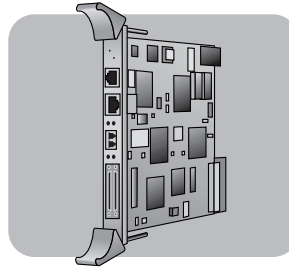


hp  
StorageWorks

Network  
Storage Router  
e1200-160



**Caution:** Parts can be damaged by electrostatic discharge. Keep parts in their containers until needed. Ensure you are properly grounded when touching static-sensitive components.

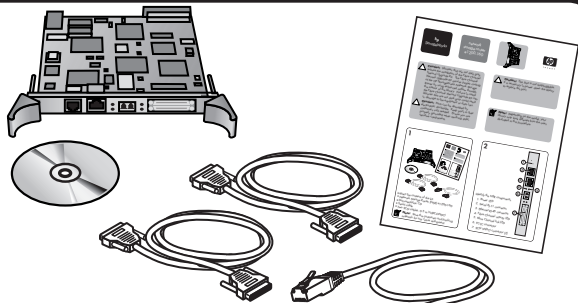


**Caution:** This part is not hot-pluggable. Power down the library before replacing this part.



**Note:** Depending on the model, your library may look different from those illustrated in this procedure.

1



Inspect the contents of the kit.

- Network Storage Router (NSR) e1200-160
- Documentation CD
- Serial cable
- Two SCSI cables, 0.5 m VHDCI-VHDCI

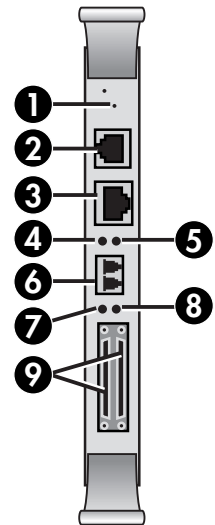


**Note:** Save the containers and packing materials for any future reshipment.

2

Identify the NSR components.

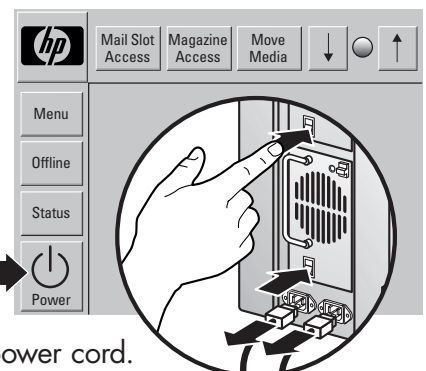
1. Power LED
2. Serial RJ-11 connector
3. Ethernet RJ-45 connector
4. FC Activity LED
5. FC link LED
6. Fibre Channel port
7. SCSI bus activity LED
8. SCSI bus activity LED
9. SCSI VHDCI connector (2)



3

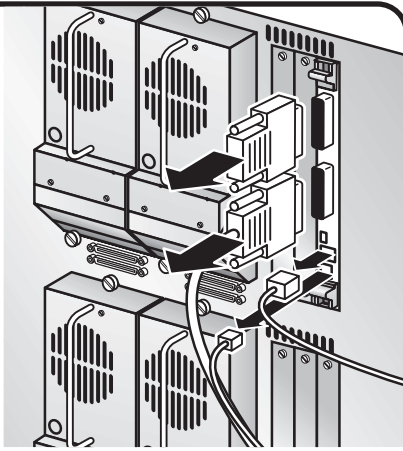
## Installation

Using the GUI, turn the library off. Turn off the master power switch for each power supply at the back of the library, and then remove the AC power cord.



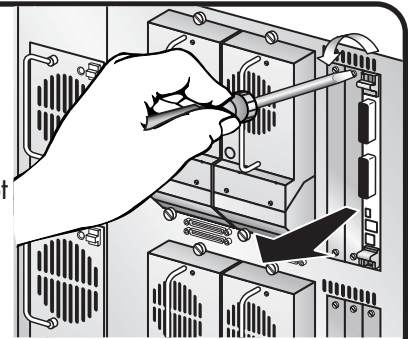
**Note:** This process automatically moves the robot to the parked position.

4



Remove the SCSI interface cable, the SCSI terminator, and if present, the Ethernet cable and the RS-232 cable.

5

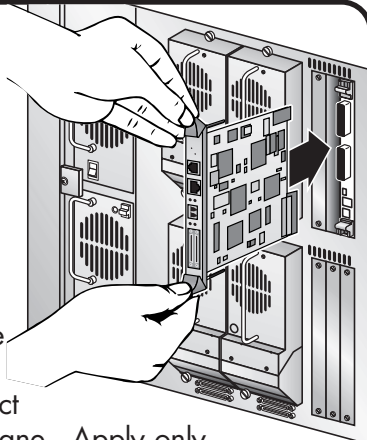


Using a #1 Phillips screwdriver, remove the center option slot cover plate. If replacing an existing router, remove the router.



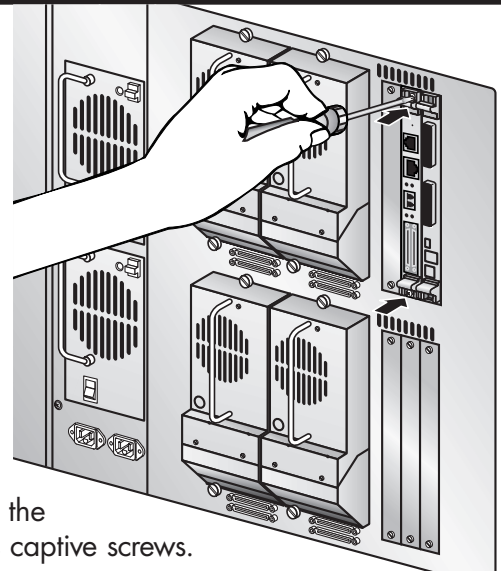
**Caution:** To avoid damage to the library, ensure routers are installed in the correct option slots. If you are installing one router, place it in the middle slot next to the controller board. If you are installing two routers, place the second one in the center slot on the bottom level of the library.

