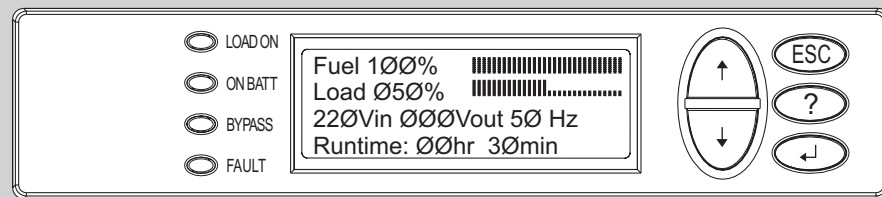


1 Record Initial Runtime

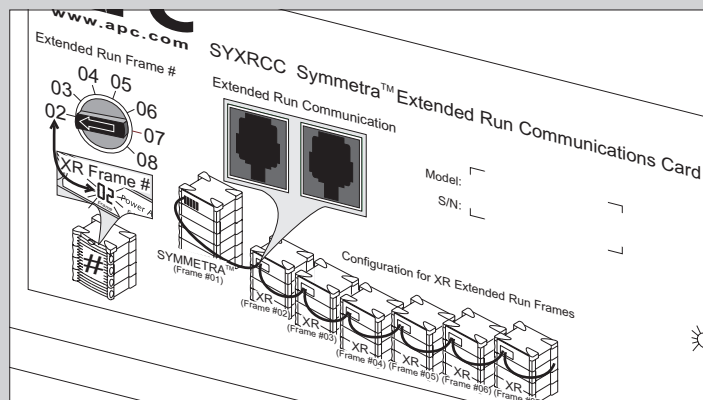
From the factory default PowerView Monitoring screen, record the initial runtime at 100% fuel (batteries fully charged).



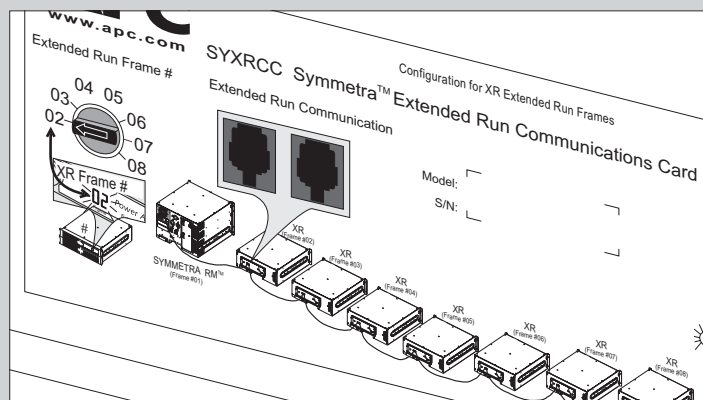
Typical Monitoring Menu Screen

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.

SymmetraTM

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.

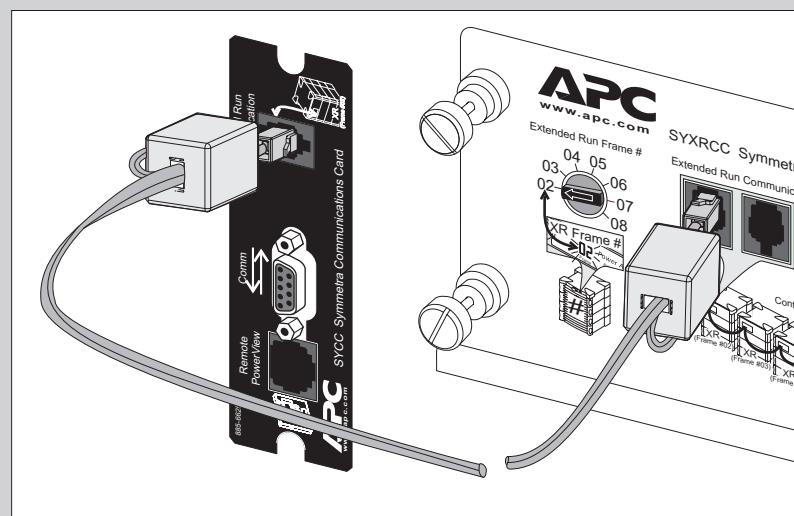


When used with a SymmetraTM RM 8-12 kVA system, ensure that one internal battery module is used for each power module to prevent excessive loading on the battery modules in the extended run frame.

- Follow the enclosed "SymmetraTM RM Extended Run Cabinet Setup Guide" to unpack and install the frame.
- The SymmetraTM extended run frame is assumed to be powered and operating during these startup procedures. Refer to your SymmetraTM 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.



