



Dolby® DSS200 Hard Drive Replacement Guide

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Part Number xxxxxxxx



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DSS200 Hard Drive Replacement Instructions

This document shows you how to replace a permanently failed DSS200 internal hard drive with a new drive. Please read all the instructions before you begin. The drive replacement procedure ([Section 1](#)) takes approximately 20 minutes. After following the instructions in the RAID rebuild procedure ([Section 2](#)), the system can take up to 10 hours to complete the rebuild process.

Before you begin, be sure you have the following:

- Phillips screwdriver
- Hard drive replacement kit (DSS200HD-SPK) with hard drive (DPN 8702640)

If one of the DSS200's internal hard drives fails, its corresponding front-panel LED turns from green to red, as shown in the example in [Figure 1](#).

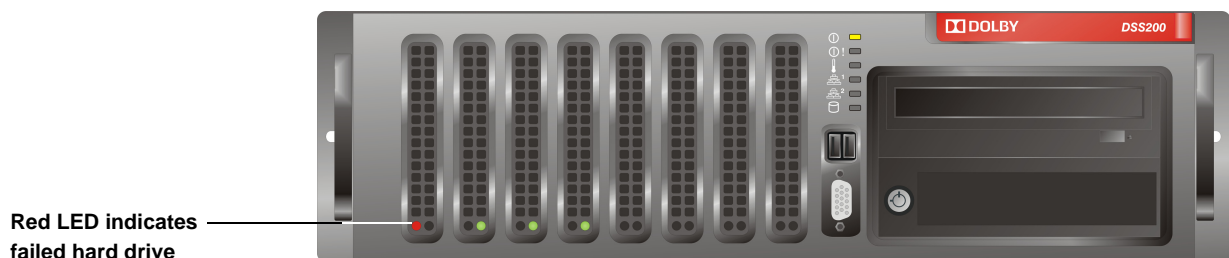


Figure 1 Identifying a Failed Drive in the DSS200

If a drive fails while a show is running, the show continues to run without interruption. If one drive fails, no information is lost. If a second drive fails before you replace the first failed drive, all information is lost (and any show in progress stops running). For this reason, you should or replace a failed drive as soon as possible.

1 Replacing a DSS200 Drive

To replace a DSS200 internal hard drive:

1. Note the front-panel drive that needs replacement, indicated by its red LED.
2. Remove the front-panel cover by placing a finger on the cover's indented area (in the upper-right corner), while pressing inward (to the left) and gently pulling the cover out of the front panel (see [Figure 2](#)).

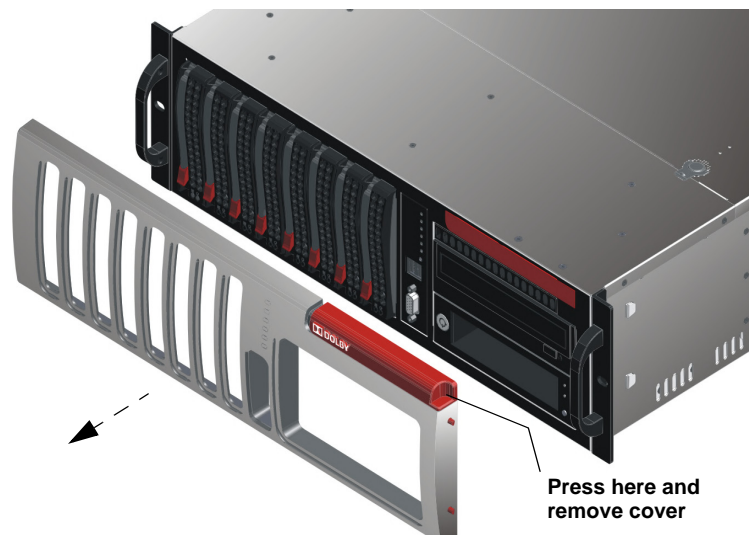


Figure 2 Remove DSS200 Front-Panel Cover

3. Press the failed drive's red release button to extend the drive tray handle, then use the handle to pull the drive tray out of the DSS200 chassis, as shown in [Figure 3](#).

