



# eXtremeRAID™ Quick Installation Guide

**eXtremeRAID 2000  
PCI to Ultra 160 SCSI  
RAID Controller**







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## **eXtremeRAID 2000 PCI to Ultra 160 SCSI RAID Controller**

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This manual describes the Mylex Global Array Manager Server Software.

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## Regulatory Information

The eXtremeRAID™ 2000 complies with the following regulatory agencies:

### **FC** Federal Communications Commission

The FCC information statements are in Appendix F of the *eXtremeRAID 2000 PCI to Ultra 160 SCSI RAID Controller Installation Guide*.

### **CE** Community of Europe

The CE information statements are in Appendix F of the *eXtremeRAID 2000 PCI to Ultra 160 SCSI RAID Controller Installation Guide*.

### Underwriters Laboratories



### **WARNING**

**This controller is furnished with a nonvolatile RAM (NVRAM) chip that uses a sealed lithium battery/crystal module. Replace the module only with the same or equivalent type recommended by the manufacturer. Dispose of the used battery/crystal module according to the manufacturer's instructions. Never incinerate a battery as it could explode and cause serious injury.**

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# Hardware Installation

## Introduction

The eXtremeRAID 2000 is a versatile PCI to Ultra 160 SCSI, Low Voltage Differential (LVD) RAID controller. There are many possible hardware configurations. This quick installation guide assumes that the user is familiar with controller, disk drive, and RAID terminology.

This document includes basic procedures to get you up and running quickly and is not intended to replace the more comprehensive documents that you received with the controller. For detailed information, refer to those documents.



### **WARNING**

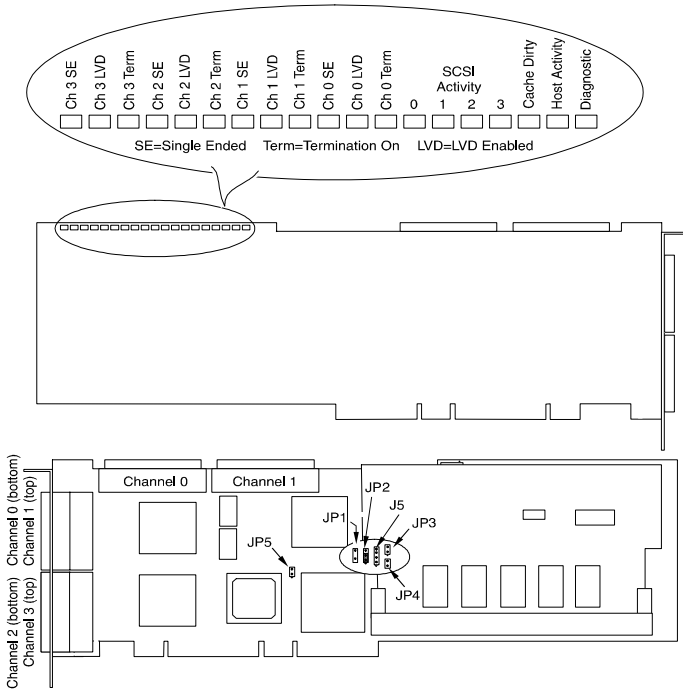
**To avoid electrical shock, do not attempt to perform this hardware installation with power on. Disconnect the system from the electrical wall outlet before you begin.**

## Connectors, Jumpers, and LEDs

Up to four Ultra 160 SCSI channels are supported on the controller. Figure 1 shows the SCSI connector locations.

All jumpers should normally be set to their default settings (see Table 1-1). Figure 1 shows the jumper locations.

The controller has 19 LEDs which are active indicators while the controller is running. The LEDs indicate termination type and status, SCSI activity, cache status, diagnostic status, and host activity. Figure 1 shows LED locations and meanings.



**Figure 1. eXtremeRAID 2000 with Component Locations**

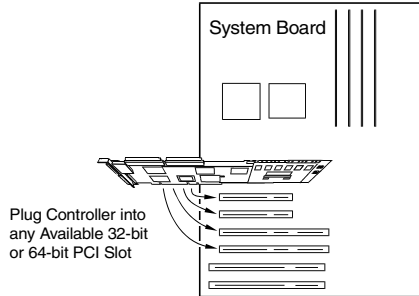
*Table 1-1. Jumper Descriptions*

Jumper	Description	Default Setting
JP1	N/A	-
JP2	pins 1–2 normal, pins 2–3 blank ROM mode	1-2
JP3	manufacturing diagnostics – do not use	-
JP4	N/A	-
JP5	maintenance – do not use	-
J5	External LED (SCSI LED)	n/a



## Installing the eXtremeRAID 2000 on the System Board

1. With the power off, plug the eXtremeRAID 2000 controller into an available 32-bit or 64-bit PCI slot on the system board (Figure 2). When available, we recommend using a 64-bit PCI slot.



