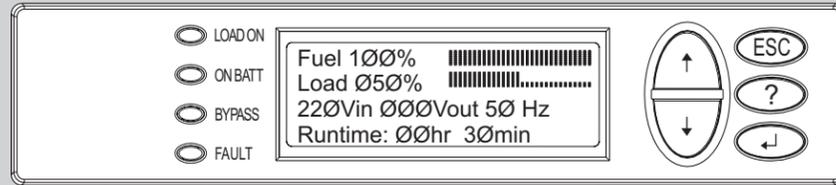


1 Record Initial Runtime

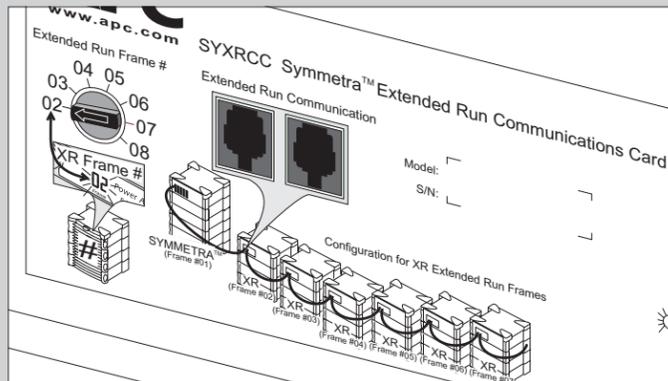
From the factory default PowerView Monitoring screen, record the initial runtime at 100% fuel (batteries fully charged).



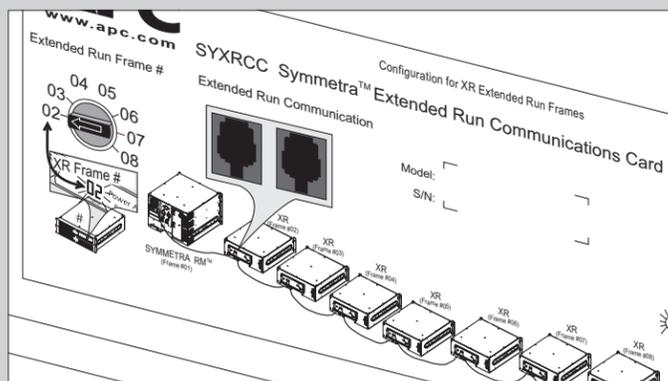
Typical Monitoring Menu Screen

2 Set Frame Number

Determine and set the frame number on the extended run frame communication card(s).



SYXR4 or SYXR12 Communications Card



SYRMXR4 Communications Card

Expected Result:

- The frame directly connected to the extended run frame, is set to frame #2 (factory default).
- Additional frames are set to #3, #4, #5, etc.

Symmetra™

Extended Run Cabinet

Startup Guide

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS - This safety section contains important instructions that should be followed during installation and maintenance of the APC equipment.

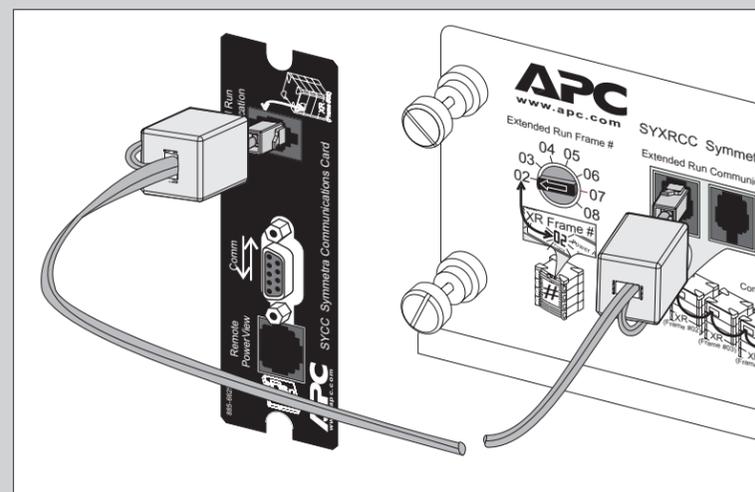


When used with a Symmetra™ RM 8-12 kVA system, ensure that one internal battery module is used for each power module to prevent excessive loading on the battery modules in the extended run frame.

