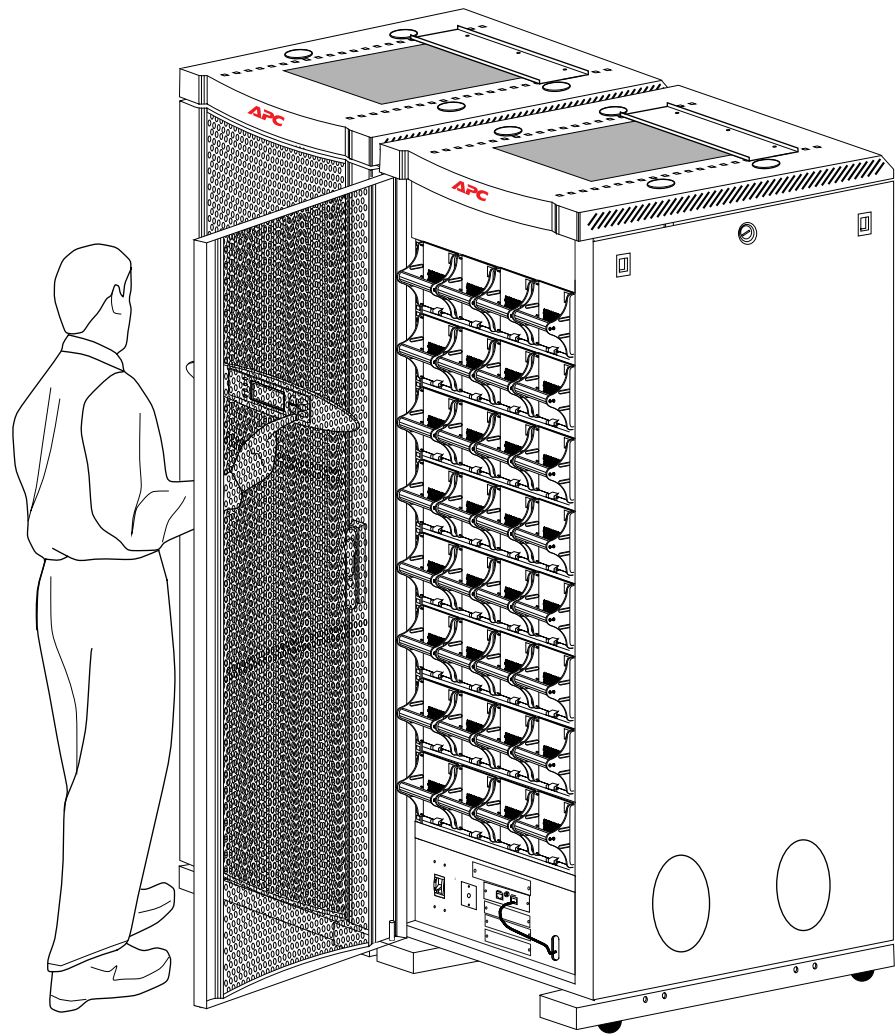


Symmetra® PX

10-40 kW

Extended Run (XR) Battery Enclosure Quick-Start & Basic Operation Guide

! Start-Up for XR Battery Enclosure(s) is included with your initial system installation. If an XR Battery Enclosure is being added to a pre-installed system, follow this guide.



1 IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS

This guide contains important instructions for the XR Battery Enclosure that should be followed when handling Enclosures and batteries.

- WARNING!**
Risk of Electric Shock.
- CAUTION!**
Read this important information.
- Indicates that a switch or current protection device is in the "ON" position.
- Indicates that a switch is in the "OFF" position.

- Only trained persons familiar with the construction and operation of the equipment, and the electrical and mechanical hazards involved, may install and remove system components.
- The UPS and the XR Battery Enclosure contain an internal energy source. Hazardous voltage can be present even when disconnected from the power source. Follow Total Power Off Procedure to completely de-energize system (Appendix B).
- Remove all conductive jewelry such as chains, watches, and rings before handling the Battery Units.
- Battery Units do not contain serviceable parts. Only authorized personnel may open Battery Units.
- Do not dispose Battery Units in a fire for they may explode. Do not mutilate Battery Units for released electrolyte may be toxic and is harmful to the skin and eyes.
- For configurations including customer-supplied external batteries, refer to manufacturer's battery installation and maintenance instructions.

