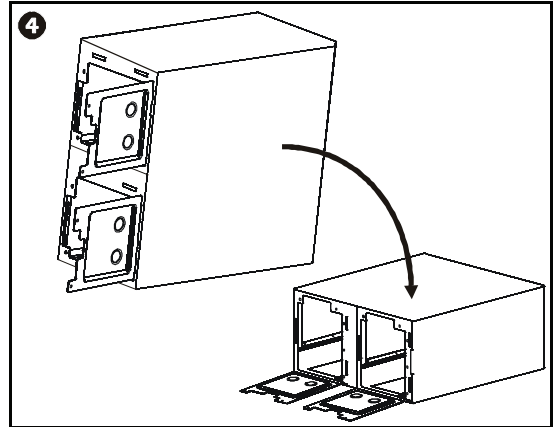
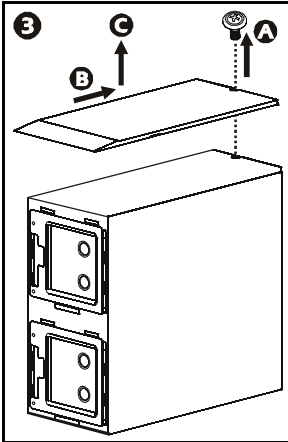
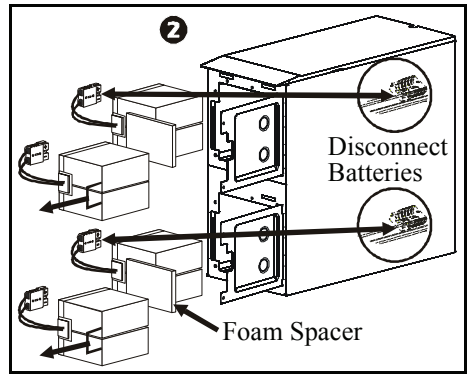
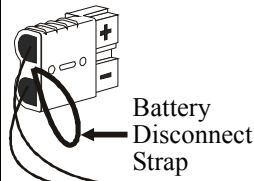
This unit is intended for mounting in a two post rack. To order a four post rack-mount kit contact your dealer or refer to the APC Web site, www.apc.com.

Tower to rack-mount conversion procedure

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



Pull the battery disconnect strap attached to the battery connector. DO NOT pull the battery cables to disconnect the battery.

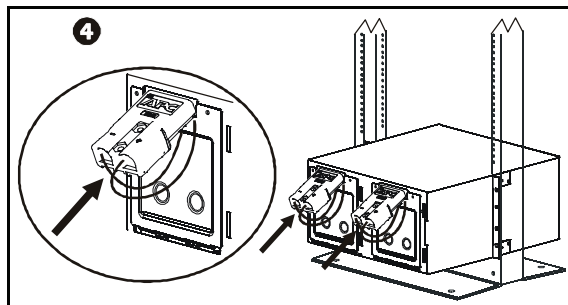
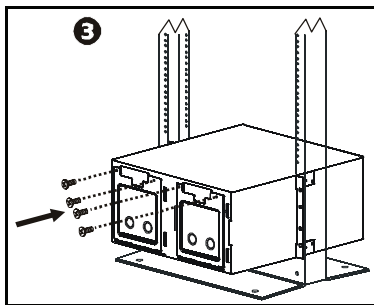
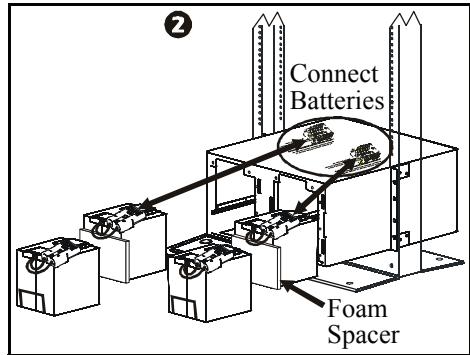
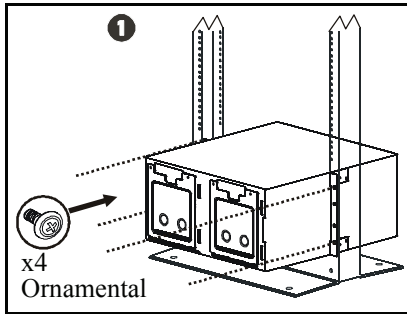


A four post rack configuration requires installation of two rack-mount brackets in the forward position (see diagram 5 above), two cleats (supplied with this unit), and the four post rails. The rails can be ordered through the APC Web site www.apc.com.

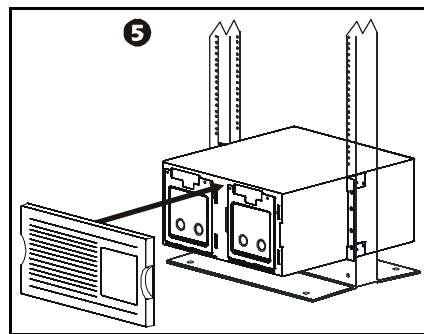
Install unit in rack

Ensure rack stability prior to installing devices in the rack.