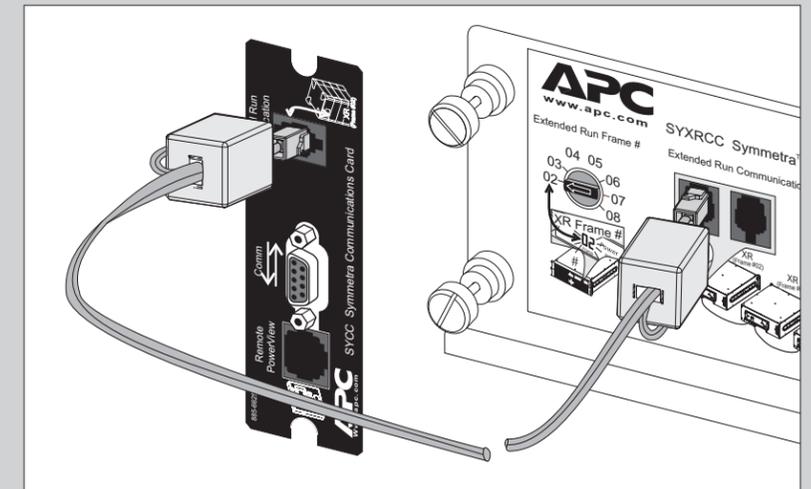
- Follow the enclosed “Symmetra™ RM Extended Run Cabinet Setup Guide” to unpack and install the frame.
- The Symmetra™ extended run frame is assumed to be powered and operating during these startup procedures. Refer to your Symmetra™ User’s Manual for power up instructions.
- Illustrations are representative. Your PowerView may look different than the rack-mount display shown in this guide. Your display settings and reported numbers may vary.
- If you do not get expected results, refer to the “Troubleshooting” section of this manual.

3 Install Communication Cable(s)

Plug the communication cable into the communication cards.



Symmetra™ Communications Card SYXR4 or SYXR12 Communications Card

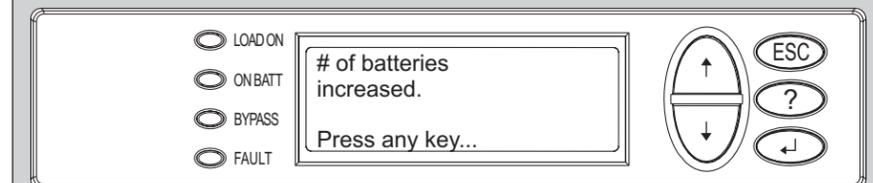


Symmetra™ Communications Card

SYRMXR4 Communications Card

Expected Result:

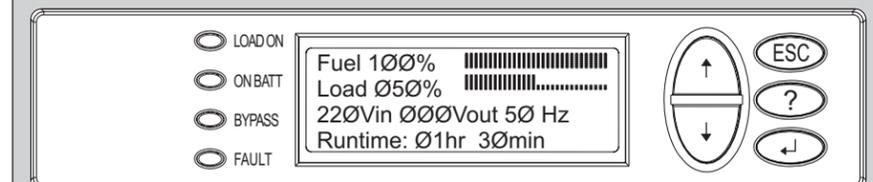
- The green “status” light at the rear of the frame will light.
- The red LED at the front of the frame will display the frame number that was set in Step 2, and will not flash.
- The following message will display:



Typical Message Screen

4 Verify New Runtime

Press **ESC** on the PowerView until the Monitoring Menu reappears.



Typical Monitoring Menu Screen

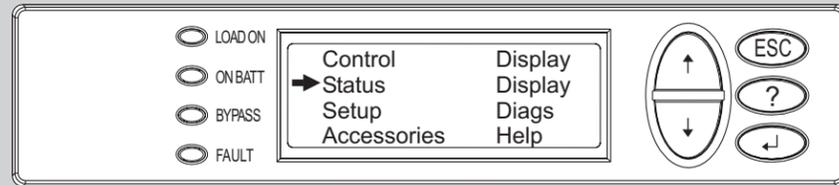
Expected Result:

- The runtime reported on the Monitoring Menu is now greater than the runtime recorded in Step 1.
- For very light loads (0-30%), the predicted runtime is less accurate.

5 Verify Battery Status

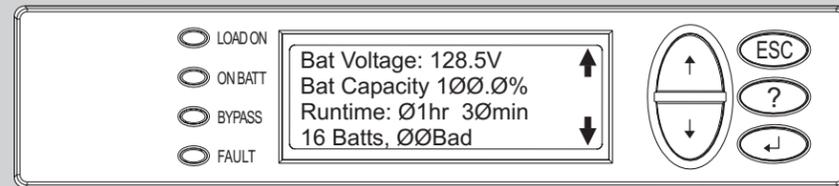
Press **ESC** until the Main Menu appears.

Press **↓** to select "Status" and press **↵**.



Typical Main Menu Screen

Press **↓** until the Battery Status Menu appears.



Typical Battery Status Menu Screen

Expected Result:

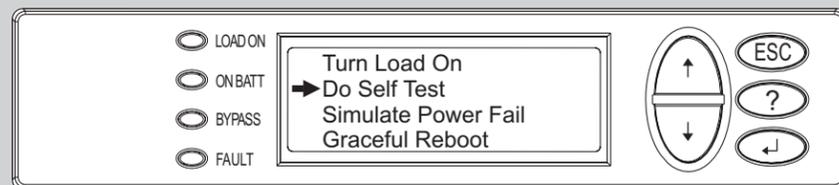
- The number of battery modules reported equals the number of battery modules installed in the Symmetra™ and all extended run frames.
- No battery modules reported "Bad."