Do not lift heavy loads without assistance.	<40 lb. <18 kg	40-70 lb. 18 - 32 kg	70-120 lb. 32 - 54 kg	>120 lb. >54 kg

Figure 1

Extended Run (XR) Battery Enclosure
Empty 550 lb. (250 kg)

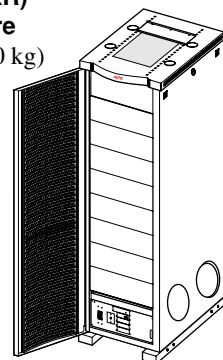


Figure 2

Battery Module
4 x 50 lb. (4 x 23 kg)

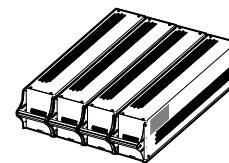


Figure 3

2 Introduction

- This guide contains information on how to operate the XR Battery Enclosure. Refer to separate Basic Operation Guide for the UPS.
- The XR Battery Enclosure houses up to 32 Battery Units (8 Battery Modules).

3 XR Battery Enclosure Components

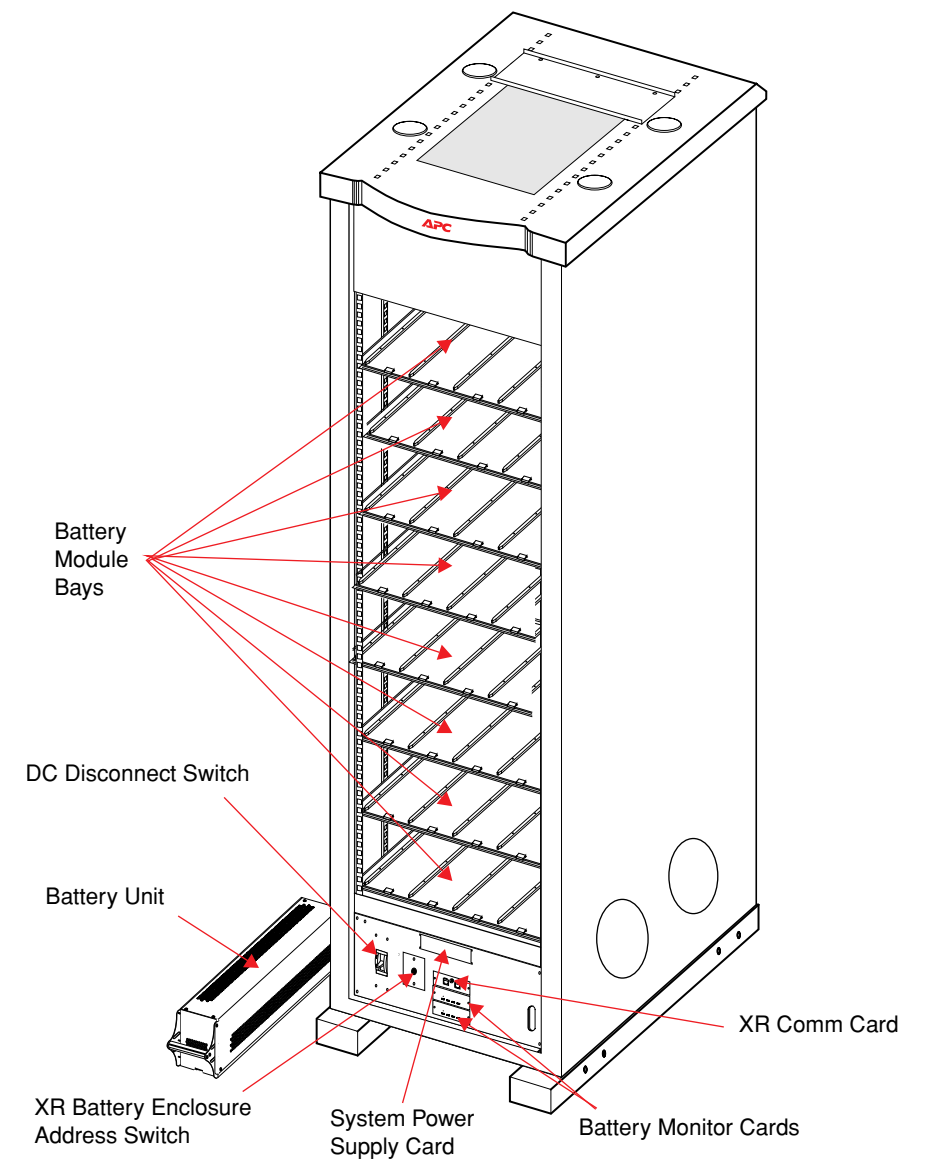


Figure 4

4 Securing the Enclosure

- 1 Secure the Enclosure by setting the Stabilizing Feet**
After the electrical wiring has been completed, secure the enclosure in its final operating position. Use a 14-mm wrench (shipped with enclosure) to adjust all 4 stabilizing feet until pads make solid contact with the floor.
- 2 Level the Enclosure (Optional)**
Adjust stabilizing feet to level from front to back and left to right.

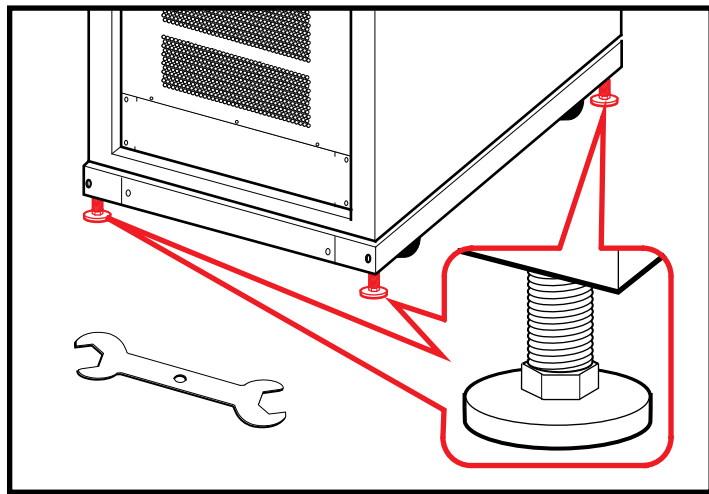


Figure 5

CAUTION! Do not move the enclosure after the stabilizing feet have been lowered as the feet may bend.