6



Carefully insert the router into the upper and lower guide rails of the appropriate option slot with the SCSI connectors downward. Resistance will be felt when the router begins to connect with the library backplane. Apply only enough force to seat the router snugly; ensure proper connection by rotating the ejector handles inward.

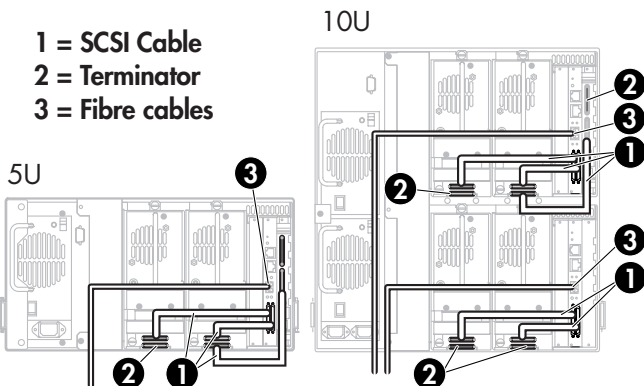
7



Tighten the router's captive screws.

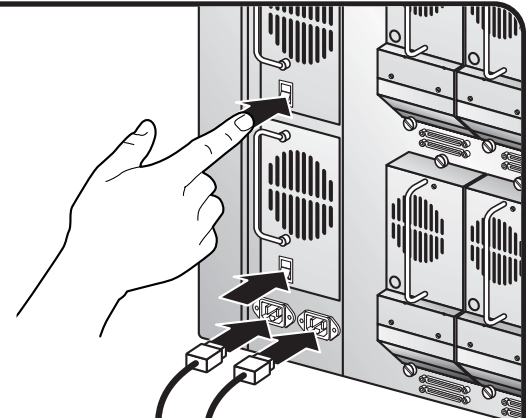
8

- 1 = SCSI Cable
- 2 = Terminator
- 3 = Fibre cables



Reconnect the cables disconnected in Step 4. Connect the cables to the router card as shown.

9



Connect each power cord and turn on the master power switch for each power supply. If necessary, turn the library on by touching the GUI control panel.

Refer to the *HP StorageWorks Network Storage Router User Guide* for detailed procedures on configuring the router.



**Note:** If this router replaced a faulty router, restore the old router's configuration settings using the FTP User Interface [ftp -> login -> bin -> put <path><filename>.cfg].

#### For All Configurations:

1. Cable the serial interface and use your host application to communicate over the serial bus. [Defaults: 115200 Bits per second, 8 Data bits, No Parity, 1 Stop bit, and Xon/Xoff Flow Control]
2. Use the serial user interface to set the Ethernet configurations (DHCP, IP address, Subnet, and Gateway). [Perform Configuration -> Ethernet and SNMP Configuration]
3. **Save Configuration.** [Perform Configuration -> Ethernet and SNMP Configuration]
4. **Reboot** the router. [Main Menu]
5. Write down the router's IP address [Perform Configuration -> Ethernet and SNMP Configuration]
6. Enter the Visual User Interface by opening your web browser and entering the router's IP address. [Defaults: Logon-root Password=password]
7. Set the Real-Time Clock. [System -> Real-Time Clock]
8. Set the Fibre Channel port **Performance Mode** (1GB or 2GB, depending on the hardware to which the router is connected). The router is not auto-switching. [Ports -> FC Port]
9. Assign **Port 0 Device Map** to the hosts that need to communicate with the library. [Mapping]
10. Select **Port 0 Device Map** and click **Edit/View**. [Mapping]
11. Set the **Fill Map Priority** to **Bus/Target** and **Fill Map**. [Mapping -> Select Map -> Edit/View]
12. For SCSI Ultra 3 drives (for example Ultrium 460), configure only 1 drive per SCSI bus. For SCSI Ultra 2 drives (for example SDLT 220, SDLT 320, Ultrium 230 and all DLT drives) configure a maximum of 2 drives per SCSI bus. [Mapping -> Select Map -> Edit/View]
13. Active Fabric (AF) should be the last LUN used on the map. Do not move AF to map LUN 0 (Device specific LUN=0 is normal) [Mapping -> Select Map -> Edit/View]
14. **Remove Gaps** in the LUN sequence. [Mapping -> Select Map -> Edit/View]
15. **Reboot** the router [Reboot]

#### Additional Steps for Direct Connect (Point to Point) Configurations:

1. Set **Port Mode** to **Auto Sense**. [Ports -> FC Port]
2. Set **Hard AL\_PA** to **Enable**. [Ports -> FC Port]
3. Click **Set AL\_PA** to select any available AL\_PA. The only remaining AL\_PA should be the host bus adapter (HBA). Using a high number will avoid potential conflicts. [Ports -> FC Port]
4. **Reboot** the router [Reboot]

### Getting Help

- HP Product Information:  
<http://www.hp.com/products/tapestorage>
- HP Technical Support and Phone Numbers:  
<http://www.hp.com/support>
- HP StorageWorks Library and Tape Tools (L&TT) diagnostic software:  
<http://www.hp.com/support/tapetools>



**Note:** Use L&TT to verify installations and to ensure your library has the latest firmware.

© Copyright 2003 Hewlett-Packard Development Company, L.P.

Third Edition (September 2003)  
Part Number: 289157-003



289157-003