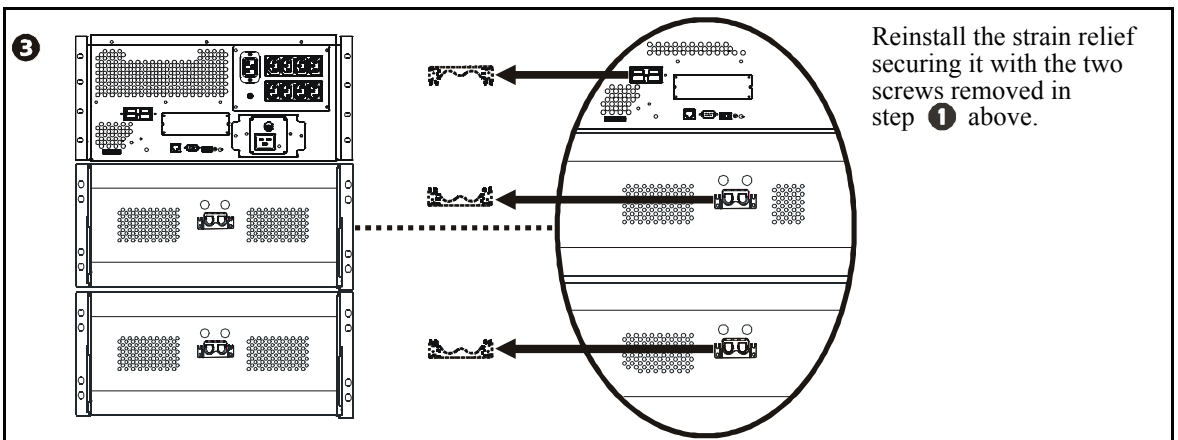
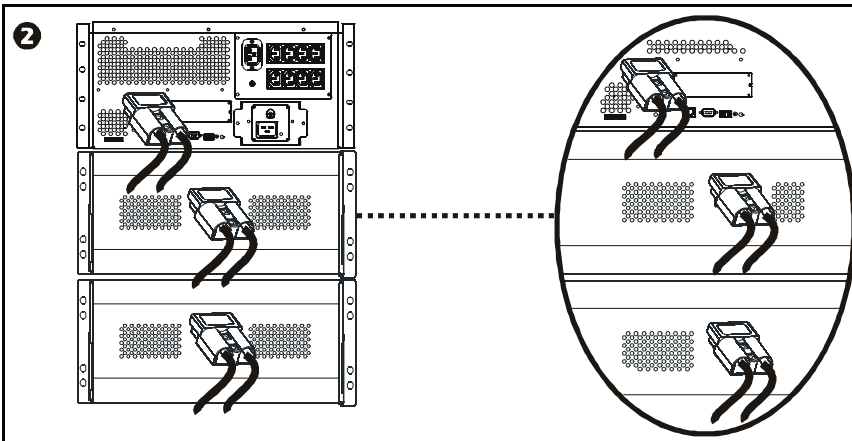
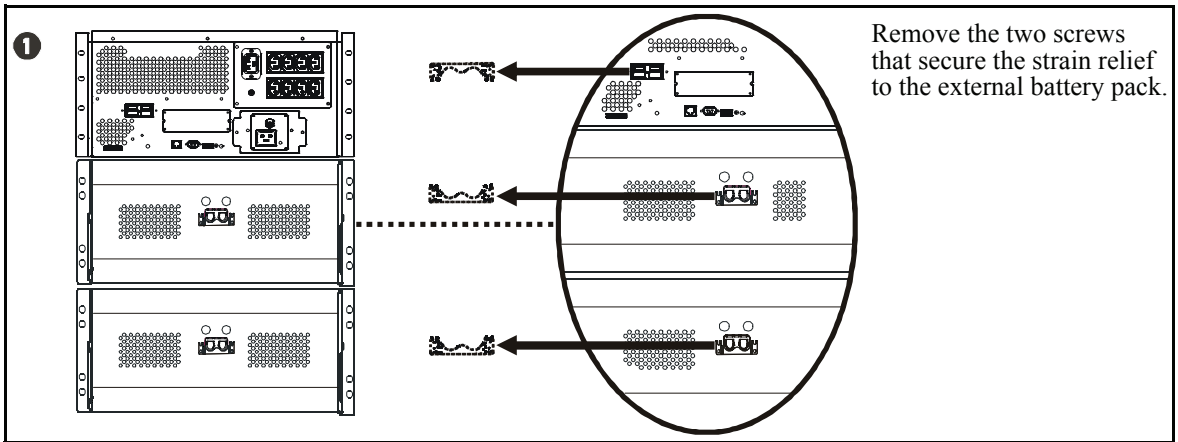
The external battery pack(s) must be mounted below the UPS in the rack.



After all of the batteries have been connected, tuck the battery cables in between the batteries and the battery doors. This will ensure a secure fit of the bezel to the unit.



Connect the external battery pack(s)



Setting the UPS to Recognize the Battery Pack(s)

Smart-UPS XL models must be programmed for the appropriate number of external battery packs in one of two ways.

- PowerChute® Business Edition
- Optional accessory cards

Refer to the instructions included with the software or accessory cards.



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

Maintenance and Service Information

Replacing the battery modules

This unit has easy-to-replace, hot-swappable battery modules. Replacement is a safe procedure, isolated from electrical hazards. You may leave the unit 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 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. Review the problems discussed in *Troubleshooting* in the UPS User Manual to eliminate common problems.
2. 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.
3. 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(s) before shipping in compliance with U.S. Department of Transportation (DOT) and IATA regulations.** The battery(s) may remain in the unit.
4. Mark the RMA# on the outside of the package.
5. Return the unit by insured, prepaid carrier to the address given to you by Customer Support.

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Two-Year 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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Warranty claims

Customers with warranty claims issues may access the APC customer support network through the Support page of the APC Web site, www.apc.com/support. Select your country from the country selection pull-down menu. Open the Support tab at the top of the Web page to obtain contact information for customer support in your region.