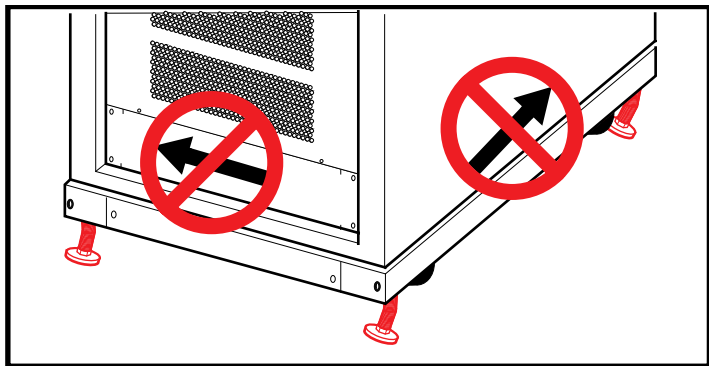


Figure 6

5 Battery Module Installation

- WARNING!** Only trained persons familiar with the construction and operation of the equipment, and the electrical and mechanical hazards involved, may install and remove system components.
- CAUTION!** Before installing any Battery Modules in the enclosure, ensure that the electrician has left the DC Disconnect in the OFF position (if not, see Appendix B).

- 1 Set DC Disconnect Switches in EACH XR Battery Enclosure to the OFF position.**
- 2 Remove Plate. Set the Address of EACH XR Battery Enclosure in the configuration.**
XR Enclosure #1 Set to 1
XR Enclosure #2 Set to 2
XR Enclosure #3 Set to 3
XR Enclosure #4 Set to 4

Figure 7

! Do not install Battery Units in the XR Battery Enclosure until you are ready to power up the system. Failure to do so can result in deep discharge of the batteries and cause permanent damage.

- 3 Install Battery Modules**

Battery Units are to be installed in the lowest available bay, 4 across. Position the Battery Unit to slide in between the grooves and push completely into the enclosure to ensure connection.

