

# Sun StorEdge™ L25 Tape Library and Sun StorEdge™ L100 Tape Library Installation Guide

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## Introduction

This document explains how to install a stand-alone Sun StorEdge™ L25 Tape Library or Sun StorEdge™ L100 Tape Library. Hereafter in this document, these libraries will be referred to as the L25 and the L100, respectively.

**Note:** To install an L25 or L100 library module in a multiple library stack, refer to the *StackLink Installation Instructions* (PN 6423029).

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## Site Requirements

When selecting an installation site for the library, consider the following requirements:

- [Space Requirements](#)
- [Cooling Considerations](#)
- [Environmental Requirements](#)
- [Power and Grounding](#)

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### Space Requirements

[Table 1](#) lists the dimensions of the L25 and L100 libraries.

**Caution:** Allow at least 5 inches (12.7 cm) of space behind the library to allow proper ventilation.

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Table 1 Library Dimensions

	L25	L100
Height	6.9 in. (176 mm)	23.4 in. (595 mm)
Width	19 in. (482 mm)	19 in. (482 mm)
Depth	28.6 in. (726 mm)	28.6 in. (726 mm)

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## Cooling Considerations

Cooling is one of the most important factors to consider when selecting a location for the library. The L25 and L100 libraries are force-cooled: air is drawn into the library through vents at the lower edge of the front bezel and exhausted through vents at the back of the library. To ensure that the library is adequately ventilated:

- Place the library on a hard, level surface, or in a standard 19-inch rack.
- If the library will be placed in a rack, the rack must be open or ventilated so that the air temperature behind the library at the air outlets is less than 104°F (40°C).
- Verify that no cables obstruct the vents at the back of the library (see [figure 1](#) and [figure 2](#)).
- Verify that nothing obstructs the vents at the lower edge of the front bezel.
- Allow at least 5 inches (12.7 cm) of space behind the library or rack.
- Do not install the library near a heater or radiator which could warm the air drawn into the library.

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Figure 1 Vent Locations, L25

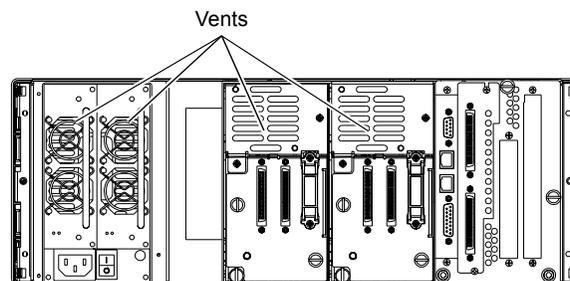
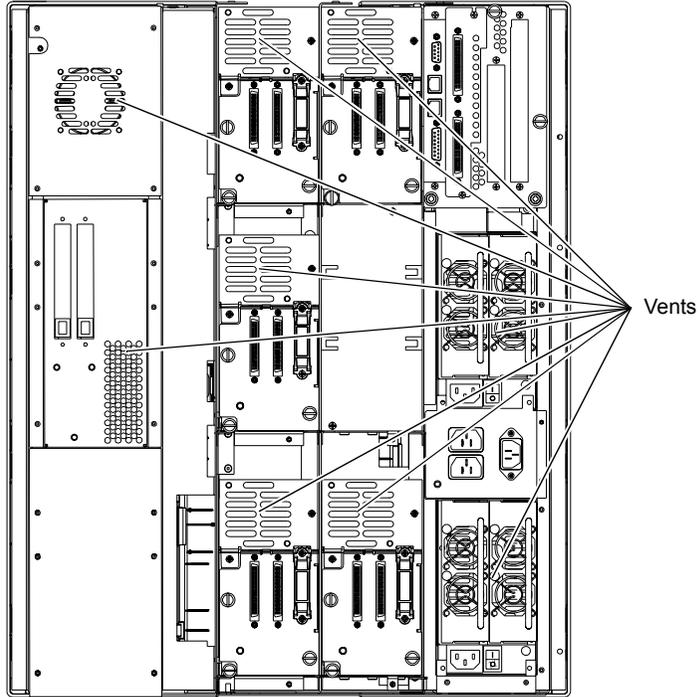


Figure 2 Vent Locations,  
L100



### Environmental Requirements

The installation site (desktop or desktide library) or the interior of the rack (rack mount library) must meet the following environmental requirements:

- Humidity: 20% to 80%, non-condensing
- Temperature: 50°F to 104°F (10°C to 40°C)
- Altitude: -100 to +10,000 feet (-30 to +3,000 meters)

### Power and Grounding

The L25 and L100 power supplies accept 88 VAC to 264 VAC input power at 47 Hz to 63 Hz.

The library must be connected to a grounded power outlet. If the library is mounted in a rack, the rack must also be grounded.

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## Installing a Desktop or Deskside Library

This section explains how to install a desktop L25 library or a deskside L100 library. To install a rack mount library, see [Installing a Rack Mount Library](#).

**Note:** The procedures in this section assume that you have already unpacked the library. If you have not, do so now, referring to the *Sun StorEdge™ L25 Tape Library Unpacking Instructions* (PN 6421029) or the *Sun StorEdge™ L100 Tape Library Unpacking Instructions* (PN 6423014).

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### Installing a Desktop L25 Library

To install a desktop L25:

- 1 Convert the L25 to a desktop unit by performing the procedures detailed in the *Sun StorEdge™ L25 Tape Library Rack Mount to Desktop Conversion Instructions* (PN 6421032).

This document is provided with the Sun StorEdge™ L25 Tape Library Rack Mount to Desktop Conversion Kit.

- 2 Place the library in the installation location, preferably on a sturdy desk or tabletop.
- 3 Proceed to [Installing Drives in the Library](#) on page 18 to continue the installation procedure.

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### Installing a Deskside L100 Library

To install a deskside L100:

- 1 Convert the L100 to a deskside unit by performing the procedures detailed in the *Sun StorEdge™ L100 Tape Library Rack Mount to Deskside Conversion Instructions* (PN 6423027).

This document is provided with the Sun StorEdge™ L100 Tape Library Rack Mount to Deskside Conversion Kit.

- 2 Place the library in the installation location.
- 3 Proceed to [Installing Drives in the Library](#) on page 18 to continue the installation procedure.

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## Installing a Rack Mount Library

This section explains how to install an L25 or L100 library in a standard 19-inch rack.

**Note:** The procedures in this section assume that you have already unpacked the library. If you have not, do so now, referring to the *Sun StorEdge™ L25 Tape Library Unpacking Instructions* (PN 6421029) or the *Sun StorEdge™ L100 Tape Library Unpacking Instructions* (PN 6423014).

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### Determining the Position of the Shelves in the Rack

Before starting the rack mount installation:

- 1 Determine the proper position of the shelves in the rack:

**Caution:** Take rack stability into account when determining where to place the library in the rack.

- An L25 library uses 4U of vertical space.
- An L100 library uses 13.5U of vertical space.
- The StackLink mounting hardware uses 1U of vertical space at the top of the rack, and either 1U or .5U at the bottom of the rack (see the *StackLink Installation Instructions*, PN 6423029, for more information).

**Note:** 1U equals 1.75 inches (44.45 millimeters).

- 2 Use a pencil to mark the desired shelf position on the rack rails.

## Installing the Rack Mount Shelves

This section explains how to install the rack mount shelves. You will need a no. 1 POZIDRIV® screwdriver for this procedure.

### Checking the Contents of the Rack Mount Kit

[Table 2](#) lists the contents of the rack mount kit.

Table 2 Rack Mount Kit Contents

Part No.	Description	Qty.
217395	Shelf, right	1
217396	Shelf, left	1
217397	Front shelf clamp	4
217405	Clamp strip	2
217406	Clamp washer	12
YS40986	M4 x 10 countersink screw	8
YS42086	No. 10 UNF x 3/8" countersink screw	12

### Installing the Shelves in a Half U Position

To install the rack mount shelves in a half U position:

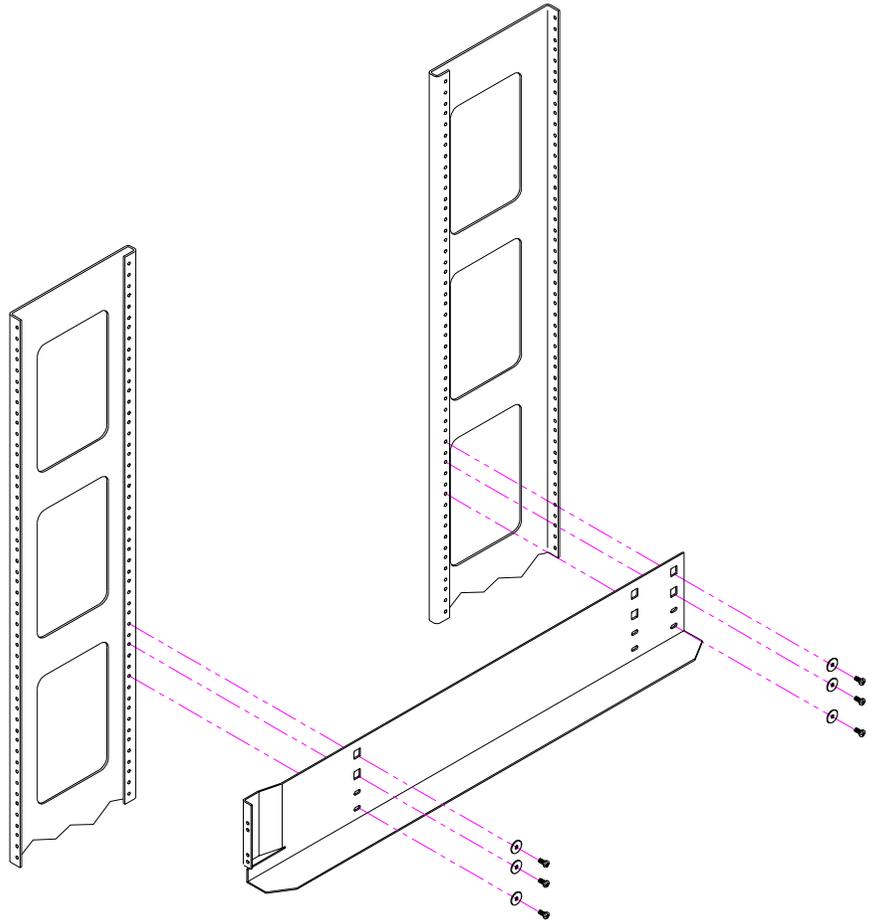
**Note:** In half U position, the bottom of the rack mount shelf lines up with the middle of a U.

