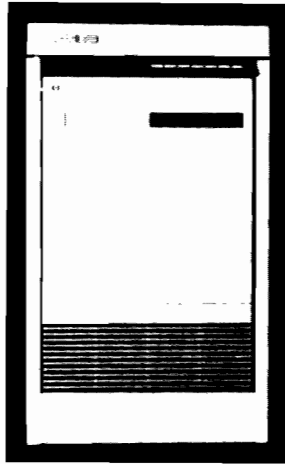


Optical Disk Library Systems Models 10 and 20

Setup Guide for Deskside Models



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Introduction

About This Guide

Caution



This Optical Disk Library System should be installed by qualified service personnel only. Contact your service representative to arrange for installation.

This Setup Guide is for Models 10 and 20 in a desktop cabinet. If you have a rackmount cabinet, use the *Setup Guide for Rackmount Version in a 1-meter Cabinet* included in the accessories kit.

This Guide consists of three chapters:

- Chapter 1: Introduction
- Chapter 2: Setup instructions for the Desktop Optical Disk Library System (Options 1AB, 100, and 103)
- Chapter 3: Instructions for connecting the Optical Disk Library System to the Host Computer

Before You Begin

Complete the *Unpacking Instructions* located in a plastic envelope attached to the outside of the shipping carton.

Note

Save the following items for future use:



- This hardware installation guide
- The unpacking instructions (found on the outside of the box)
- The shipping bracket (removed in this procedure)

Caution



Moving the Optical Disk Library System when it is improperly packaged can damage the unit. If the Optical Disk Library System is moved, the items listed in the note above are needed for repackaging the unit. (Refer to “Moving the Optical Disk Library System” in Chapter 5 of the *Optical Disk Library System User’s Guide for Models 10 and 20.*)

Site Preparation/Requirements

Before setting up the Optical Disk Library System, you should complete a site analysis and preparation. The following paragraphs discuss the requirements for proper operation of the Optical Disk Library System.

Environmental Requirements

The Optical Disk Library System is designed to operate with an ambient air temperature range of 10° to 40°C (50° to 104°F) with a rate of temperature change not to exceed 10°C (50°F) per hour. See the “Cooling Requirements” section in this chapter for the recommended operating range.

Primary Power/External Ground

The female power outlet to be used to supply AC power to the Optical Disk Library System must be checked to ensure that the proper voltage is available. Permitted voltage range(s), depending on configuration and assuming 48-66Hz,

are 90 to 125 V (120 V nominal) and 198 to 250 V (240 V nominal). Also, check the earth (safety) ground in the power outlet (uses NEMA IG 15-R).

Be aware that the Optical Disk Library System can draw as much as 25 amperes when switched on and the electrical load imposed by the Optical Disk Library System may reduce the available voltage below the non-load value. If the line voltage is not within the correct range, resolve the power problem.

Cooling Requirements

A minimum of 2-3 inches should be maintained behind the Optical Disk Library System to allow air circulation.

The area does not have to be air-conditioned but maintaining an operating room temperature between 18°C to 24°C (65°F to 75°F) is recommended.

Location Requirements

Position the Disk Library System away from sources of particulate contamination such as frequently-used doors and walkways, stacks of supplies that collect dust, and smoke-filled rooms.



Ramp Installation and Shipping Bracket Removal

This chapter gives instructions for removing the unit from the pallet by installing a ramp, and removing the shipping bracket.

Tools Required

This procedure requires:

- A 1/2-inch open-end wrench (to lower the leveler feet of the cabinet)
- A T-15 Torx® (for the 6-32 screw in the shipping bracket)
- A 9/16-inch wrench (to remove the bolts that clamp the feet to the pallet)

Installing the Ramp and Removing the Unit from the Pallet

1. Locate the ramp that was shipped with the Disk Library System. It was shipped on top of the protective foam pads which were on top of the Disk Library System.
2. Install the ramp onto the pallet.
 - a. Remove the plastic bag of two bolts which are stapled to the front of the pallet. Remove the bolts and set aside.
 - b. Place the ramp with the two-by-two wood strips facing up onto the pallet with the holes on the end of the ramp aligning with the two holes in the pallet.
 - c. Insert the bolts through these holes. (It is not necessary to tighten these bolts.)