Figure 8

6 System Start-Up Procedure

- !** The UPS is assumed to be powered and operating during this Start-up procedure; if not, power up the UPS now.
- 1 Check that each XR Battery Enclosure is set to a different enclosure address in each Battery Monitor Card as illustrated below. If not, remove all batteries to disconnect line, and follow procedure in Section 5.**
- !** A “no good batteries” fault will occur until at least one battery module is reinserted.

Figure 9

- 2 Set DC Disconnect Switches in all your XR Battery Enclosures to the ON position.**

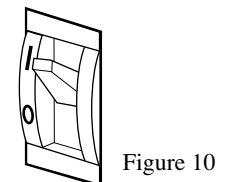


Figure 10

Wait 15 seconds for XR Battery Enclosure to start up. The PowerView will display the following message:

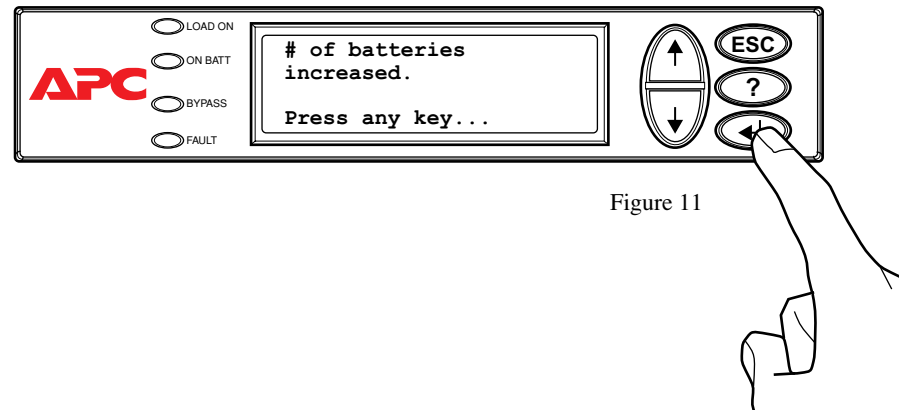
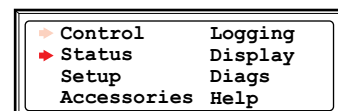
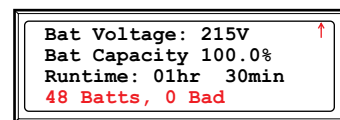


Figure 11

3 From the Top-Level Menu, select Status and scroll down to verify Battery Unit count.



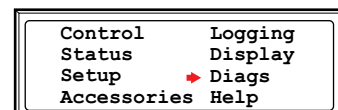
Top-Level Menu



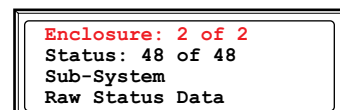
Sub-Sub-Status Screen

Figure 12

4 From the Top-Level Menu, select Diags, Enclosure Status, and verify Enclosure count.



Top-Level Menu



Enclosure-Status Screen

Figure 13

! If the total number of Battery Units or Enclosures do not equal the amount in your configuration ensure that the component in question is correctly installed (Section 5). If the problem persists, refer to Basic Troubleshooting (Section 9).