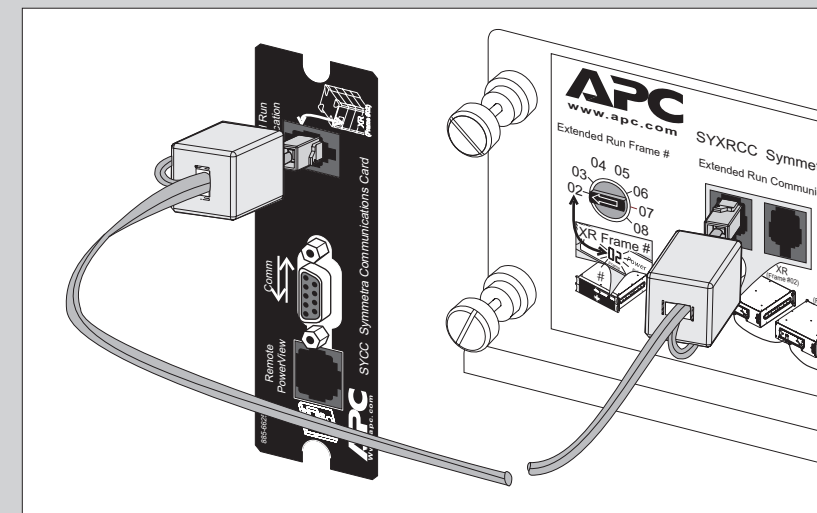
SymmetraTM Communications Card

SYXR4 or SYXR12 Communications Card



English

990-7822, Revision 1

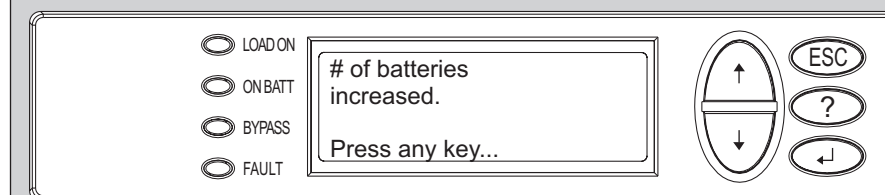


SymmetraTM Communications Card

SYRMXR4 Communications Card

Expected Result:

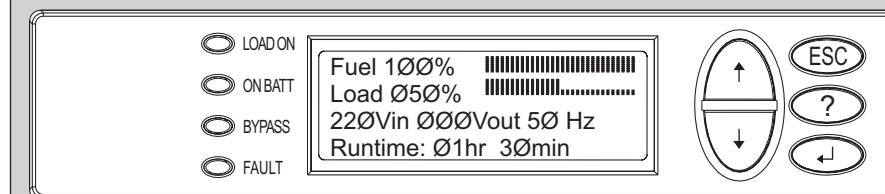
- The green "status" light at the rear of the frame will light.
- The red LED at the front of the frame will display the frame number that was set in Step 2, and will not flash.
- The following message will display:



Typical Message Screen

4 Verify New Runtime

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



Typical Monitoring Menu Screen

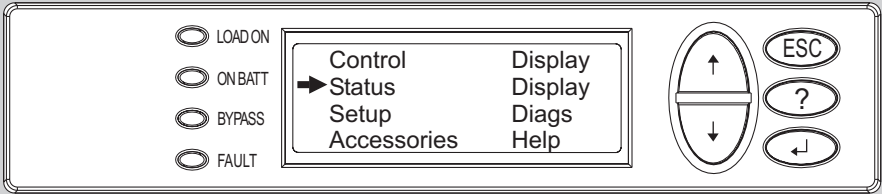
Expected Result:

- 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

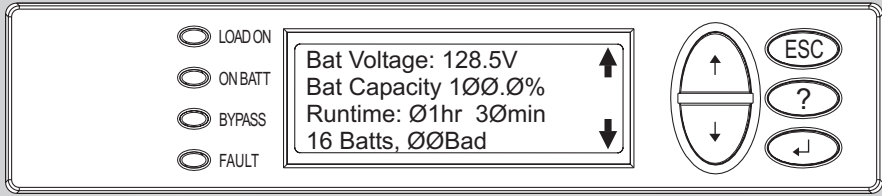
Press **ESC** until the Main Menu appears.

Press **↓** to select “Status” and press **↵**.



Typical Main Menu Screen

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



Typical Battery Status Menu Screen

Expected Result:

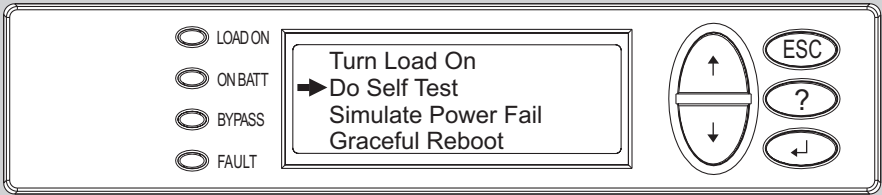
- The number of battery modules reported equals the number of battery modules installed in the Symmetra™ and all extended run frames.
- No battery modules reported “Bad.”

6 Run System Self Test

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

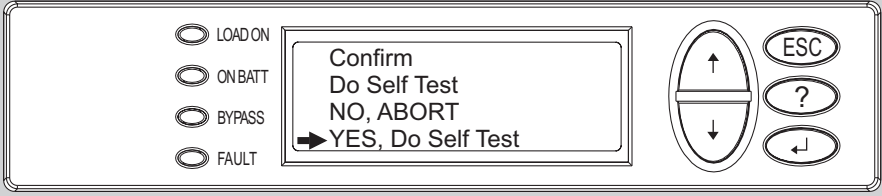
Press **↓** to select “Control” and press **↵**.

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



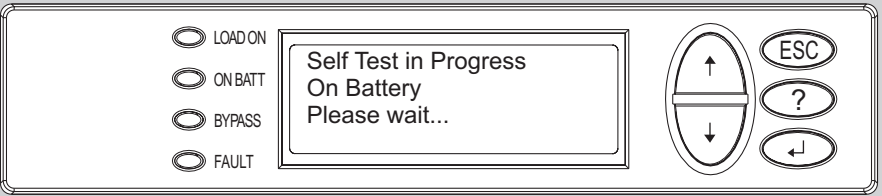
Typical Control Menu Options Screen

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_O” 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. |