- 1 Position the left shelf in the rack, aligning the bottom of the shelf with the pencil marking you made in [step 2](#) on page 7.
- 2 Use six screws (PN YS42086) and washers (PN 217406) to secure the shelf to the rack rails as shown in [figure 3](#).

**Note:** Do not tighten these screws fully; you will finish tightening them later in this procedure.

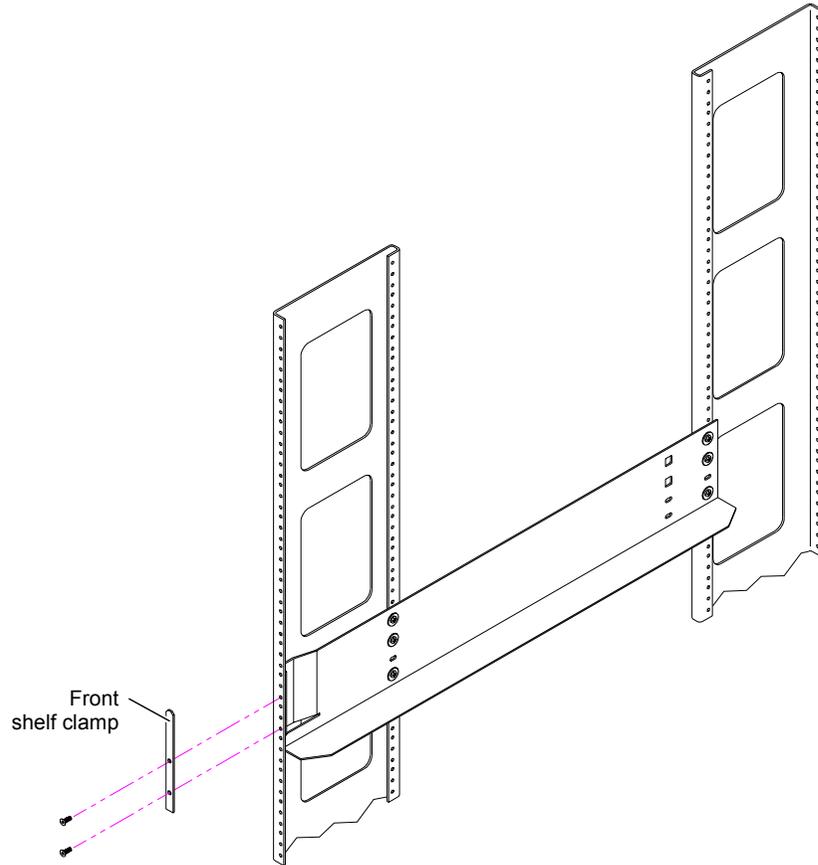
- 3 Repeat steps [1](#) and [2](#) to install the right shelf.

Figure 3 Securing the Shelf in the Half Position



- 4 Install the front shelf clamps (see [figure 4](#)):
  - a Position a front shelf clamp (PN 217397) on the front left rack rail.
  - b Secure the shelf clamp to the rack rail using two countersink screws (PN YS40986).
  - c Repeat these steps to install a shelf clamp on the front right rack rail.

Figure 4 Installing the  
Front Shelf Clamps

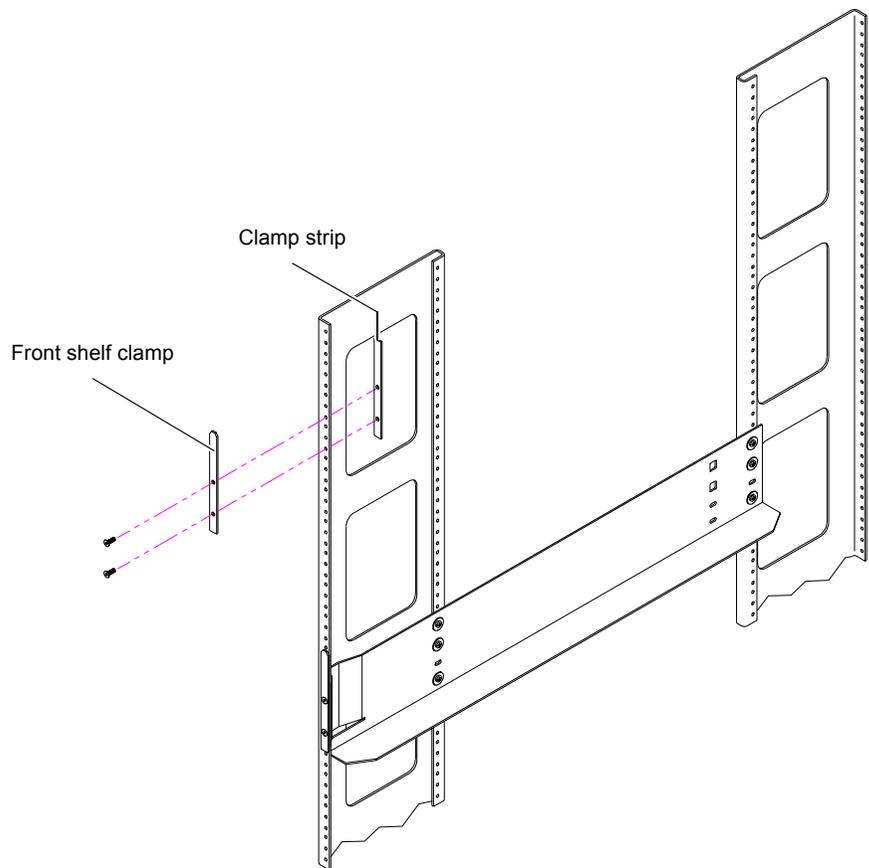


- 5 Fully tighten the screws securing the right and left shelves to the rack rails.
- 6 Install the clamp strips (see [figure 5](#)):
  - a Position a front shelf clamp (PN 217397) at the front of the front left rack rail, with the bottom of the clamp approximately 9U above the bottom of the rack mount shelf.

**Caution:** The top of the front shelf clamp must be no more than 22.75 in. (580 mm) above the bottom of the rack mount shelf.

- b** Position a clamp strip (PN 217405) behind the front left rack rail, aligning it with the front shelf clamp.
- c** Insert a screw (PN YS40986) through the upper hole in the front shelf clamp, through the rack rail, and into the upper hole in the clamp strip.
- d** Insert a screw (PN YS40986) through the bottom hole in the front shelf clamp, through the rack rail, and into the bottom hole in the clamp strip.
- e** Repeat steps [6a](#) through [6d](#) to install the front shelf clamp and clamp strip on the right rack rail.

Figure 5 Installing the Clamp Strips



The shelf installation is now complete. Proceed to [Installing the Library in the Rack](#) on page 15 to install the library.

### Installing the Shelves in a Full U Position

To install the rack mount shelves in a full U position:

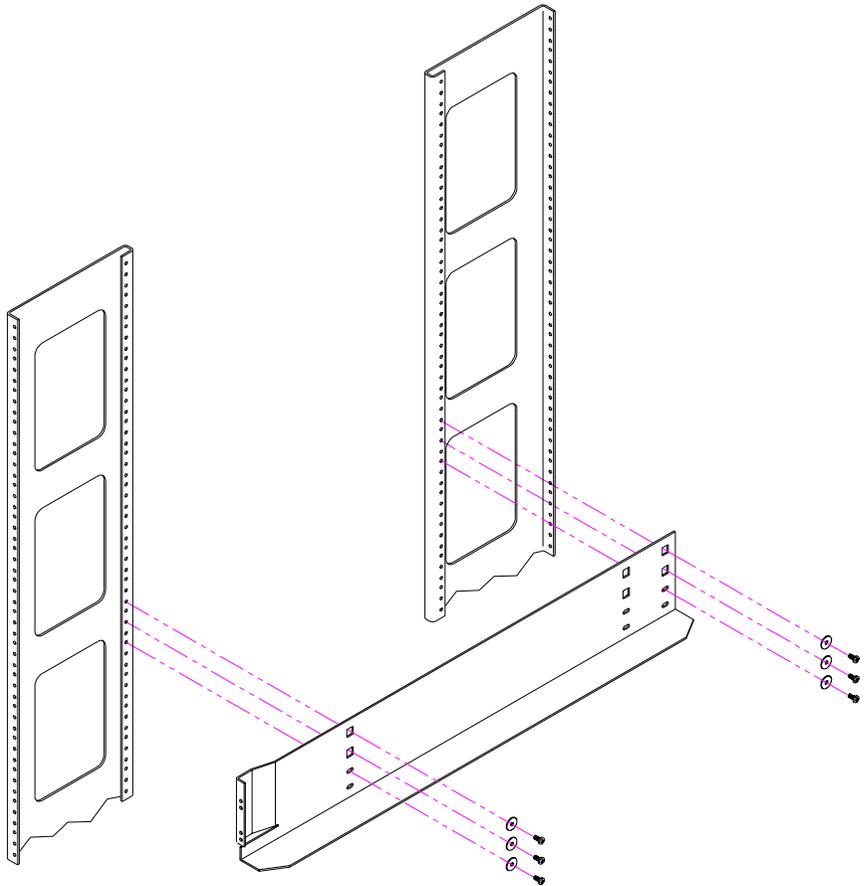
**Note:** In full U position, the bottom of the rack mount shelf lines up with the bottom of a U.

- 1 Position the left shelf in the rack, aligning the bottom of the shelf with the pencil marking you made in [step 2](#) on page 7.
- 2 Use six screws (PN YS42086) and washers (PN 217406) to secure the shelf to the rack rails as shown in [figure 6](#).