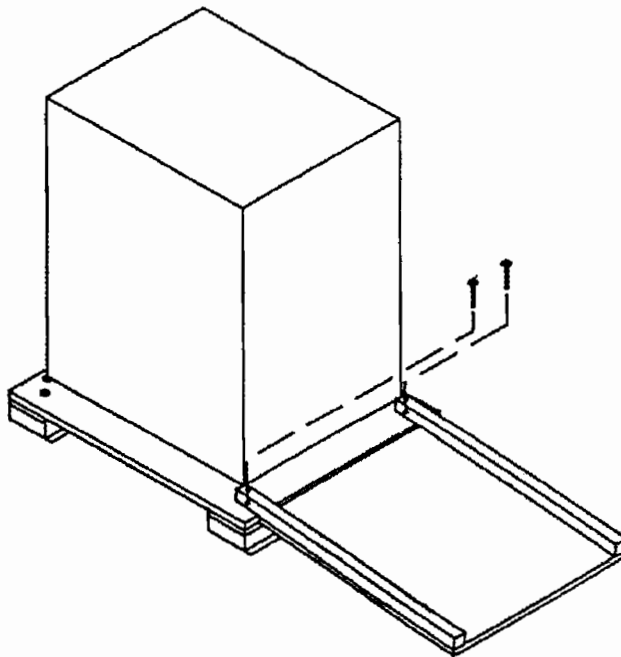


Figure 2-1. Installing the Ramp onto the Pallet

- Using a 9/16-inch wrench, remove the eight hold-down bolts that clamp the leveler feet to the pallet.
- Raise the four leveler feet on the cabinet to their highest position using a 1/2-inch open-end wrench.

Caution

The Optical Disk Library system could tip over if the leveler feet catch on the ramp. To prevent this, make sure the leveler feet are raised to their highest level.

- Carefully roll the cabinet down the ramp.



Removing the Shipping Bracket

Prior to powering on the Optical Disk Library System, the shipping bracket that secures the picker mechanism must be removed to allow free movement of the picker.

1. Remove the top cover by lifting it from the rear, pushing it slightly towards the front, and lifting it off.
2. Remove the left side panel (when facing the front of the unit). The side panel is held at the top by two captive, slotted-head screws. Loosen the screws using a standard screwdriver and pull the panel up and away.
3. Locate the shipping bracket (the orange angle bracket on the left side of the unit).
4. Remove the 6-32 screw using a T-15 Torx.
5. Pull the bracket out. See Figure 2-2.

Caution



Save the the shipping bracket in case the unit is moved a long distance or if it needs to be shipped. Moving the Optical Disk Library System without replacing the shipping bracket can damage the unit.

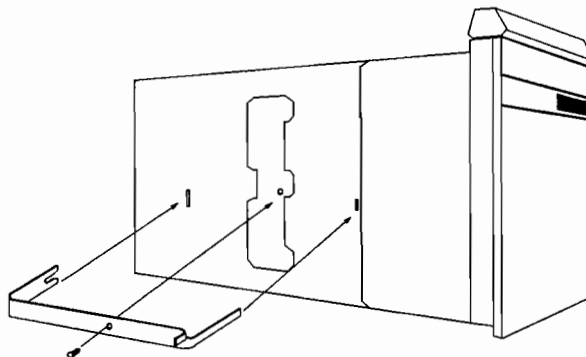


Figure 2-2. Shipping Bracket Removal

6. Replace the left side panel. Do not replace the top cover yet.

Connecting the Optical Disk Library System

This chapter gives instructions for the following:

- Recording product information
- Changing the disk drives' addresses
- Connecting SCSI cables
- Connecting power
- Setting the Autochanger controller address

Recording Product Information

Prior to connecting the Disk Library System to the host computer, follow these steps:

1. Open the back door of the cabinet.
2. Locate the product information located on the Disk Library System's rear panel.
3. Record this information by checking the appropriate boxes on the table in Appendix F of the *Optical Disk Library System User's Guide for Models 10 and 20*.