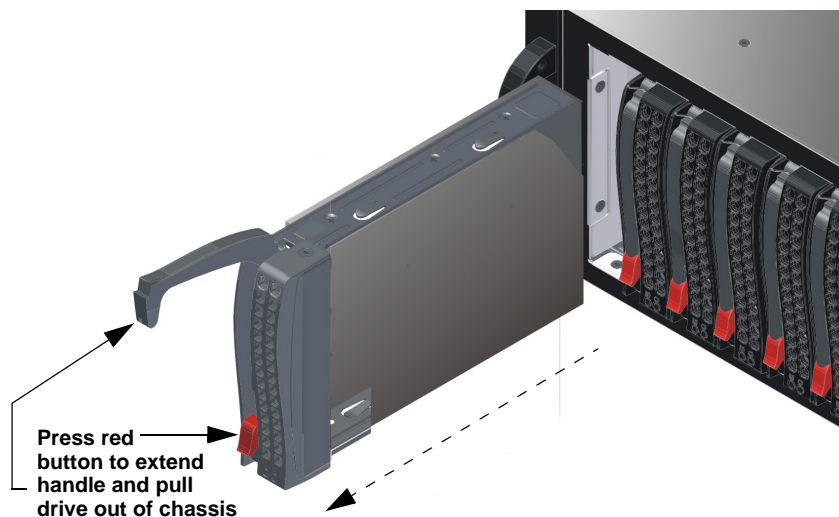


Figure 3 Press Release Button to Extend Handle and Remove Drive

4. Place the drive tray on a flat, stable surface such as a desk, table, or work bench.
5. Use a Phillips screwdriver to remove the six screws securing the failed drive to the drive tray, then lift the drive out of the tray, as shown in [Figure 4](#).

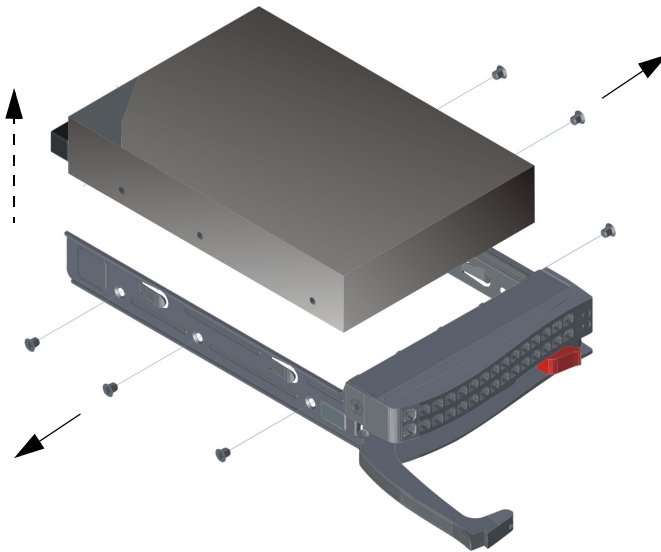


Figure 4 Removing the Failed Drive from the DSS200 Drive Tray

6. Slide the replacement drive into the tray with the printed circuit board facing down, as shown in [Figure 4](#).
You can replace a drive with a higher-capacity unit, but not with a lower-capacity unit.
7. Carefully align the mounting holes on the drive and the tray.
Make sure the bottom of the drive and the bottom of the tray are flush.
8. Use a Phillips screwdriver to secure the drive to the drive tray using all six screws you removed in step 4.