**Note:** Do not tighten these screws fully; you will finish tightening them later in this procedure.

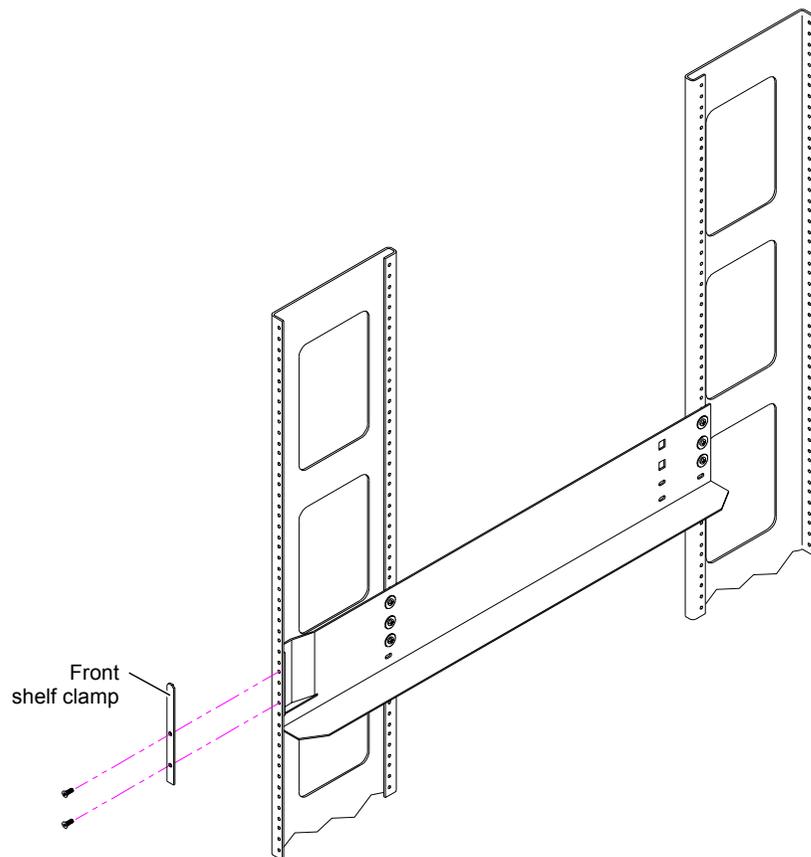
- 3 Repeat steps [1](#) and [2](#) to install the right shelf.

Figure 6 Securing the Shelf in the Half Position



- 4 Install the front shelf clamps (see [figure 7](#)):
  - a Position a front shelf clamp (PN 217397) on the front left rack rail.
  - b Secure the shelf clamp to the rack rail using two countersink screws (PN YS40986).
  - c Repeat these steps to install a shelf clamp on the front right rack rail.

Figure 7 Installing the Front Shelf Clamps

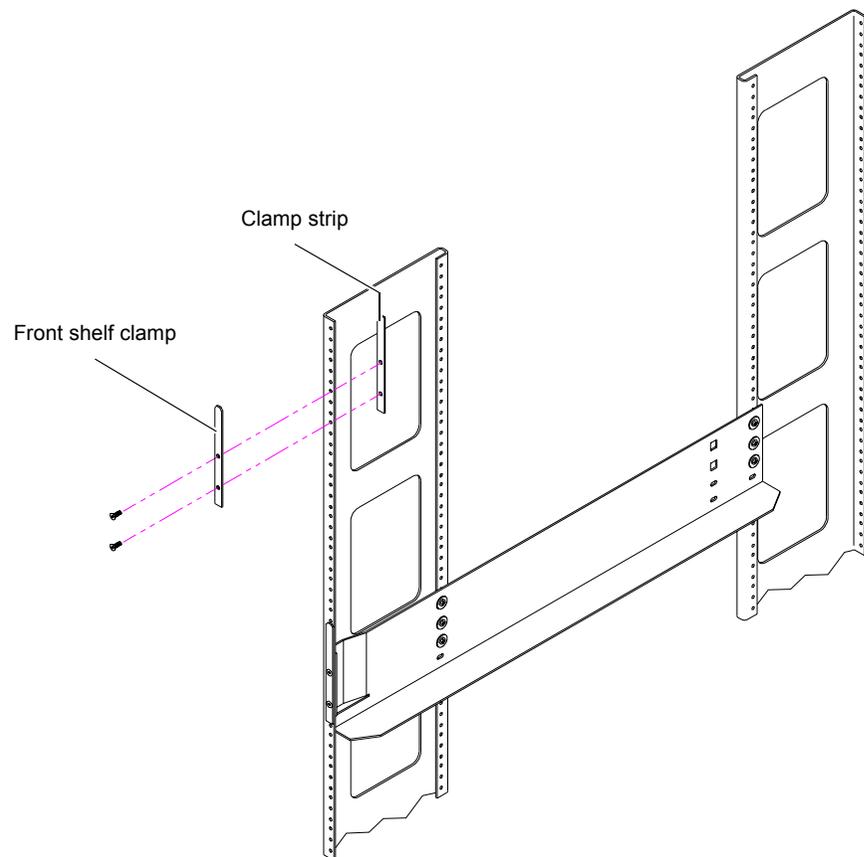


- 5 Fully tighten the screws securing the right and left shelves to the rack rails.
- 6 Install the clamp strips (see [figure 8](#)):
  - a Position a front shelf clamp (PN 217397) at the front of the front left rack rail, with the bottom of the clamp approximately 9U above the bottom of the rack mount shelf.

**Caution:** The top of the front shelf clamp must be no more than 22.75 in. (580 mm) above the bottom of the rack mount shelf.

- b** Position a clamp strip (PN 217405) behind the front left rack rail, aligning it with the front shelf clamp.
- c** Insert a screw (PN YS40986) through the upper hole in the front shelf clamp, through the rack rail, and into the upper hole in the clamp strip.
- d** Insert a screw (PN YS40986) through the bottom hole in the front shelf clamp, through the rack rail, and into the bottom hole in the clamp strip.
- e** Repeat steps [6a](#) through [6d](#) to install the front shelf clamp and clamp strip on the right rack rail.

Figure 8 Installing the  
Clamp Strips



The shelf installation is now complete. Proceed to [Installing the Library in the Rack](#) to install the library.

## Installing the Library in the Rack

This section explains how to install the library in the rack. You will need a no. 2 POZIDRIV screwdriver for this procedure.

### Installing an L25 Library

To install an L25 library in a rack:

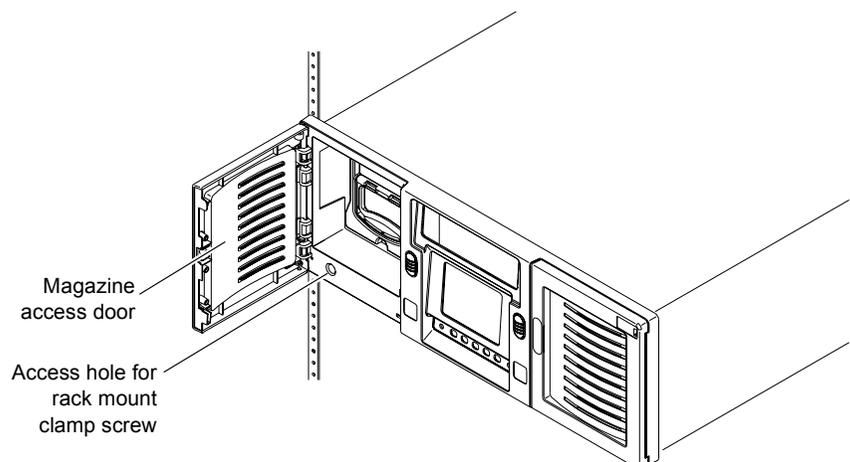
- 1 Take precautions to ensure that the rack is stable:
  - If you are installing the library at the top of a rack with no equipment at the bottom of the rack, purchase a rack stabilization kit from the rack manufacturer and install it before installing the library.
  - If you are installing the library in a rack with other equipment, place the heaviest equipment at the bottom of the rack.
- 2 Verify that the rack mount shelves are level and securely fastened to the rack.

**Caution:** The L25 library weighs approximately 58 lbs (26.5 kg). At least two people are required to lift and install the library.

- 3 With the help of another person, lift the library onto the rack mount shelves.
- 4 Slide the library all the way into the rack.
- 5 Press the white button next to the left magazine access door and open the door.
- 6 Notice the hole behind the magazine access door, at the lower edge of the library (see [figure 9](#)).

This hole provides access to the rack mount clamp screw.

Figure 9 Securing the L25 Library to the Rack



- 7 Insert a no. 2 POZIDRIV screwdriver into the hole and turn the rack mount clamp screw clockwise to tighten it.

**Caution:** Do not over-tighten the rack mount clamp screw. When the screw begins to feel tight, turn it an additional quarter turn and then stop.

As you tighten this screw, a lever protrudes from the side of the library and presses against the back side of the rack rail.

- 8 Repeat steps [5](#) through [7](#) to secure the right side of the library to the rack.
- 9 Close the magazine access doors.

Proceed to [Installing Drives in the Library](#) on page 18 to continue the installation procedure.

### Installing an L100 Library

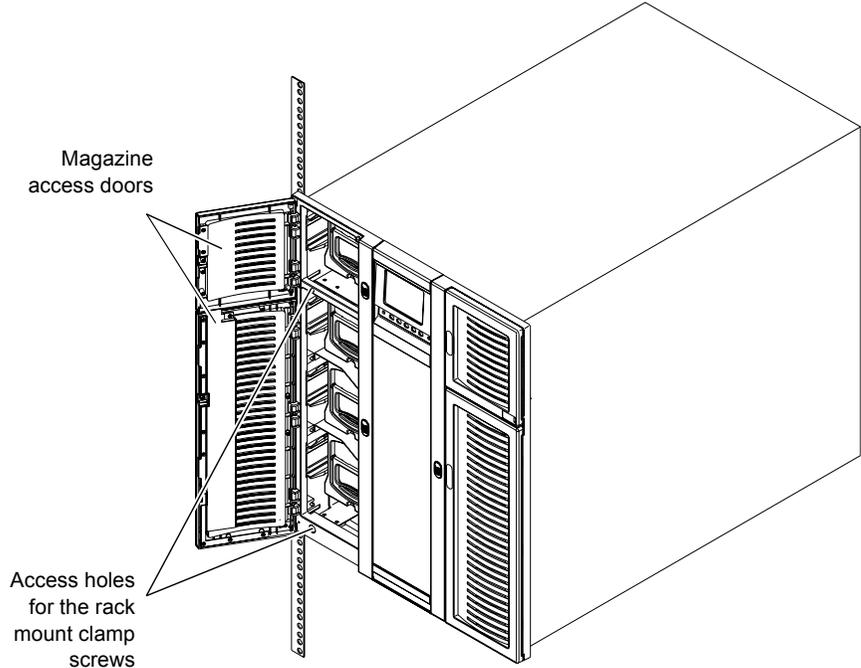
To install an L100 library in a rack:

**Warning:** The L100 library weighs approximately 162 lbs (74 kg). At least two people are required to lift and install the library.

- 1 Take precautions to ensure that the rack is stable:
  - If you are installing the library at the top of a rack with no equipment at the bottom of the rack, purchase a rack stabilization kit from the rack manufacturer and install it before installing the library.
  - If you are installing the library in a rack with other equipment, place the heaviest equipment at the bottom of the rack.
- 2 Verify that the rack mount shelves are level and securely fastened to the rack.
- 3 With the help of another person, lift the library onto the rack mount shelves.
- 4 Slide the library all the way into the rack.
- 5 Press the two white buttons next to the left magazine access doors and open the doors.
- 6 Notice the two holes behind the left magazine access doors (see [figure 10](#)).

