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.

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 1

Figure 2

Figure 3

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).

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 perma-
nent 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 Set DC Disconnect Switches in EACH XR Battery
   Enclosure to the OFF position.

Figure 7

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

Figure 9

Figure 10
Wait 15 seconds for XR Battery Enclosure to start up. The PowerView will display the following message:

```
# of batteries increased.
Press any key...
```

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

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

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).

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7 Reversing the Door (if required)

1. Remove Handle
2. Rotate Handle 180°
3. Re-install Handle
4. Remove Door
5. Remove hinge pin brackets from their original position (A) and re-install to their new positions (B).
6. Remove the 2 door bumpers from their original position (A) and re-install to their new position (B).
7. Remove latch plate from its original position (A) and re-install it to its new position (B).
8. Re-install door.
**Modular Component Replacement**

**Replacing Battery Units**

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

**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.

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

**Appendix B: Total Power OFF Procedure**

- **CAUTION!** To ensure solid stability, do not pull Battery Units out beyond the Red Disconnect Line unless completely removing them from the enclosure.

<table>
<thead>
<tr>
<th>Country</th>
<th>Tech Support</th>
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<th>Tech Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>0800 296480</td>
<td>Norway</td>
<td>0800 11632</td>
</tr>
<tr>
<td>Belgium</td>
<td>0800 15063</td>
<td>Poland</td>
<td>0801 345917</td>
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<td>Czech Republic</td>
<td>0800 102063</td>
<td>Portugal</td>
<td>800 853182</td>
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<td>Denmark</td>
<td>800 18155</td>
<td>Russia</td>
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<td>800 13374</td>
<td>South Africa</td>
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<td>0800 906483</td>
<td>Spain</td>
<td>090 955333</td>
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<td>Germany</td>
<td>0800 1801227</td>
<td>Sweden</td>
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<td>Greece</td>
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<td>0640 200262</td>
<td>Turkey</td>
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<td>Ireland</td>
<td>1800 702000</td>
<td>UK</td>
<td>0800 132990</td>
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<td>Israel</td>
<td>1800 9452206</td>
<td>USA &amp; North America</td>
<td>1 (800) 800 4272</td>
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<td>Italy</td>
<td>800 874731</td>
<td>Other Countries</td>
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<td>Luxembourg</td>
<td>0800 2091</td>
<td>Fx</td>
<td>353 91 735273</td>
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<tr>
<td>Netherlands</td>
<td>0800 022 4655</td>
<td>Support</td>
<td><a href="http://support.apc.com">http://support.apc.com</a></td>
</tr>
</tbody>
</table>

**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.