7 Reversing the Door (if required)

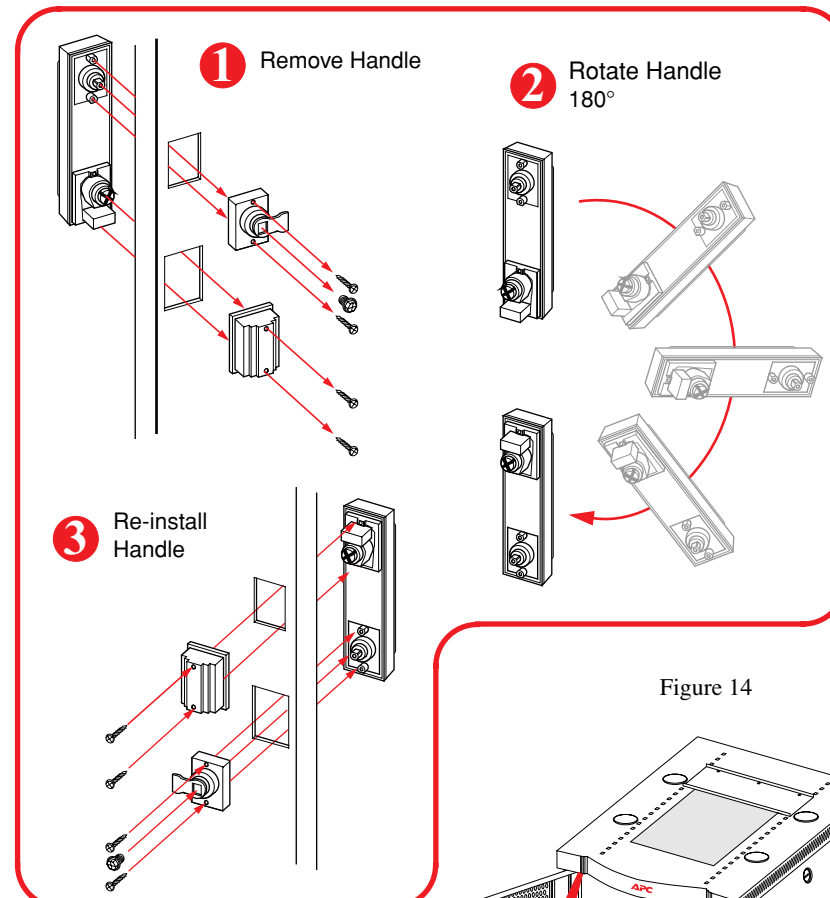
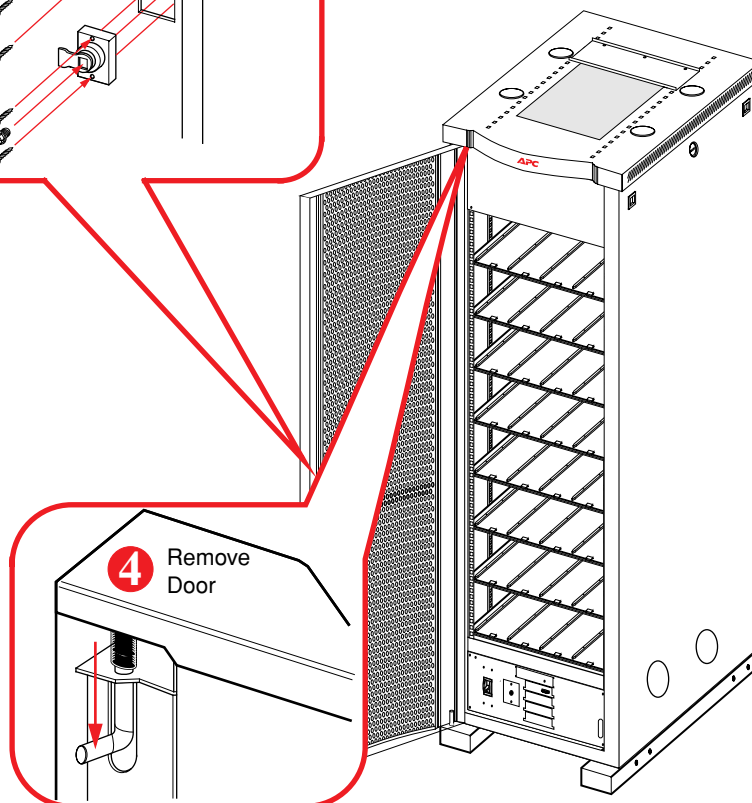