These holes provide access to the rack mount clamp screws.

Figure 10 Securing the Library to the Rack



- 7 Insert a no. 2 POZIDRIV screwdriver into one of the holes and turn the rack mount clamp screw clockwise to tighten it fully.

**Caution:** Do not overtighten the rack mount clamp screw. When the screw begins to feel tight, turn it an additional quarter turn and then stop.

As you tighten this screw, a lever protrudes from the side of the library and presses against the back side of the rack rail.

- 8 Tighten the remaining rack mount clamp screw in the same manner.
- 9 Press the white button next to the right magazine access door. The right magazine access door opens.
- 10 Repeat steps [6](#) through [8](#) to secure the right side of the library to the rack.
- 11 Close the magazine access doors.

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## Installing Drives in the Library

This section explains how to install tape drives in the library. You will need a TORX® T-20 screwdriver and a flat blade screwdriver for this procedure.

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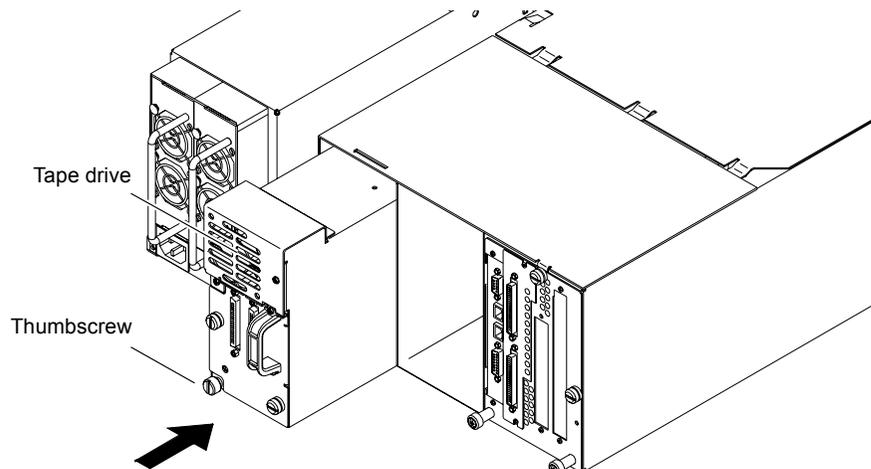
### Installing Tape Drives in an L25

To install tape drives in an L25:

- 1 At the back of the library, use a TORX T-20 screwdriver to remove the cover plate protecting the drive bay in which you will install the tape drive.
- 2 Insert the tape drive into the drive bay slowly until the connectors are seated (see [figure 11](#)).
- 3 Tighten the tape drive thumbscrew using a flat blade screwdriver.
- 4 Repeat steps [1](#) through [3](#) to install another tape drive, if desired.

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Figure 11 Installing a Tape Drive in an L25 Library



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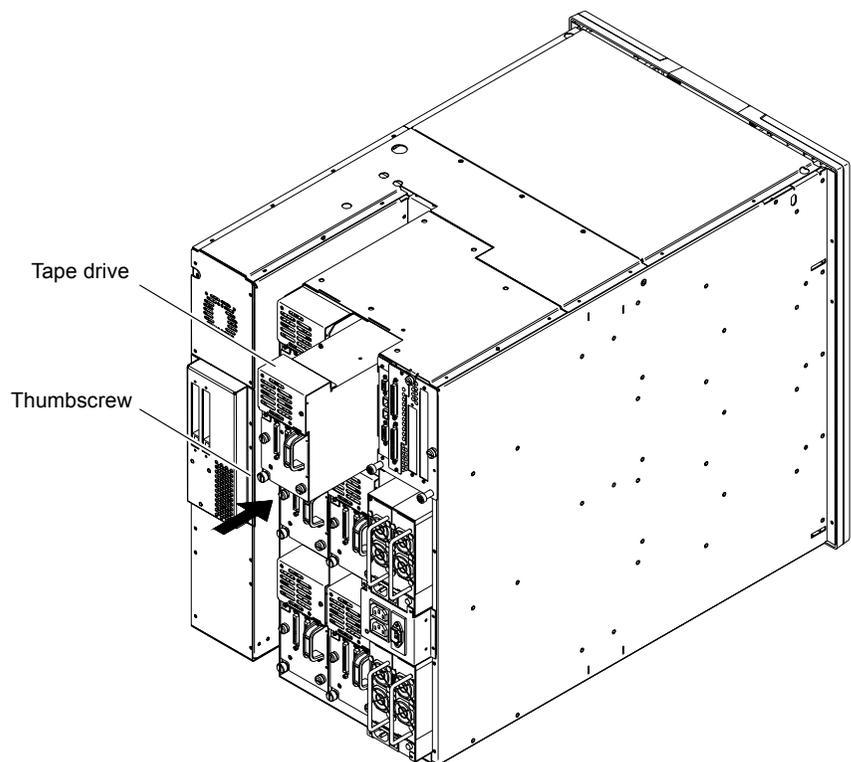
## Installing Tape Drives in an L100

To install tape drives in an L100:

- 1 At the back of the library, use a TORX T-20 screwdriver to remove the cover plate protecting the drive bay in which you will install the tape drive.
- 2 Insert the tape drive into the drive bay slowly until the connectors are seated (see [figure 12](#)).

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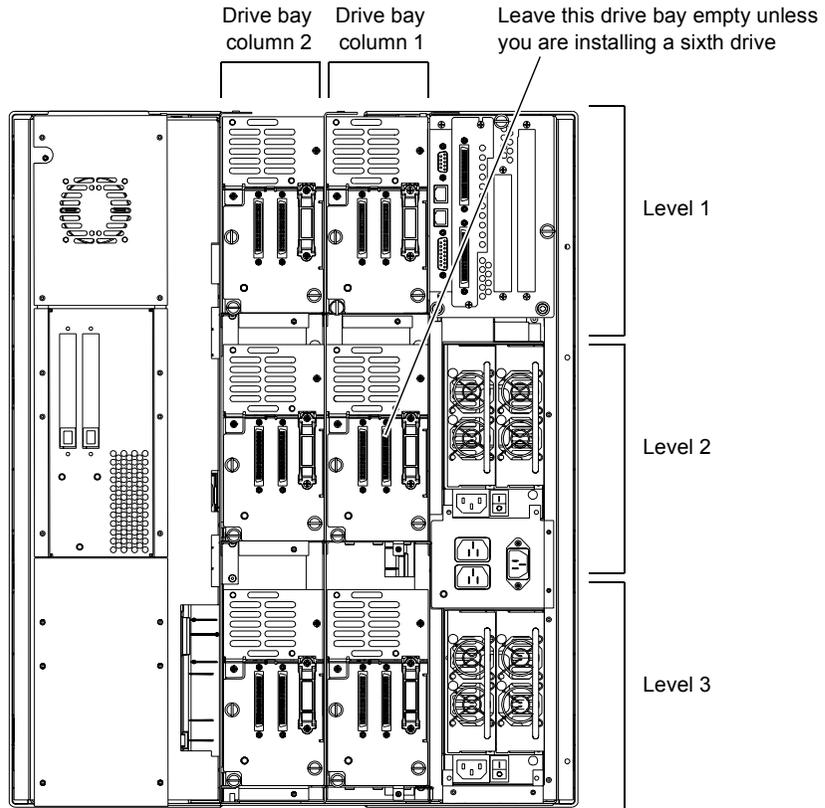
Figure 12 Installing a Tape  
Drive in an L100 Library



- 3 Tighten the tape drive thumbscrew using a flat blade screwdriver.
- 4 Repeat steps [1](#) through [3](#) to install any additional tape drives.

**Caution:** If you are installing fewer than six drives in an L100 library, do not install a drive in drive bay 1 on level 2 (see [figure 13](#)). Installing a drive in this location reduces the cartridge capacity of the library (see the **Note** following [step 5](#)).

Figure 13 Drive Bay  
Numbering, L100



- 5 If you installed six tape drives, remove the level 3 left magazine and fixed slot as follows:

**Note:** The level 3 left magazine and fixed slot prevent the robotic hand from accessing the tape drive in drive bay 1 on level 2 of the library.

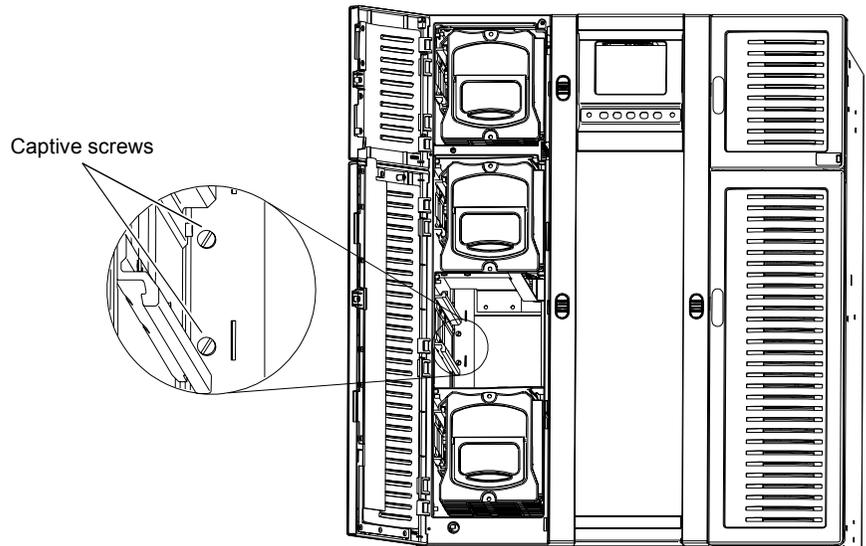
- a Press the white buttons next to the two left magazine access doors.  
The magazine access doors open.
- b Remove the level 3 left magazine by grasping the handle at the front of the magazine and sliding it forward and out of the library.

**Note:** Library levels are numbered from top to bottom. The level 3 left magazine is the left magazine that is third from the top of the library.

- c Using a flat blade screwdriver, loosen the two captive screws that hold the level 3 fixed slot in place (see [figure 14](#)).

The captive screws spring forward slightly when they are fully loosened.

Figure 14 Loosening the Captive Screws



- d Reach into the library and carefully move the hand assembly to the right front of the library, away from the fixed slot.
- e Reach into the level 3 magazine slot and grasp the right side of the level 3 fixed slot.
- f Gently pull the fixed slot to the right and remove it from the library.

**Caution:** Do not replace the level 3 left magazine.

- g Close the magazine access doors.

