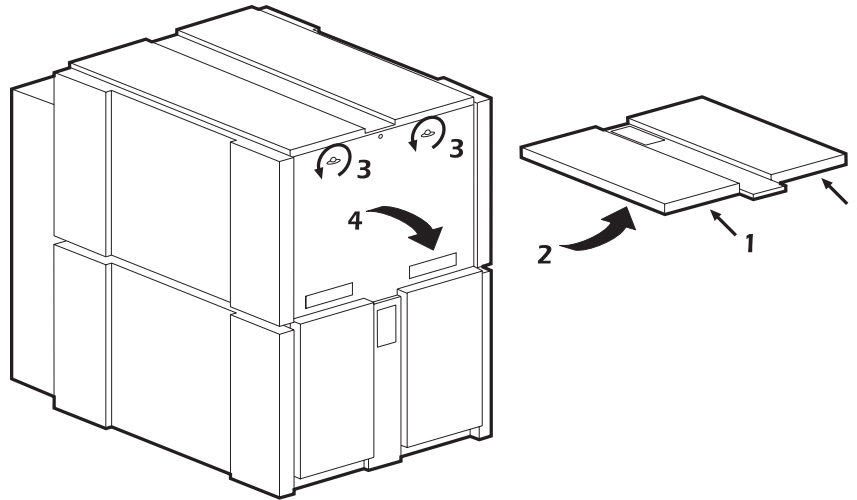# Installing and Replacing Batteries

The XR Battery Pack features user installable batteries. Please read the warnings in Section 5.1 of the User's Manual before performing the installation of the batteries. Failure to follow the proper installation can result in damage to the equipment.
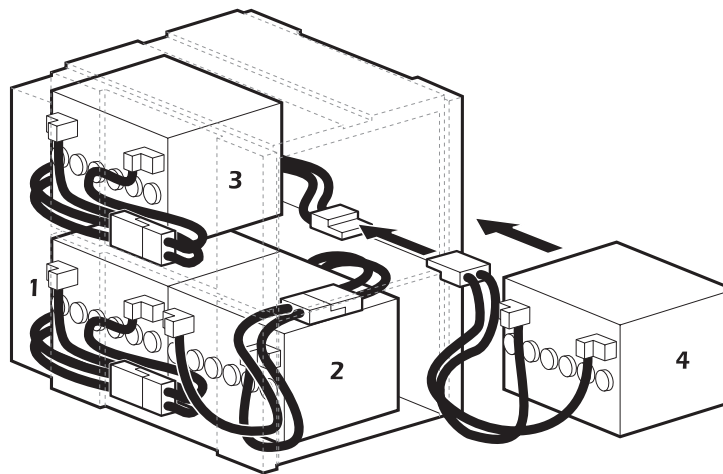
Warning
Only personnel familiar with the dangers of batteries and the required precautions should perform or supervise battery installations. Keep unauthorized personnel away from batteries.

Installing batteries
The XR Battery Pack has been shipped with its batteries removed. To install the batteries, follow the procedure outlined below.

1. Grasp the lower edge of the plastic battery door fastener cover and pull the cover off with gentle, firm pressure.

2. Turn the battery door fasteners counterclockwise with your fingers to loosen them.

3. Tilt the battery door/front panel forward, then lift it away from the cabinet.

4. Position batteries on their side, terminals up and to the left of the cabinet. Note the yellow couplers (4) located inside the cabinet, one for each battery.

5. Begin with the lower pair by selecting a battery and, using firm pressure, sliding the battery all the way to the rear of the cabinet.

6. Connect the battery's coupler to the matching coupler located on the cabinet wall. **Warning! Do not connect the couplers mounted to the cabinet together.**

7. Select the second battery and move it into place. With firm pressure, slide it into the cabinet until it makes contact with the first battery.

8. Connect the second battery's coupler to the free hanging coupler and route the battery cable over the top of the battery. **Warning! Do not connect the batteries together.**

9. Check mounting position of the upper battery tray to verify proper installation.

10. Repeat steps 5 through 8 for the upper battery pair.

11. Refer to the section below for **Test Instructions** before closing the XR cabinet.

12. Replace the battery door and tighten the fasteners by turning them clockwise.

13. Replace the plastic battery door fastener cover.

14. Connect the XR Battery Pack's blue DC coupler to a Matrix or another battery pack.

15. Connect the XR Battery Pack's Communication cable to a Matrix or another battery pack.

16. Verify with the Matrix's Control Panel that the Matrix recognizes all of the batteries connected to the system and that the battery voltage status is within those described in Table I of the Test Procedure.

Installing and Replacing Batteries: Test Instructions

Before coupling the XR Battery Pack to a Matrix or another battery pack, a test must be performed to insure the batteries have been properly installed within the XR cabinet. A DC voltmeter is required to perform this simple test. **Warning! Do not install the XR Battery Pack until this test procedure has been performed.**

1. Locate the blue coupler at the end of the DC power bus cable.

2. Measure the DC voltage across the two conductors in the coupler. **Warning! Care must be taken not to short circuit the coupler with the test leads.**

3. Refer to the following table for the status of the XR Battery Pack:

Table I

Battery Pack Voltage	Battery Pack Status
45.0 Vdc - 57.0 Vdc	Ready to Install
0.0 Vdc - 44.9 Vdc	Miswired or Bad Battery

4. When the Battery Pack Status is "Ready to Install," complete the final steps of the installation. If the Battery Pack Status is "Miswired or Bad Battery," disconnect the internal battery connections. **Do not connect the XR Battery Pack to any other equipment.** Review the Installation and Test Procedures and if necesssary contact APC's Technical Support for additional help with the installation and troubleshooting. When calls are placed to the Technical Support Line please have the following information ready when the representative answers:

1. The XR Battery Pack's serial number.

2. The battery pack voltage measured at the blue coupler.

3. Each of the individual battery voltages.

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