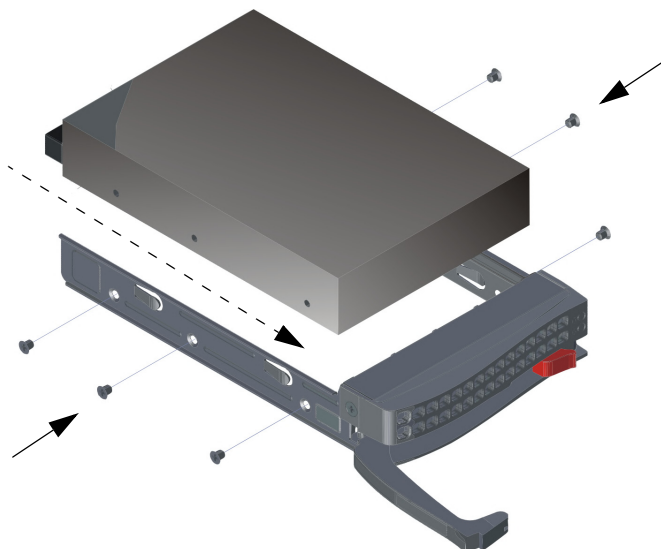


Figure 5 Installing the Replacement Drive in the DSS200 Drive Tray

9. Slide the drive tray into the chassis, pressing down on its handle until it snaps into place.

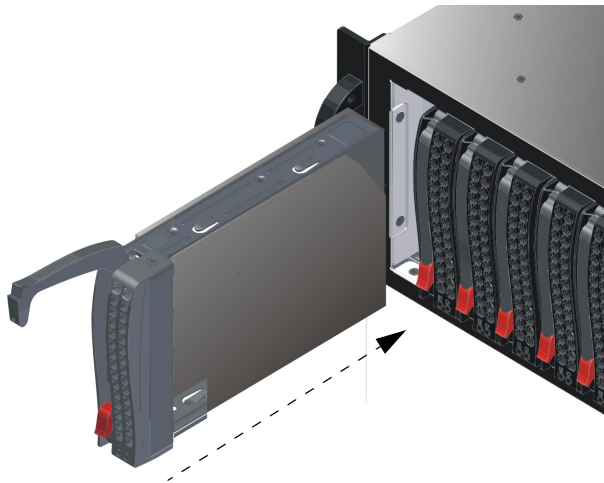


Figure 6 Slide Drive into DSS200 Chassis

10. Replace the front-panel cover:

- Line up the two pins on the cover's left side with their respective holes on the front panel, then insert the pins in the holes.
- Place a finger on the cover's right indent, press inward to depress the two pins, line up the pins with their respective holes, then release your finger to insert the pins and snap the cover in place (see [Figure 7](#)).

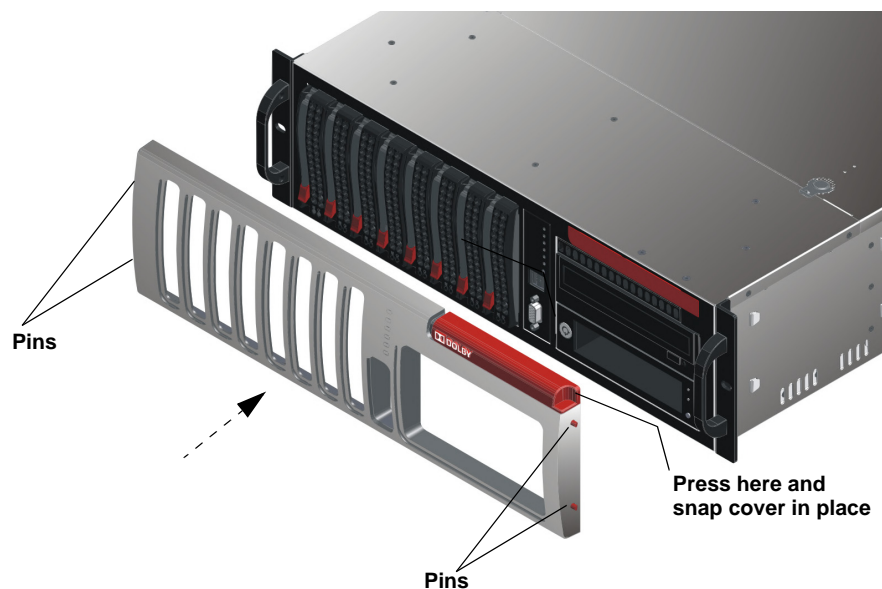


Figure 7 Replace Front-Panel Cover

2 Rebuilding the RAID with a Replacement Drive

The DSS200 must have four internal drives installed before you can run a RAID rebuild operation. The system partitions larger drives to the same size as the existing internal drives. The rebuild process can take up to 10 hours, so be sure no show is scheduled, and no content or licenses are loading during this time (if possible, rebuild in the morning or overnight). To rebuild the DSS200 RAID with a replacement drive:

1. Place the DSS200 in an idle state by stopping playback of any shows, and waiting for the completion of any file transfers or other operations.
2. Be sure a monitor and keyboard are connected to the DSS200, then reconnect the power.
3. Ignore the initial prompt to press <Alt> + <3>.
4. When the system recognizes the RAID drives, as shown in the example in [Figure 8](#), press <Alt> + <3>.

```

Press <Alt-3> to access 3ware BIOS Manager
3ware Serial ATA RAID Controller: 9550SX-4LP
BIOS: BE9X 3.08.00.004 Firmware: FE9X 3.08.00.016 Slot: 5
BBU Status: Not Present
Number of online units: 1, available drives: 1, hot spares: 0, offline units: 0

Available drives:

SATA - ST3400832NS 372.61 GB Port 3

Exportable Units:

4 drive 64K RAID 5 1.09 TB (Unit 0) DEGRADED
SATA - ST3400620NS 372.61 GB (Port 2)
SATA - ST3400620NS 372.61 GB (Port 1)
SATA - ST3400620NS 372.61 GB (Port 0)

```

Figure 8 RAID Drives Displayed

At this point, the 3ware BIOS Manager launches and a warning message informs you that the internal RAID drives are now operating in a degraded mode, as shown in Figure 9.