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## Preparing and Inserting Tape Cartridges

This section explains how to insert tape cartridges into the L25 and L100 libraries. This procedure consists of the following steps:

- Labeling the tape cartridges
- Setting the write-protect switch
- Placing cartridges in the library

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### Labeling Tape Cartridges

Attaching a bar code label to each cartridge enables the library to identify tape cartridges quickly, speeding the inventory process.

**Note:** The L25 and L100 libraries are capable of reading most common bar code formats.

### Bar Code Label Requirements

Bar code labels must meet the requirements of the latest revision of the ANSI MH10.8M standard, and should use industry standard Code 39 (3 of 9 code).

The basic requirements are listed in [table 3](#).

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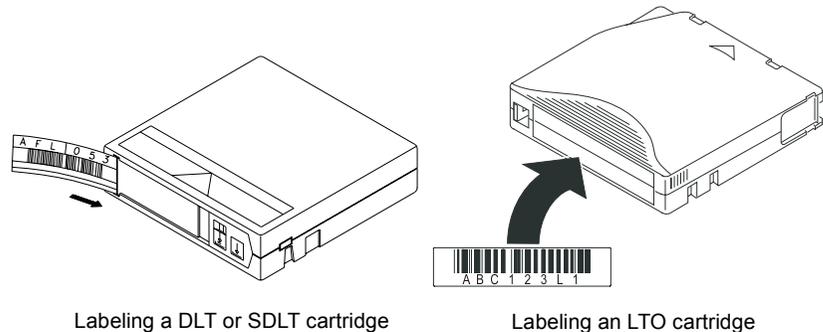
Table 3 Bar Code Label Requirements

<b>Label size</b>	2.2 x 0.82 inches (5.59 x 2.08 cm)
<b>Quiet zone</b>	0.25 inches (6.4 mm) minimum
<b>Character height</b>	0.3 inches (7.6 mm)
<b>Bar code characters</b>	one start character, one to six alphanumeric characters, one stop character
<b>Ratio of wide to narrow element</b>	2.5:1 minimum

## Applying the Labels

- 1 Label the tape cartridges (see [figure 15](#)):
  - DLT and SDLT cartridges use non-adhesive labels that slide into a slot at the front of the cartridge.
  - LTO cartridges use adhesive labels that adhere to the front of the cartridge.

Figure 15 Labeling Tape Cartridges



- 2 Use the same method to apply a cleaning cartridge label to the cleaning cartridge.

Cleaning cartridge labels are black and white, and their numbers start with the letters CLN.

**Caution:** LTO tape drive media cannot be degaussed due to the fact that it uses magnetic servos. Do not attempt to degauss LTO tape drive media. If this media is degaussed, it will no longer work.

## Setting the Write-Protect Switch

The write-protect switch (see [figure 16](#)) controls whether the tape cartridge is write-protected or write-enabled:

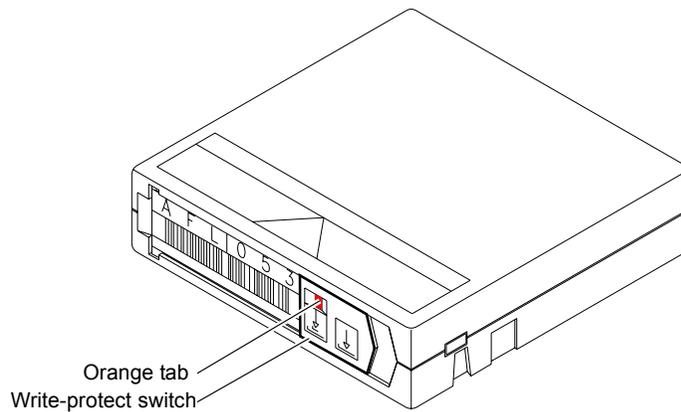
- Write-protecting a cartridge protects the data it contains from being erased or overwritten. Typically you use this setting when removing the cartridges for storage outside the library.
- Write-enabling a cartridge allows new data to be written to the cartridge or existing data to be modified or erased. This is the setting that cartridges are typically set to when they are inside the library.

### Setting the Write-Protect Switch (DLT and SDLT Cartridges)

To write-protect a DLT or SDLT cartridge, move the write-protect switch to the left. An orange tab is visible behind the switch (see [figure 16](#)).

To write-enable a DLT or SDLT cartridge, move the write-protect switch to the right. The orange tab is not visible when the cartridge is write-enabled.

Figure 16 Setting the Write-Protect Switch (DLT and SDLT Cartridges)

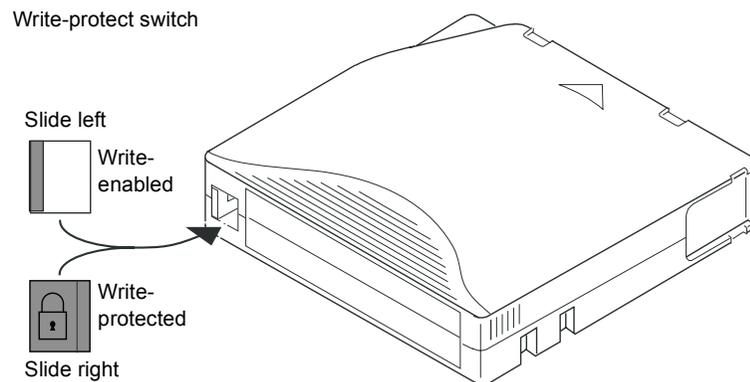


### Setting the Write-Protect Switch (LTO Cartridges)

To write-protect an LTO cartridge, move the write-protect switch to the right (see [figure 17](#)).

To write-enable an LTO cartridge, move the write-protect switch to the left.

Figure 17 Setting the Write-Protect Switch (LTO Cartridges)



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## Placing Cartridges in the Library

This section explains how to place tape cartridges in the library.

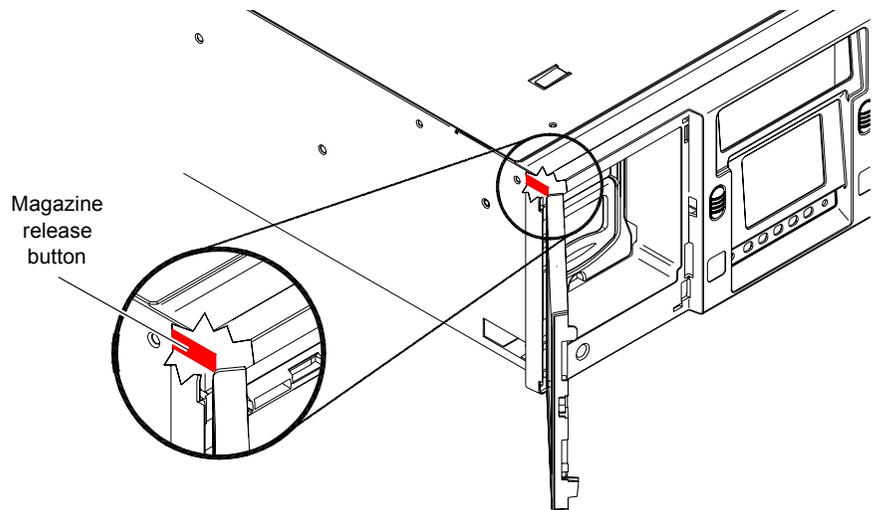
### Placing Tape Cartridges in an L25 Library

To place tape cartridges in an L25 library:

- 1 Remove the left magazine:
  - a Press the white button next the left magazine access door and open the door.
  - b Grasping the handle at the front of the left magazine, pull it forward until it stops.
  - c Using a slender object such as a pen, press and hold the magazine release button (see [figure 18](#)).
  - d Pull the left magazine the rest of the way out of the library.

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Figure 18 Magazine Release Button

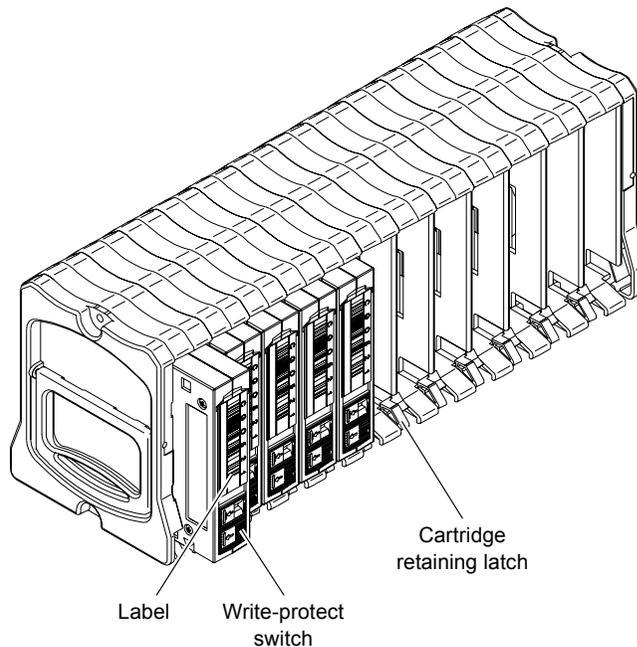


- 2 Remove the right magazine:
  - a Press the white button next the right magazine access door and open the door.
  - b Grasping the handle at the front of the right magazine, pull it forward and out of the library.
- 3 Insert the cleaning cartridge into the fixed slot behind the left magazine, orienting it with the label facing outward and the write-protect switch:
  - Down, if it is a DLT or SDLT cartridge
  - Up, if it is an LTO cartridge

- 4 Insert cartridges into each of the magazine slots:
  - a Orient the cartridges as described in [step 3](#).
  - b Push each cartridge into a slot until the cartridge retaining latch clicks to hold the cartridge in place.

**Caution:** The magazines are designed so that you cannot insert cartridges incorrectly. Do not try to force the cartridges into the slots.

Figure 19 Inserting DLT Cartridges into a Magazine



- 5 Insert the magazines into the library, sliding them back until they click into place.
- 6 Close the magazine access doors.

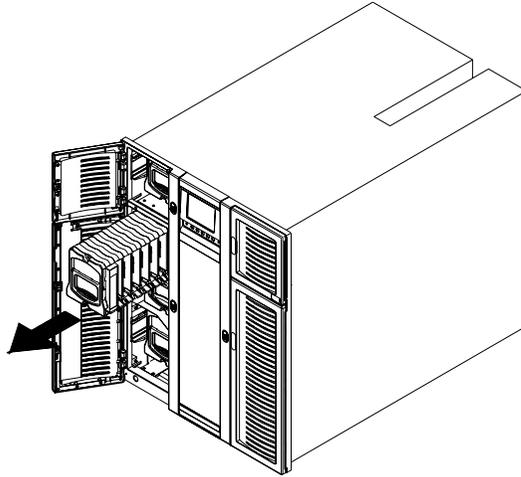
### Placing Tape Cartridges in an L100 Library

To place tape cartridges in an L100 library:

- 1 Press the white buttons next to the magazine access doors.  
The magazine access doors open.
- 2 Remove the level 1 left magazine:
  - a Grasping the handle at the front of the level 1 left magazine, pull it forward until it stops.
  - b If the magazine stops after the first slot, perform steps [2c](#) through [2e](#) to release it.