Rear Panel Connections

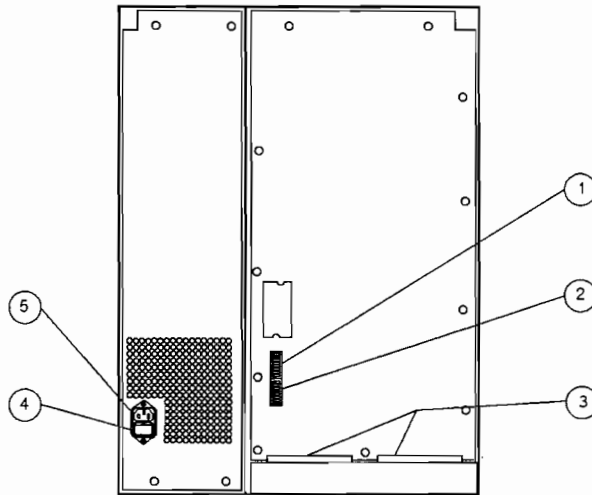


Figure 3-1. Optical Disk Library Rear Panel

1. Drive 1 Address Select Switch Used to set the SCSI ID for Disk Drive 1. Default address is 4.
2. Drive 2 Address Select Switch Used to set the SCSI ID for Disk Drive 2. Default address is 5.
3. SCSI Connectors Two SCSI bus connectors that allow SCSI devices to be daisy-chained. If the Disk Library System is the last device on the bus, a terminator must be connected to the unused connector.
4. Power Switch Energizes the primary circuits of the power supply.
5. Power Connector Connection for the power cord.

Changing the Disk Drives' Addresses

Each Disk Library System uses either 2 or 3 SCSI addresses—one for each optical drive and one for the Autochanger controller. The addresses for the optical drives are set using the switches on the Disk Library System rear panel. The Autochanger controller address is set using the control panel. This section gives instructions for setting the optical drive addresses. For instructions for setting the autochanger controller address, refer to “Setting the Autochanger Controller Address” in this chapter.

Note



If you are configuring more than one Disk Library System to the same host, you must change the SCSI addresses on one of the Disk Library Systems to avoid an address conflict.

The default address settings are:

Model 20

Optical Disk Drive #1	Address 4
Optical Disk Drive #2	Address 5

Model 10

Optical Disk Drive #1	Address 4
-----------------------	-----------

Caution



Do not press the Disk Library System's operation switch (located on the front panel) or the power switch (located on the rear panel) until you are sure that the SCSI bus is inactive. Pressing either button when the bus is active can cause data loss and/or indeterminate bus states.

Check the host system reference manuals for information on determining the status of the SCSI bus.

Caution

Make sure the Disk Library System is switched off and the power cord is unplugged before changing the disk drive addresses.

To change the Optical Drive addresses, follow these steps.

1. Locate the address switches on the rear panel of the Disk Library System.
2. Verify that switches 2, 4, and 5 are in the “OFF” position and switch 3 is in the “ON” position.

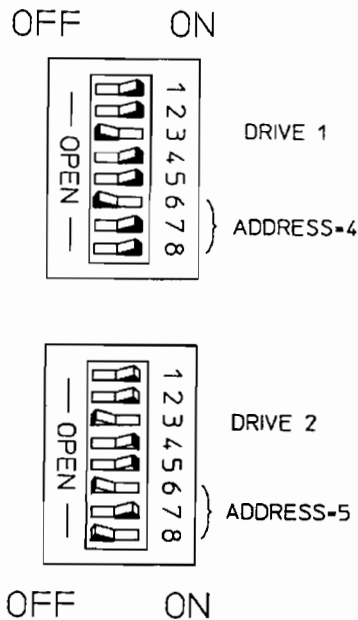


Figure 3-2. Default Switch Settings

Table 3-1. Switch Explanations

Switch	Selection	Description
1 - Write-with-Verify	On	When enabled, each time you write to an optical disk, the data that was just written is verified on the next disk rotation. (See the note that follows this table.)
	Off	(Default) Write-with-Verify is disabled.
2 - Eject Mode	On	Eject only by the controller.
	Off	(Default) Eject Button enabled. Must be off.
3 - Disable Eject Through SCSI Command	On	(Default) When SCSI Eject Command is received, the drive spins down but the disk is not ejected. Must be on.
	Off	When SCSI Eject Command is received, the drive spins down and the disk is ejected.
4 - Diagnostic Switch	On	For use by factory personnel only. Must be off.
	Off	(Default) No diagnostics - normal operating mode. Must be off.
5 - SCSI Parity Check Mode Selection	On	Parity Check disable.
	Off	(Default) Parity Check enable.
6, 7, and 8 - SCSI Address		These switches combine to set the SCSI address. Refer to Table 3-2 on the next page.

Note

It is highly recommended that your library system operate with verify after write to assure data integrity. If your host system does not initiate a write-with-verify, you may wish to initiate the function using switch 1. Because of the verification process, you can expect to see a 0-40% overall system performance degradation, depending on the host system and the application.

3. Set the appropriate address switches on both disk drives.

Switches 6 through 8 are used to set the address. The address can be set from 0 to 7. However, you should **avoid address 7** as it is used by the host HP-UX system or other hosts for the SCSI controller address.