Figure 14



5 Remove hinge pin brackets from their original position (A) and re-install to their new positions (B).

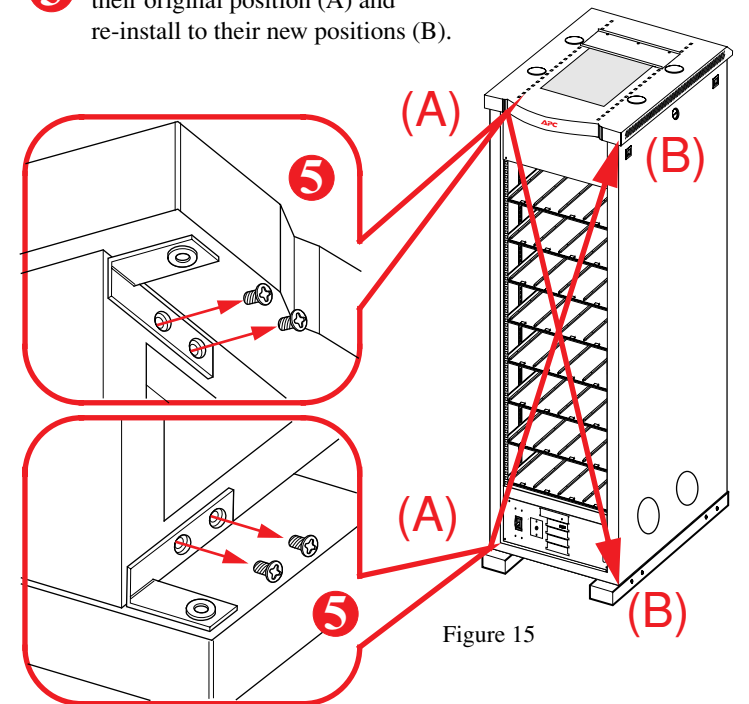


Figure 15

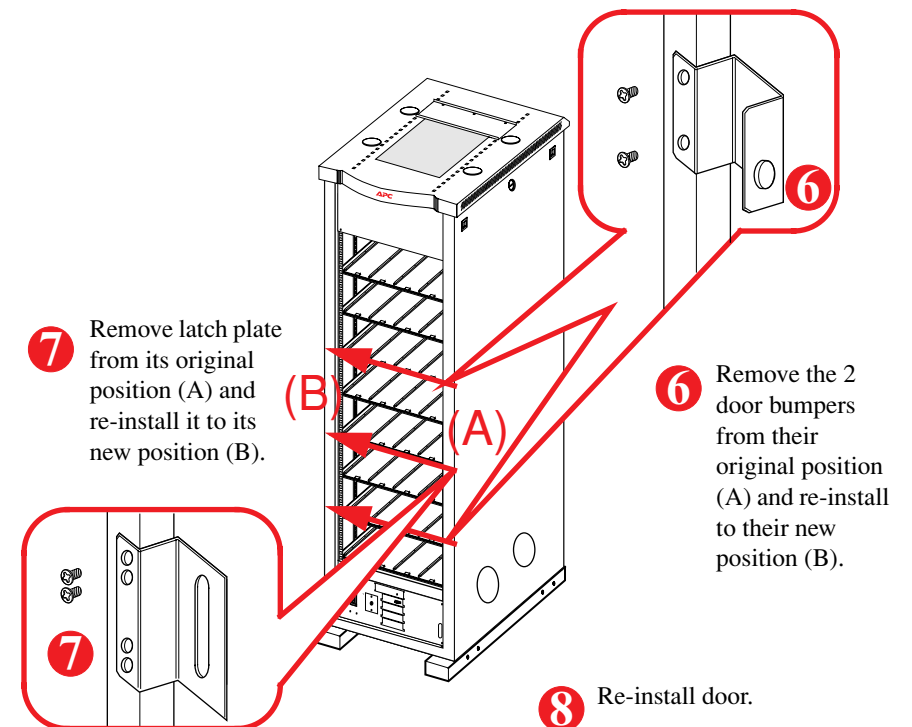


Figure 16

8 Modular Component Replacement

Replacing Battery Units

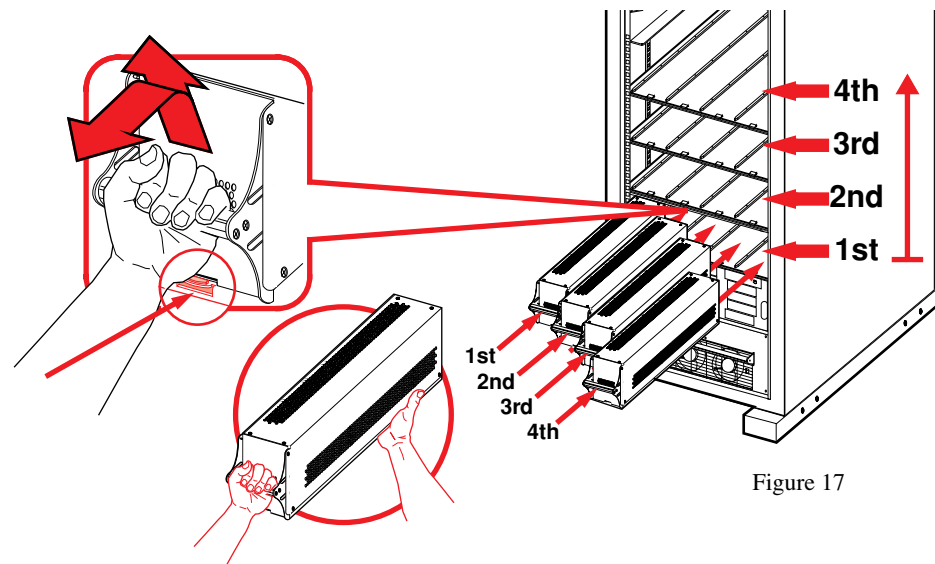


Figure 17

! Display will indicate location of faulty Battery Units (levels 1-8).

Battery Removal

- When removing Battery Units, start from the highest level and work down.
- Holding the handle, gently push the battery upwards and pull it halfway out of the enclosure. A lock mechanism prevents it from being pulled all the way out. To release it from the lock mechanism, gently push the battery upwards again and pull it out, supporting the battery with the other hand.

Battery Installation

- To reinstall the Battery Unit, position it to slide in between the 2 grooves and push the unit all the way into the enclosure.
- Check that the display shows message saying the installation has been registered.

Replacing Cards

- Using a Phillips head screwdriver, remove the two screws.
- Gently pull to slide out

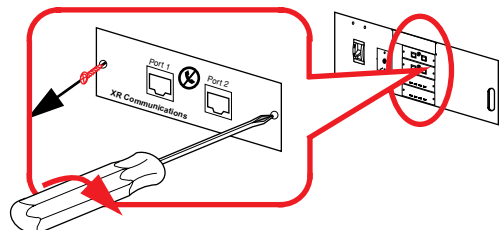


Figure 18

Replacement Parts and Numbers			
Battery Module	SYBT4	Battery Monitoring Card	SYCBTMON
Battery Unit	SYBTU1	XR Communication Card	SYCXRCOM
System Power Supply Card	SYCSPS		

Figure 19

9 Basic Troubleshooting

This Basic Troubleshooting section will allow you to solve most problems. If the problem persists, note the UPS/XR # and serial # before calling Tech Support at below applicable numbers.

Display Message	Meaning	Corrective Action