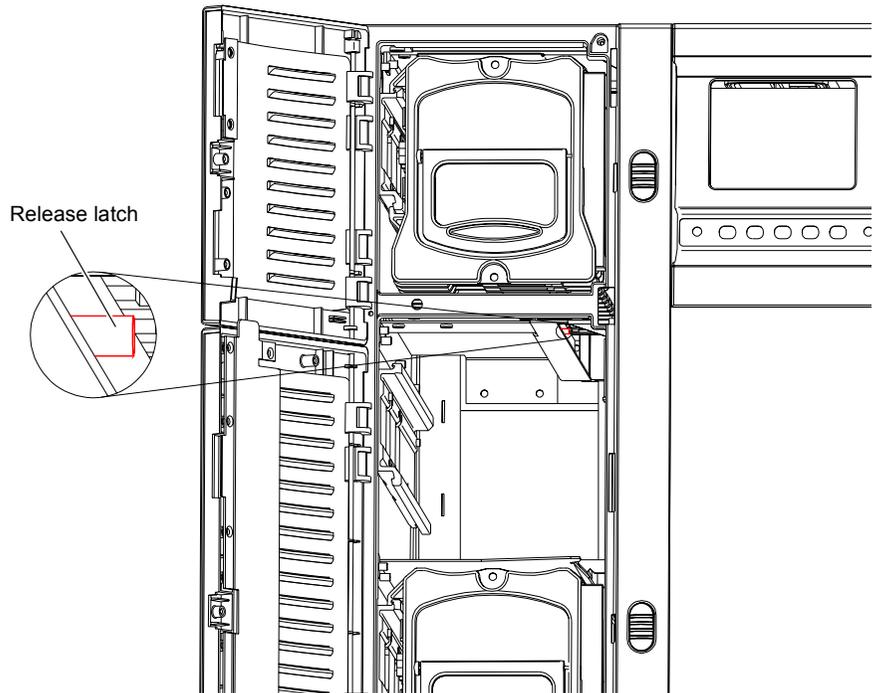
- c Remove the level 2 left magazine (see [figure 20](#)).

Figure 20 Removing the Level 2 Left Magazine



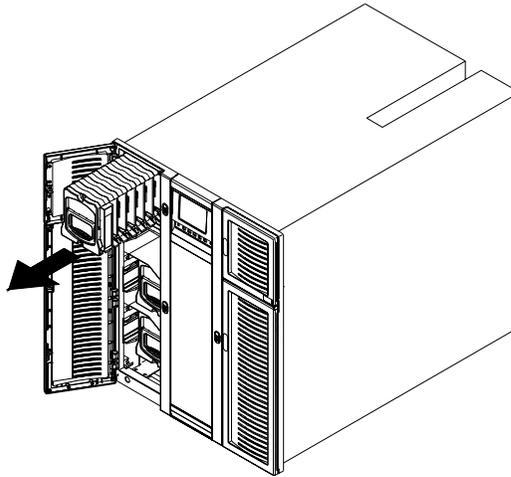
- d Reach into the library underneath the level 1 left magazine and press up on the release latch (see [figure 21](#)).

Figure 21 Pressing the Release Latch



- e While holding the release latch, pull the level 1 left magazine forward and out of the library (see [figure 22](#)).

Figure 22 Removing the  
Level 1 Left Magazine



- 3 Remove each remaining magazine by grasping the handle at the front of the magazine and sliding it forward and out of the library.
- 4 Insert cleaning cartridges into the fixed slots.

**Note:** There is one fixed slot behind each left magazine.

Orient the cartridges with the label facing outward and the write-protect switch:

- Down, if it is a DLT or SDLT cartridge
  - Up, if it is an LTO cartridge
- 5 Insert cartridges into each of the magazine slots (see [figure 19](#)):
    - a Orient the cartridges as described in [step 4](#).
    - b Push each cartridge into a slot until the cartridge retaining latch clicks to hold the cartridge in place.

**Caution:** The magazines are designed so that you cannot insert cartridges incorrectly. Do not force the cartridges into the slots.

- 6 Insert the magazines into the library, sliding them back until they click into place.
- 7 Close the magazine access doors.

---

## Connecting the Library to AC Power

This section explains how to connect the library to AC power.

---

### L25 Power Requirements

To connect the L25 library to AC power:

- 1 Referring to [table 4](#), select appropriate AC distribution unit(s) for your library configuration and input voltage.

**Warning:** AC distribution units (power strips) must be certified for safety by an agency acceptable to the country of use. For use in the United States and Canada, distribution units must be UL listed and CSA certified. For use in Europe, distribution units must be CE marked. National certifications for other countries depend on local requirements.

- 2 Connect the power cable (provided in the accessories kit) to the power inlet on the back of the library (see [figure 23](#)) and to the AC distribution unit.

---

Figure 23 Power Inlet

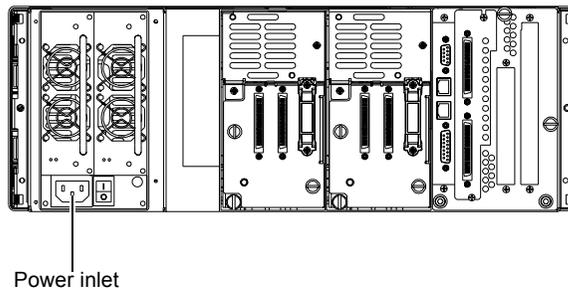


Table 4 AC Distribution Requirements, L25

# of Library Modules	Distribution Unit Requirements	
	200-240V 50-60Hz supply voltage (Europe & international, etc.)	100-120V 50-60Hz supply voltage (USA, Canada, Japan, etc.)
1-2	Connect libraries to one AC distribution unit rated minimum 10A, minimum 1.00mm <sup>2</sup> <HAR> cord with minimum 10A plug. Must be 3 wire grounding plug and wall outlet.	Connect libraries to one UL Listed AC distribution unit rated 15A or 20A, with a minimum 14AWG 3 wire cord, and a 15A or 20A plug. Must be 3 wire grounding plug and wall outlet.
3-4	<p>Select one of the following options:</p> <ul style="list-style-type: none"> <li>• Connect no more than 2 libraries to each AC distribution unit rated minimum 10A, minimum 1.00mm<sup>2</sup> &lt;HAR&gt; cord with minimum 10A plug. Must be 3 wire grounding plug and wall outlet. The AC distribution units must be plugged into separate outlets served by separate circuit breakers or fuses.</li> <li>• Connect all libraries to one AC distribution unit rated minimum 10A, minimum 1.00mm<sup>2</sup> &lt;HAR&gt; 3 wire cord with 3 wire IEC60309 rated 16A. Must be 3 wire grounding plug and wall outlet and have a ground warning label.</li> <li>• Connect all libraries to one AC distribution unit rated minimum 10A, minimum 1.00 mm<sup>2</sup> &lt;HAR&gt; 3 wire cord permanently wired to the electrical supply. Must be connected with a 3 wire cable and have a ground warning label.</li> </ul>	Connect libraries to one UL Listed AC distribution unit rated 15A or 20A, with a minimum 14AWG 3 wire cord, and a 15A or 20A plug. Must be 3 wire grounding plug and wall outlet.

# of Library Modules	Distribution Unit Requirements	
	200-240V 50-60Hz supply voltage (Europe & international, etc.)	100-120V 50-60Hz supply voltage (USA, Canada, Japan, etc.)
5-10	<p>Select one of the following options:</p> <ul style="list-style-type: none"> <li>• Connect no more than 2 libraries to each AC distribution unit rated minimum 10A, minimum 1.00mm<sup>2</sup> &lt;HAR&gt; cord with minimum 10A plug. Must be 3 wire grounding plug and wall outlet. The AC distribution units must be plugged into separate outlets served by separate circuit breakers or fuses.</li> <li>• Connect all libraries to one AC distribution unit rated minimum 10A, minimum 1.00mm<sup>2</sup> &lt;HAR&gt; 3 wire cord with 3 wire IEC60309 rated 16A. Must be 3 wire grounding plug and wall outlet and have a ground warning label.</li> <li>• Connect all libraries to one AC distribution unit rated minimum 10A, minimum 1.00 mm<sup>2</sup> &lt;HAR&gt; 3 wire cord permanently wired to the electrical supply. Must be connected with a 3 wire cable and have a ground warning label.</li> </ul>	<p>Select one of the following options:</p> <ul style="list-style-type: none"> <li>• Connect no more than 4 libraries to each AC distribution unit rated 15A or 20A, with a minimum 14AWG 3 wire cord, and a 15A or 20A plug. Must be 3 wire grounding plug and wall outlet.</li> <li>• Connect all libraries to one AC distribution unit rated 20A, with a minimum 14AWG 3 wire cord, with a 20A plug. Must be 3 wire grounding plug and wall outlet and have a ground warning label.</li> <li>• Connect all libraries to one AC distribution unit rated minimum 20A, with a minimum 14AWG 3 wire cord, permanently wired to the electrical supply and have a ground warning label.</li> </ul>

## L100 Power Requirements

To connect the L100 library to AC power:

- 1 Referring to [table 5](#), select appropriate AC distribution unit(s) for your library configuration and input voltage.

**Warning:** AC distribution units (power strips) must be certified for safety by an agency acceptable to the country of use. For use in the United States and Canada, distribution units must be UL listed and CSA certified. For use in Europe, distribution units must be CE marked. National certifications for other countries depend on local requirements.

- 2 Using one of the short AC power cables provided in the accessory kit, connect the top power supply to the AC distribution panel on the back of the library (see [figure 24](#)).
- 3 Using the remaining short AC power cable, connect the bottom power supply to the AC distribution panel (see [figure 24](#)).
- 4 Connect the power cable (provided in the accessories kit) to the power inlet on the back of the library (see [figure 24](#)) and to the wall outlet or AC distribution unit.