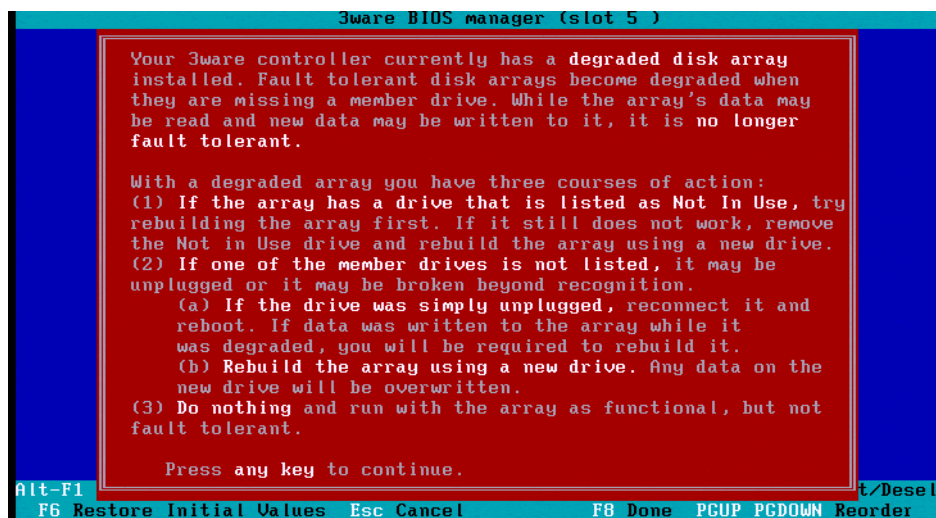


Figure 9 Degraded RAID Warning Message

5. Press any key to continue.

Typically, the system finds the replacement drive under Available Drives and shows the degraded array under Exportable Units, as shown in the example in Figure 10. If necessary, use the up/down arrow keys on the keyboard to highlight Port x (x = port number of the drive you're rebuilding), then press the space bar to display an asterisk (*).

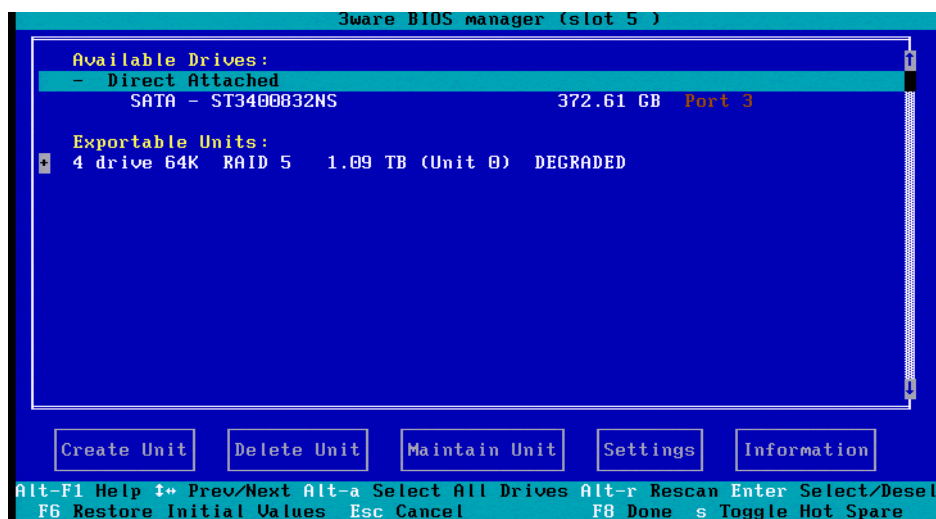


Figure 10 Degraded Drive Identified

6. Use the up/down arrow keys on the keyboard to highlight the Exportable Units (Unit 0) line, then press the space bar to display an asterisk (*).
7. Use the <Tab> key to move to the Maintain Unit button, then press <Enter> to display the Maintain pop-up menu, as shown in [Figure 11](#).
8. Use the arrow keys to select Rebuild in the Maintain menu, as shown in [Figure 11](#), then press <Enter>.