6 Run System Self Test

Press **ESC** until the Main Menu appears.

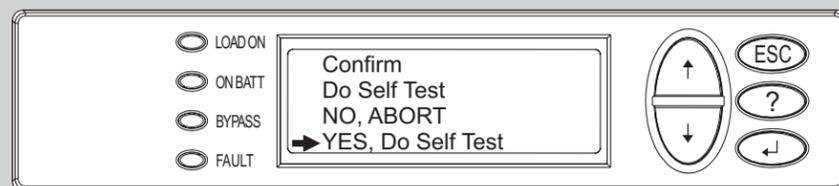
Press **↓** to select "Control" and press **↵**.

Press **↓** to select "Do Self Test" and press **↵**.



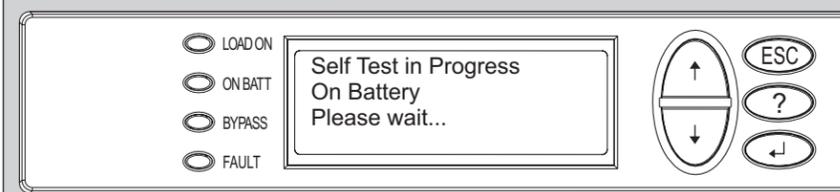
Typical Control Menu Options Screen

Press **↓** to select "YES, Do Self Test" and press **↵**.



Typical Self Test Confirmation Screen

The "Self Test in Progress" screen is displayed. If a problem is detected, an error message code will display.



Typical Self Test Screen

Expected Result:

- No system errors reported.
- No error message codes are flashing.
- The correct frame number is displayed on the front of each frame.

Additional Information:

Performing a runtime calibration after an initial installation or battery replacement will ensure the most accurate runtime reporting. Refer to your Symmetra™ User's Manual for additional instructions.

Troubleshooting

It is assumed that the Symmetra™ is powered and functioning during these startup procedures. If the problem persists, call technical support. Visit our website at <http://www.apc.com/support> for contact information and technical support telephone numbers.

Steps 1 - 3

Problem	Possible Cause	Solution
The green status LED (rear of frame), and the red frame number LED (front of the frame) does not light after the communication cable is installed.	There is no battery power present at the frame.	Ensure that the battery cable and battery modules are properly installed.
	The communication cable is not installed.	Ensure that the communication cable is properly installed.
The green status LED lights, but the red frame number LED does not display the frame number.	There is a potential hardware failure.	Call technical support.
The red LED frame number (front) flashes on and off.	More than one frame is set with the same frame number.	Ensure that no frame numbers are duplicated on the communication card(s).
The "# of battery modules has increased" message is not displayed after the communication cable is installed.	There are no battery modules installed in the frame.	Install battery modules in the frame.
	The extended run frame is not compatible with the extended run battery management feature.	Call technical support for information on how to upgrade the extended run frame to include this feature.

Step 4

Problem	Possible Cause	Solution
The runtime with the frame installed is not greater than the initial runtime.	The battery modules were not fully charged when installed in the frame.	Allow battery modules to fully recharge. This is a temporary condition caused by batteries equalizing. The Fuel Indicator on the Startup screen will indicate 100% and new runtime will be greater than initial runtime.
A false "on battery" alarm condition is displayed.		

Step 5

Problem	Possible Cause	Solution
The number of battery modules reported is inaccurate.	Battery modules are not installed correctly.	Ensure that all battery modules are installed in the Symmetra™ or extended run frames.
The LED on the front of the frame alternately flashes the frame number and either Lx or Rx. A bad battery module with the frame number and module location is reported.	A failed battery module has been detected in the location displayed.	Replace the battery module. Refer to the APC website to obtain a replacement battery. Refer to the "Symmetra™ RM Extended Run Cabinet Setup Guide" for battery removal and installation instructions.

Step 6

Problem	Possible Cause	Solution
An error message is displayed after the self test.	A system error has occurred.	Refer to the section on Error Messages in your Symmetra™ User's Manual.
An "XR frame failure" is reported. The red frame number LED on the frame flashes an error code.	The "E_0" frame error code may indicate that the battery cable is not installed.	Ensure that the battery cable is properly installed. If error code continues to flash, call technical support.
	The "E_7" frame error code may indicate that the communication cable is not installed.	Ensure that the communication cable is properly installed. If error code continues to flash, call technical support.
	All other LED error codes could indicate a potential hardware failure.	Call technical support and report the error code.