Figure 24 Power Inlet

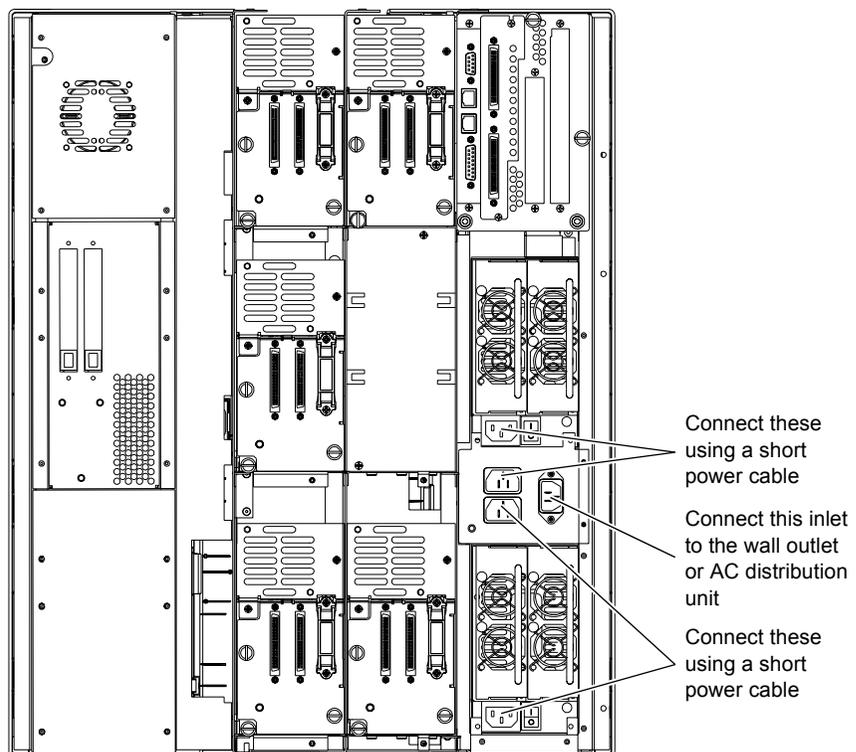


Table 5 AC Distribution Requirements, L100

# of Library Modules	Distribution Unit Requirements	
	200-240V 50-60Hz supply voltage (Europe & international, etc.)	100-120V 50-60Hz supply voltage (USA, Canada, Japan, etc.)
1	Connect the library to an AC wall outlet rated minimum 10A, minimum 1.00mm <sup>2</sup> <HAR> cord with minimum 10A plug. Must be three wire grounding plug and wall outlet.	Connect the library to one UL listed AC distribution unit rated 15A or 20A, with a minimum 14AWG 3 wire cord, and a 15A or 20A plug. Must be three wire grounding plug and wall outlet.
2	Connect each library to a separate wall outlet rated minimum 10A, minimum 1.00mm <sup>2</sup> <HAR> cord with minimum 10A plug. Must be three wire grounding plug and wall outlet.	Connect both libraries to one UL listed AC distribution unit rated 15A or 20A, with a minimum 14AWG 3 wire cord, and a 15A or 20A plug. Must be three wire grounding plug and wall outlet.
3	<p>Select one of the following options:</p> <ul style="list-style-type: none"> <li>• Connect each library to a separate wall outlet rated minimum 10A, minimum 1.00mm<sup>2</sup> &lt;HAR&gt; cord with minimum 10A plug. Must be three wire grounding plug and wall outlet.</li> <li>• Connect all libraries to one AC distribution unit rated minimum 10A, minimum 1.00mm<sup>2</sup> &lt;HAR&gt; 3 wire cord with 3 wire IEC60309 rated 16A. Must be 3 wire grounding plug and wall outlet and have a ground warning label.</li> <li>• Connect all libraries to one distribution unit rated minimum 10A, minimum 1.00mm<sup>2</sup> &lt;HAR&gt; 3 wire cord permanently wired to the electrical supply. Must be connected with a 3 wire cable and have a ground warning label.</li> </ul>	<p>Select one of the following options:</p> <ul style="list-style-type: none"> <li>• Connect no more than 2 libraries to each of two AC distribution units rated 15A or 20A, with a minimum 14AWG 3 wire cord, and a 15A or 20A plug. Must be 3 wire grounding plug and wall outlet. The AC distribution units must be plugged into separate outlets served by separate circuit breakers or fuses.</li> <li>• Connect all libraries to one AC distribution unit rated 20A, with a minimum 14AWG 3 wire cord, with a 20A plug. Must be 3 wire grounding plug and wall outlet.</li> <li>• Connect all libraries to one AC distribution unit rated minimum 20A, with a minimum 14AWG 3 wire cord, permanently wired to the electrical supply.</li> </ul>

---

## Connecting the Library to the Host Computer

The library robotics and tape drives are independent SCSI devices with independent SCSI connections. The L25 and L100 provide two 68-pin high density connectors for each device. You can connect these devices to a single SCSI bus or divide them between two or more SCSI buses.

To connect the library or libraries to the host computer(s), refer to the following sections:

- [SCSI Cabling Guidelines](#)
- [Terminator Power](#)
- [SCSI Cabling Diagrams](#)

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### SCSI Cabling Guidelines

Refer to these SCSI cabling guidelines when completing the SCSI cabling:

- Each device on the SCSI bus must have a unique SCSI ID. The default settings for the L25 are: library robotics = 0, tape drive 1 = 1, tape drive 2 = 2. The default settings for the L100 are: library robotics = 0, tape drive 1 = 1, tape drive 2 = 2, tape drive 3 = 3, tape drive 4 = 4, tape drive 5 = 15, tape drive 6 = 14. You can change these SCSI ID settings using the **Drive ID** and **Library ID** options on the GUI **Configuration** screen.
- Termination must be provided at each end of the SCSI bus (see [Terminator Power](#)).
- All SCSI cables must be shielded or double shielded to meet EMI specifications.
- The maximum total SCSI bus length for an HVD SCSI bus is 82 feet (25 meters).

---

### Terminator Power

External terminators must be installed at the end of each SCSI bus. Power for the terminator must be supplied by at least one device on the SCSI bus.

In the factory default configuration, the library robotics supplies terminator power. You can turn this terminator power off using the **Terminator Power** option on the GUI **Configuration** screen.

---

## SCSI Cabling Diagrams

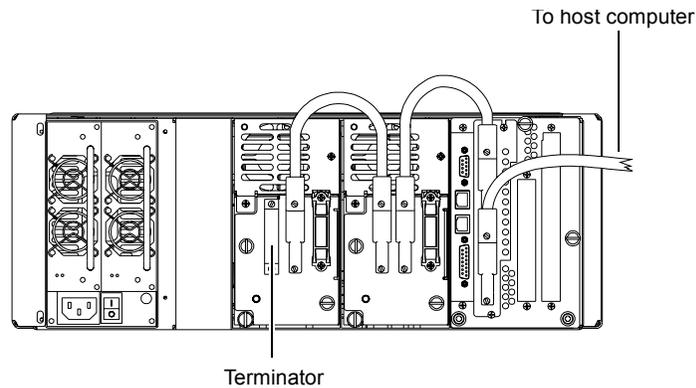
This section provides sample SCSI cabling configurations for L25 and L100 libraries.

### SCSI Cabling Diagrams, L25

Figures 25 through 27 illustrate sample SCSI cabling configurations for a single L25 library module.

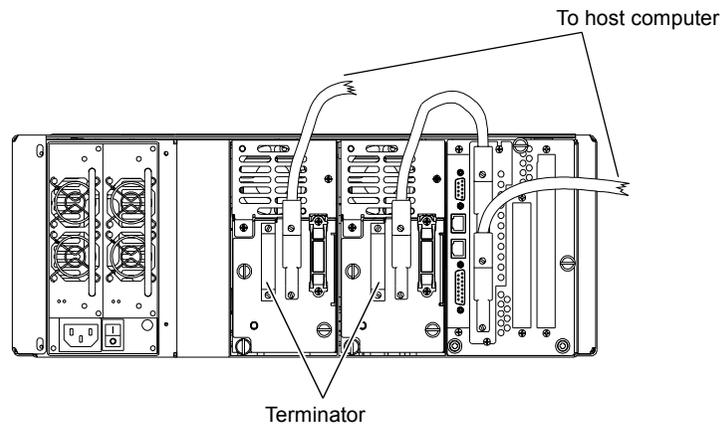
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Figure 25 SCSI Cabling Diagram, L25 — Single SCSI Bus



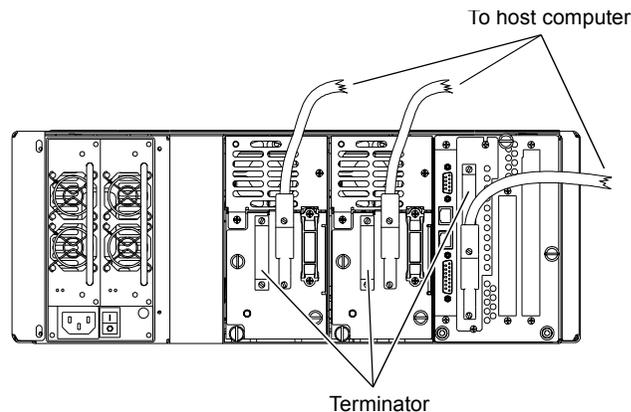
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Figure 26 SCSI Cabling Diagram, L25 — Two SCSI Buses



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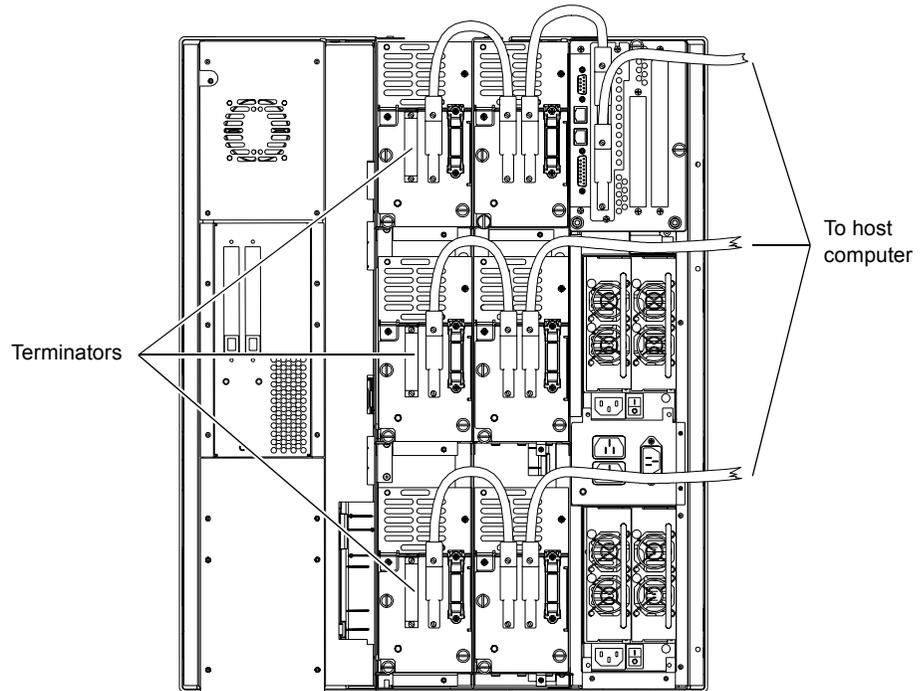
Figure 27 SCSI Cabling Diagram, L25 — Three SCSI Buses



### SCSI Cabling Diagram, L100

Figure 28 illustrates the recommended SCSI cabling configuration for a single L100 library module.

