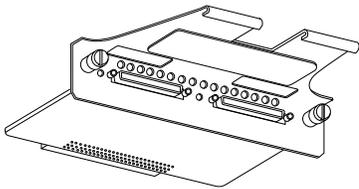


# DIGITAL StorageWorks Single-Ended I/O Module Installation Guide

This guide describes the procedures for removing and installing an ultra SCSI RAID single-ended I/O module (I/O module) assembly, model DS-BA35X-MN.



CXO5816A

## CAUTION

To protect this sensitive electronic device from electrostatic discharge (ESD) use the following precautions—(1) Wear an ESD wrist strap. (2) Do not touch the printed circuit board or the backplane connector. (3) Do not lay the device on a work surface but place it on an electrostatic mat. (4) Place the device in an electrostatic bag for shipment.

## Caution

Removing an I/O module disconnects the SCSI bus TERMPOWER and will result in corrupted and lost data. Therefore, you must turn off the subsystem *before* removing the I/O module.

## Turning Off the Subsystem

Complete the following procedure *before* removing or installing an I/O module:

1. On the host, dismount the ultra SCSI RAID subsystem storage devices.
2. Connect a maintenance terminal to the primary controller.

3. Shut down the redundant controller by entering the command—`shutdown other_controller`
4. Shut down the primary controller by entering the command—`shutdown this_controller`
5. After shutting down both controllers, turn off the ac power controllers in all the enclosures.

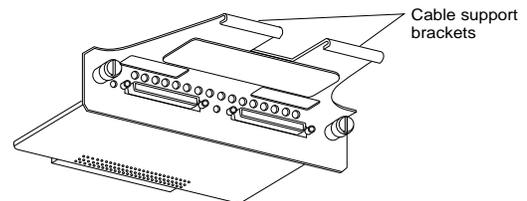
## Removing an I/O Module

### Note

Complete this section only when you are replacing an I/O module.

After turning off the subsystem,, complete the following procedure to remove an I/O module from the ultra SCSI RAID enclosure.

1. Use a flat-tip screwdriver to loosen the two, spring-loaded mounting screws on the module.



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Grasp the module by the cable support bracket and pull it directly to the rear to remove it from the enclosure shroud.

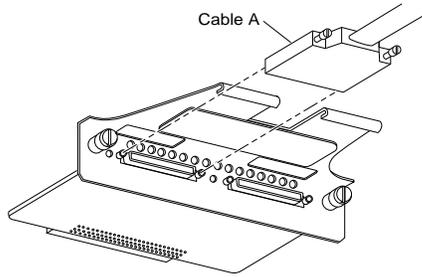
Cut and remove the wire ties.

2. Loosen the thumb screws on the left module cable connector.  
Remove the cable and label it as Cable A.
3. Loosen the thumb screws on the right module cable connector.  
Remove the cable and label it as Cable B.

# Installing an I/O Module

Complete the following procedures to install an I/O module in an ultra SCSI RAID enclosure.

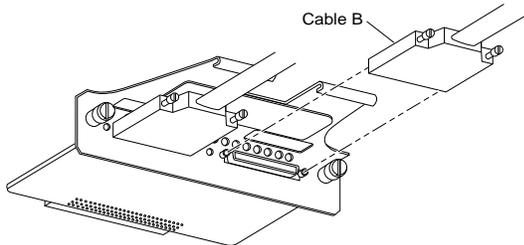
1. Remove the I/O module from the electrostatic bag.  
Verify that the unit is the correct model by checking the label.
2. Align Cable A with the left cable connector.



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Gently insert the cable connector into module connector. Tighten both cable connector thumb screws to fully seat the connector.

3. Insert a wire tie through the hole in cable support bracket. Route the wire tie around the support bracket and the cable. Tighten the wire tie.
4. Align Cable B with the right cable connector.



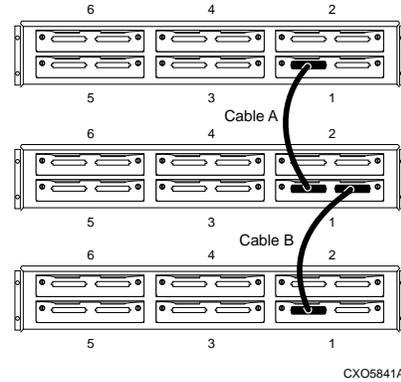
CXO5855A

Gently insert the cable connector into module connector. Tighten both cable connector thumb screws to fully seat the connector.

5. Insert a wire tie through the hole in cable support bracket. Route the wire tie around the support bracket and the cable. Tighten the wire tie.
6. Align the module with the enclosure card guides. Gently insert the module and firmly seat it. Use a screwdriver to tighten the spring-loaded mounting screws.

**CAUTION**

To prevent damaging the mounting screws do not over tighten the screw.



7. Repeat this procedure to install each I/O module.

# Turning On the Subsystem

After connecting the cables and installing the I/O modules, complete the following procedure:

1. Restore power to each of the enclosures by turning ON all the ac power controllers.
2. On the primary controller, press and hold the Reset switch for at least 3 seconds.
3. From the maintenance terminal, enter the command—`show other_controller`  
Verify that the controller is functioning correctly
4. On the redundant controller, press and hold the Reset switch for at least 3 seconds.
5. From the maintenance terminal, enter the command—`show other_controller`  
Verify that the controller is functioning correctly
6. Check the subsystem for proper operation.

**Note**

For detailed information about the operation, function, status, error conditions, fault conditions, and displays of this device, refer to the *DIGITAL StorageWorks Ultra SCSI RAID Enclosure User's Guide*.