The battery monitory board LEDs do not light up or PowerView displays inaccurate number of XR Battery Enclosures.	The XR Battery Enclosure(s) are not recognized.	Check that the Communications cable(s) are connected, and that the XR Selector Switch(s) are in the correct position.
PowerView displays inaccurate number of batteries.	Unrecognized batteries in your configuration.	Insure that all batteries are correctly installed. (Section 5)
PowerView displays a bad battery unit.	A failed battery has been detected.	Refer to Section 8, Replacing Battery Units.

Figure 20

Country	Tech Support	Country	Tech Support
Austria	0800 296480	Norway	800 11632
Belgium	0800 15063	Poland	0801 345917
Czech Republic	0800 102063	Portugal	800 853182
Denmark	800 18153	Russia	095 9167166
Finland	9800 13374	South Africa	011 4652583
France	0800 906483	Spain	900 953533
Germany	0800 1801227	Sweden	020 795419
Greece	00800 35312206	Switzerland	080055 6177
Hungary	0640 200262	Turkey	0800 2113305
Ireland	1800 702000	UK	0800 132990
Israel	1800 9452206	USA & North America	1 (800) 800 4272
Italy	800 874731	Other Countries	353 91 702055
Luxemburg	0800 2091	Fax	353 91 755275
Netherlands	0800 022 4655	eSupport	http://esupport.apcc.com

Figure 21



WARNING!

A battery can present a risk of electric shock and high short-circuit current. The following precautions should be observed when working on batteries:

- Remove watches, rings or other metal objects
- Use tools with insulated handles
- Wear rubber gloves and boots
- Do not lay tools or metal parts on top of batteries

When replacing batteries, replace with same number and type as installed. For customer-supplied external batteries, see manufacturer's installation and safety instructions.