**Figure 2. Plugging the eXtremeRAID 2000 into a PCI Slot**

2. Set the SCSI ID of each internal drive to a unique address between 0 and 15, but do not use address 7 (reserved for controller). For information on how to do this, refer to the disk drive documentation.

### **Caution**

If internal and external drives are used, be sure that no drive addresses are duplicated. Many external SCSI cabinets automatically assign drive addresses to drives based on their locations in the cabinet.

3. On a static-free surface, lay out drives that will be used with this controller and arrange the drives by channel. For example, all Channel 0 drives should be grouped together, all Channel 1 drives should be grouped together, and so on.

For optimal performance, distribute the drives equally across the channels and select the maximum supported data transfer rate.

### **Note**

If you plan to use both narrow and wide SCSI devices, place the devices on separate channels.

If LVD-capable drives and single-ended drives are installed on the same channel, both drives types will operate as single-ended drives, and the bus length will be limited to the single-ended bus length.

4. Disable termination for each SCSI disk drive. For information on how to do this, refer to the disk drive documentation.
5. Enable termination power for each SCSI disk drive. For information on how to do this, refer to the disk drive documentation.
6. Set the SCSI ID for each external disk drive to a unique address between 0 and 15, but do not use address 7 (reserved for the controller).

 **Note**

Do not duplicate SCSI IDs used by internal drives designated for the same channel.

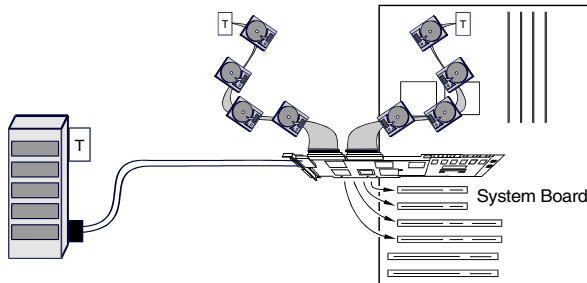
For information on how to do this, refer to the disk drive documentation.

7. Insert the disk drives into the drive cabinet. For more information, see the documentation that accompanied the enclosure.
8. Select from the following for each group of SCSI drives:
  - If the drives are in the same cabinet as the controller, connect the SCSI drives to the SCSI cable and connect the cable to a channel on the controller. If the last device is not terminated, attach a terminator to the last connector of the SCSI cable.
  - If the drives are in an external cabinet, connect one end of a wide, round, 68-pin Very High Density Connector Interface (VHDCI) cable to the eXtremeRAID 2000 controller and the other end to the external drive cabinet.  
External drive cabinets usually have termination built into the end of the SCSI bus. If not, attach a terminator to the last connector of the SCSI cable. If you are unsure, check the cabinet documentation.

 **Note**

The eXtremeRAID 2000 controller automatically determines whether or not its own on-board termination is required, and automatically enables or

disables on-board termination as necessary.



The hardware portion of the installation is complete.

Please see the following section titled “What to Do Next.”

## What to Do Next

1. Use RAID EzAssist to create an automatic or a custom RAID configuration.

Refer to the *RAID EzAssist Configuration Utility Quick Configuration Guide* or *RAID EzAssist Configuration Utility User Reference Guide*.

2. Install the eXtremeRAID 2000 controller drivers appropriate for your server’s network operating system.

Refer to the *PCI Disk Array Controller Drivers Installation Guide and User Manual*.







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NAME: \_\_\_\_\_ COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_

STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_ COUNTRY: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_ FAX NO: \_\_\_\_\_ E-MAIL: \_\_\_\_\_

DATE PURCHASED: \_\_\_\_\_ MODEL NO: \_\_\_\_\_ SERIAL NO: \_\_\_\_\_

PURCHASED FROM: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_

STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_ COUNTRY: \_\_\_\_\_

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- Advertisement (Name of Pub) \_\_\_\_\_  Article Review  Friend  
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10. Have you ever purchased Mylex products in the past?

- Yes  No

If yes, which products? \_\_\_\_\_

11. Who purchased this product?

- Individual  Company

2. Where will this product be used?

- Home  Workplace

3. What other brands, if any, did you consider? \_\_\_\_\_

4. Please indicate the most common uses of your system:

- Personal  Business  Graphics (CAD/CAM or Business Graphics)  Accounting  Digital Video  
 Data Retrieval  Multi-User  Multi-Tasking  Database

5. Which factor most influenced your purchase?

- Company Reputation  Price  Features (List) \_\_\_\_\_  Performance

6. What does your computer system include? (Please specify brand and model)

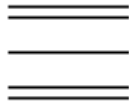
- System Unit \_\_\_\_\_  Peripherals \_\_\_\_\_  
 Monitor \_\_\_\_\_  Operating System \_\_\_\_\_

7. What add-ons or peripherals are you most considering for future purchase? \_\_\_\_\_

8. What best describes your occupation?

- Management/Administration  Sales/Service  Technical-Scientific/Engineering  MIS  Other \_\_\_\_\_

9. Do you have any comments or suggestions? \_\_\_\_\_



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