Table 3-2. SCSI Address Settings

SCSI ID	SWITCH 6	SWITCH 7	SWITCH 8
0	OFF	OFF	OFF
1	OFF	OFF	ON
2	OFF	ON	OFF
3	OFF	ON	ON
4 (default)	ON	OFF	OFF
5 (default)	ON	OFF	ON
6	ON	ON	OFF
7	ON	ON	ON

4. Record the address settings you chose for future reference.

The SCSI Interface

Caution



The problem described below is unique to HP 9000 Series 300 computers. If you are connecting the Disk Library System to any other host computer, this notice is not applicable.

Combining a SCSI interface or a high-speed disk interface with an HP 98625A high-speed interface can result in data loss or data corruption to an HP 9000 Series 300 system disk.

To make this combination work, replace the HP 98625A interface card with an HP 98625B interface card.

The following interfaces are high-speed disk interfaces:

- HP 98625A Interface Card
- HP 98625B Interface Card
- HP 98626A Daughterboard for Models 330, 350, 360, and 370
- High Speed Disk Interface bundled with the Model 345 or Model 375

The following interfaces are SCSI interfaces:

- HP 98658A Interface Card
 - HP 98265A Daughterboard for Models 330, 350, 360, and 370
 - Built-in interface for Models 345 and 375
-



Connecting the SCSI Cables

1. Make sure your computer and Disk Library System are switched off.
2. Locate a SCSI cable.

The allowable external SCSI cable length differs as follows:

- Single-Ended SCSI Interface—Up to 4.9 meters total cable length is allowed (includes 1.1 meter internal cable length).
 - Differential SCSI Interface—Up to 23.9 meters total cable length is allowed (includes 1.1 meter internal cable length).
3. Locate an appropriate SCSI terminator—differential or single-ended.
 4. Do you have another SCSI device connected to your host computer?

NO

- a. Connect the SCSI cable to a SCSI socket on the rear of the Disk Library System. Press in fully. (See Figure 3-1)
- b. Plug the terminator into the other SCSI socket.
- c. Connect the other end of the SCSI cable to the SCSI interface on the computer. Press in fully.
- d. Go to the next step “Connecting the Power Cord.”



You can position the Disk Library System anywhere along the SCSI bus. The last device on the bus needs to be terminated properly and the total SCSI cable length limitations must not be exceeded.

YES

- a. Determine which SCSI device is last on the chain of SCSI connections.
- b. Remove the terminator from the SCSI socket on the last device and connect the Disk Library System SCSI cable to that socket. Press in fully.
- c. Connect the other end of the SCSI cable to one of the SCSI sockets on the back of the Disk Library System. Press in fully.
- d. Plug the terminator into the other SCSI socket on the back of the Disk Library System.

Connecting the Power Cord

1. Check to make sure the power switch is off.
2. Locate the power cord.
3. Plug the power cord into the AC line connector located on the rear panel.
(See Figure 3-1)
4. Plug the power cord into the power outlet.
5. Switch the power switch on.

Reassembling the Cabinet

1. Replace the front panel and the two nuts that secure it.
2. Replace the rear door.
3. Replace the cabinet top and the two screws that secure it.
4. Position the power cord and the SCSI cable below the rear door.
5. Close the rear door.

Switching on the Disk Library System

1. Locate the operation switch on the front panel.
2. Switch on the unit. Initially, the control panel displays TESTING. Once the poweron test completes, the control panel displays READY.

Note



A sequence of tests run when the Disk Library System is first switched on. The READY status on the control panel indicates that the unit is in sound condition. If a TEST FAIL status appears on the control panel display, consult your *Optical Disk Library System Service Manual*, part number C1700-90080, for troubleshooting information.

Setting the Autochanger Controller Address

The Autochanger controller default SCSI address is 3. If you want to change the address to something else, follow these steps.

1. Switch on the Optical Disk Library System.
2. With READY displayed, press **OPTION**. TEST * displays.
3. Press **NEXT**. CONF * displays.
4. Press **NEXT**. INFO * displays.
5. Press **NEXT**. SCSI ID displays.
6. Press **ENTER**. SCSI ID 3 displays.
7. Press **NEXT** or **PREV** until the address you want displays.
8. Press **ENTER**. The address you chose is now set.

Note



If you changed the controller address, power cycle the Optical Disk Library System so the new address setting(s) will be recognized by the host system.

Positioning the Unit

- If everything appears to be working correctly, position the Optical Disk Library System in its permanent location and lower the leveler feet using a 1/2-inch wrench.
- In the accessories box, locate the appropriate Hewlett-Packard host configuration instructions to continue with the installation. If you are connecting to a non-HP host, consult the host system manual for peripheral installation instructions.



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