Appendix B: Total Power OFF Procedure

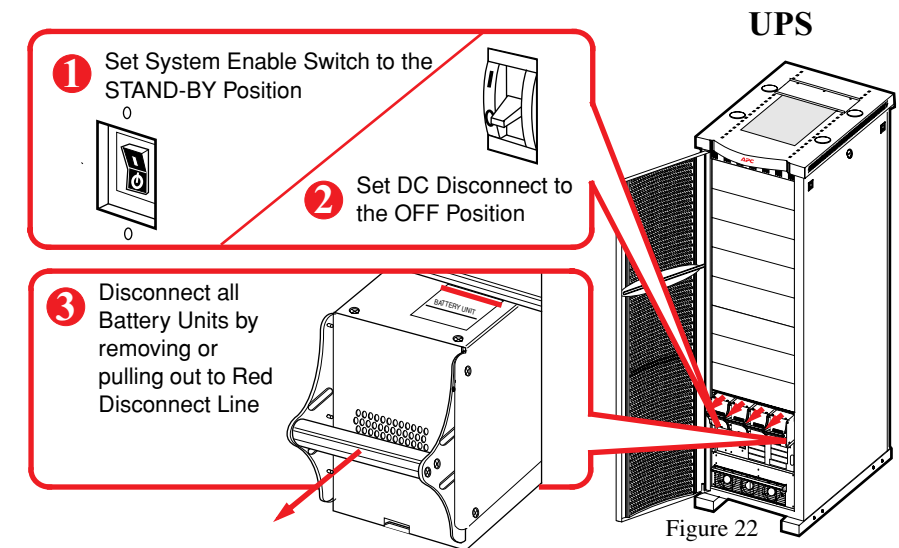


Figure 22

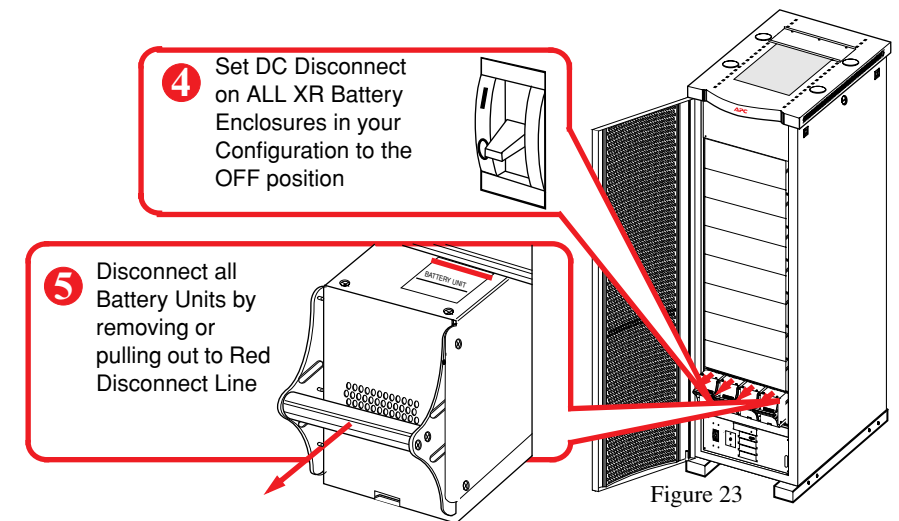
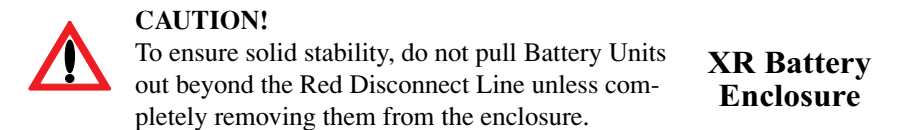


Figure 23

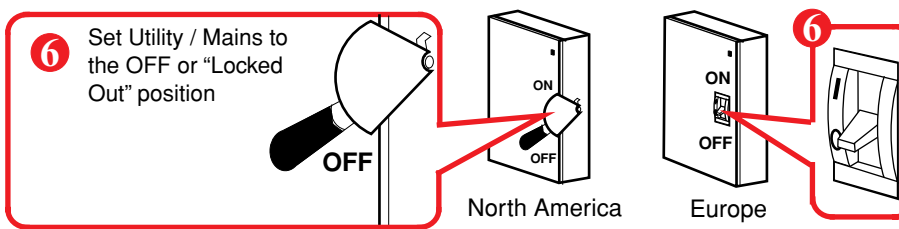


Figure 24