Figure 28 SCSI Cabling Diagram, L100



## Powering Up the Library

To power up the library, press the power switch (or switches) on the back panel of the library (see [figure 29](#) and [figure 30](#)).

To minimize the effects of inrush current, always turn on the library using these library power switches instead of using the power switches that may be on the AC distribution unit.

Figure 29 Power Switch, L25

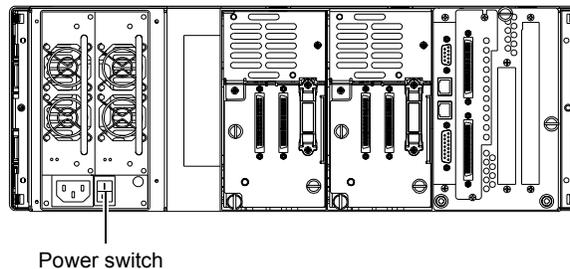
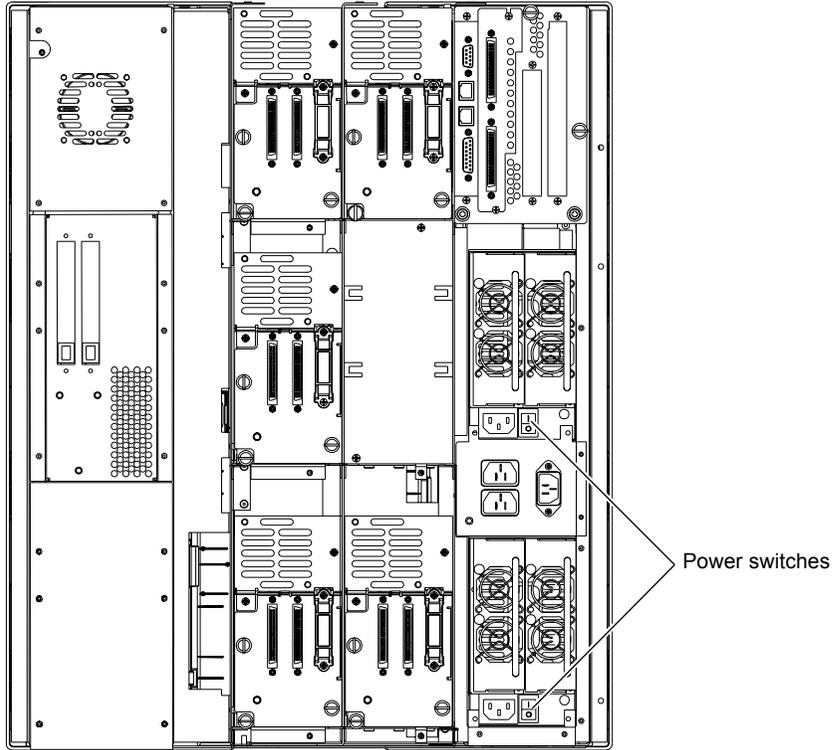
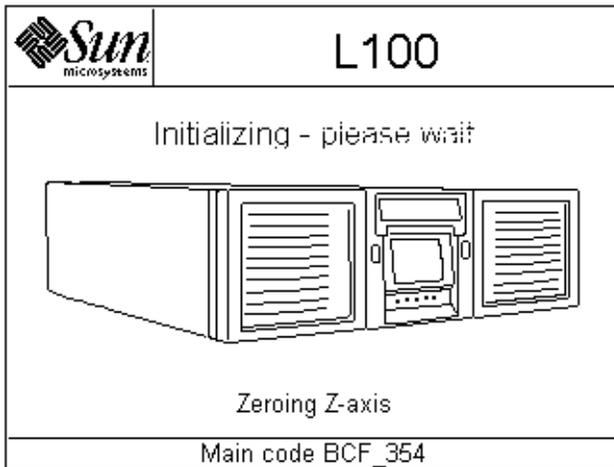


Figure 30 Power Switches, L100



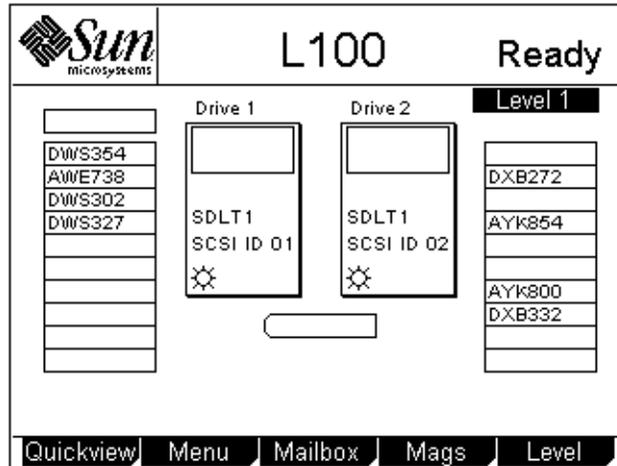
The GUI displays a welcome screen (see [figure 31](#)) and the library runs a power-on self-test (POST).

Figure 31 Welcome Screen, L100



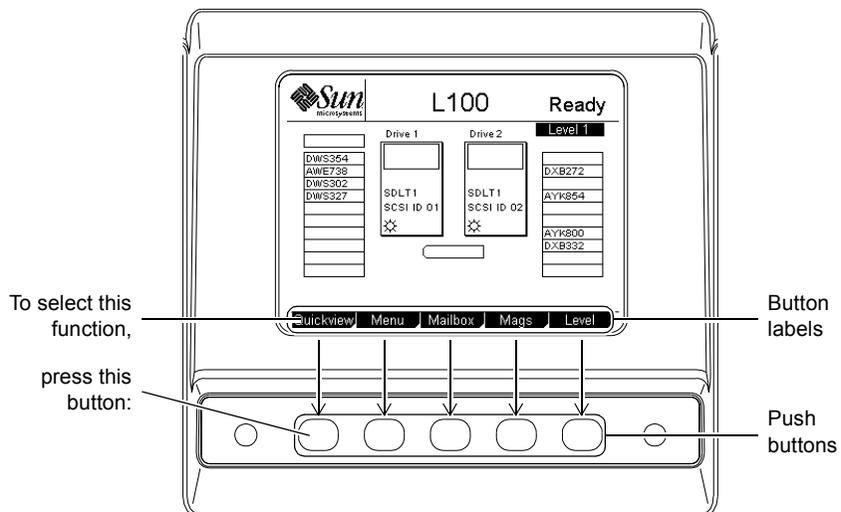
When the POST is complete, the GUI displays the main screen (see [figure 32](#)).

Figure 32 Main Screen, L100



At the bottom of each GUI screen are up to five button labels. These labels indicate the functions of the five push buttons below the GUI. To select a function, press the push button directly below the button label on the GUI screen (see [figure 33](#)).

Figure 33 Using the GUI Buttons



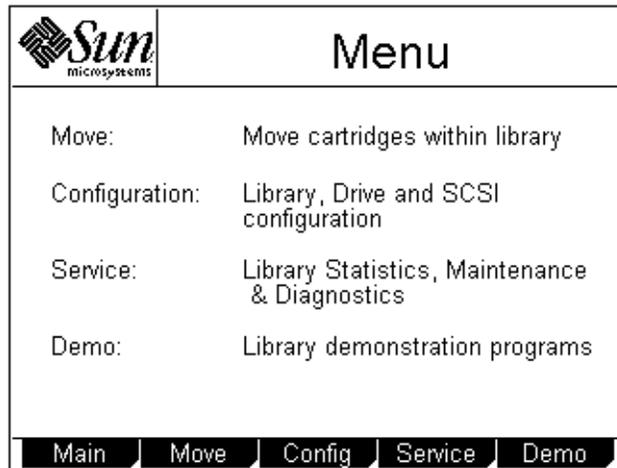
## Disabling Unused Drive Bays

To complete the library installation, disable any unused drive bays as follows:

- 1 On the main screen, press **Menu**.

The GUI displays the **Menu** screen (see [figure 34](#)).

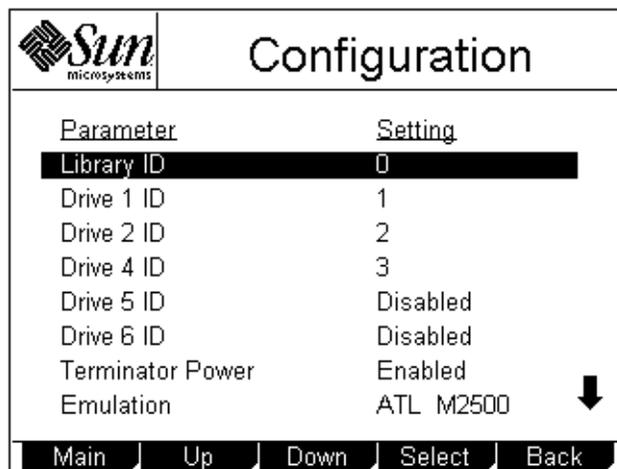
Figure 34 Menu Screen



- 2 Press **Config**.

The GUI displays the **Configuration** screen (see [figure 35](#)).

Figure 35 Configuration Screen



- 3 Press the **Up** or **Down** buttons until the drive ID for the unused drive bay is highlighted.
- 4 Press **Select**.

- 5 Press the **Down** button until the `Disabled` setting is selected.

**Caution:** Set the drive SCSI ID to `Disabled` only if there is no drive installed in the drive bay.

- 6 Press **Select**.
- 7 Repeat steps 3 through 6 to disable any other unused drive bays.
- 8 Press **Main** to return to the main screen.

**Caution:** If you do not return to the main screen after changing this setting, your change will not be saved to NVRAM.

**Note:** You must reboot the library before this setting will take effect.

- 9 Turn the library off and then back on again.

The library is now ready for operation.

**Note:** It is recommended that you check the library configuration settings and change them as necessary before configuring your backup software, especially the **Import/Export** option setting.

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