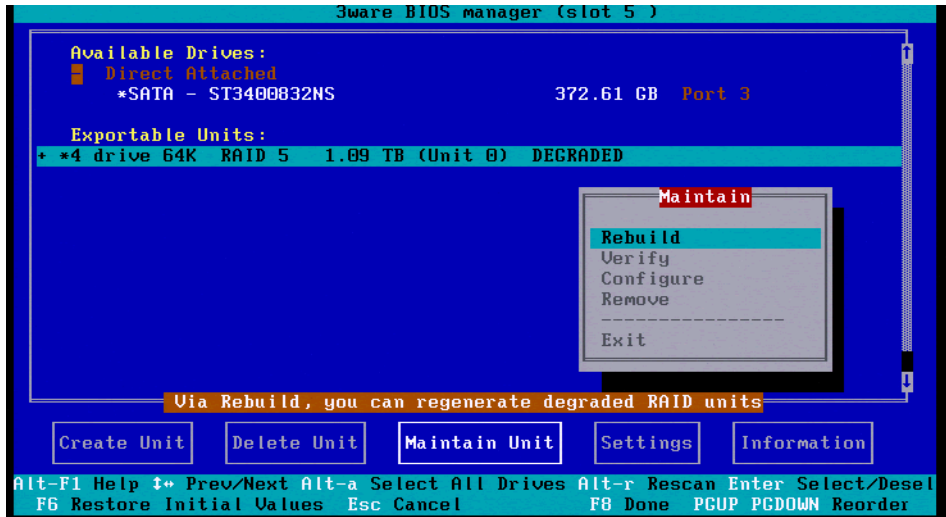


Figure 11 Select Rebuild in Maintain Menu

The Rebuild Disk Array confirmation screen appears, as shown in [Figure 12](#).

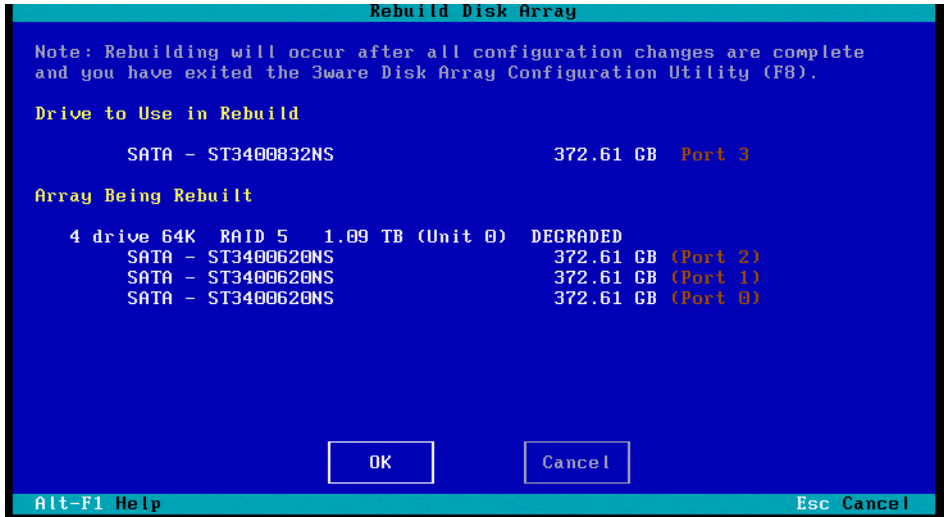


Figure 12 Rebuild Disk Array Confirmation Screen

9. Select OK and press <Enter> to display the Exportable Units rebuild screen, as shown in [Figure 13](#).

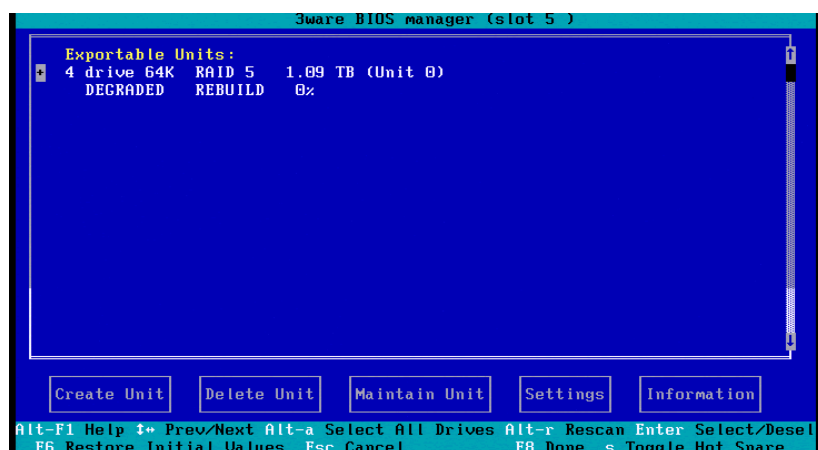


Figure 13 Exportable Units Rebuild Screen

10. Press <F8> to display a final warning message, indicating that the rebuild process will destroy any existing data on the replacement drive, as shown in [Figure 14](#).

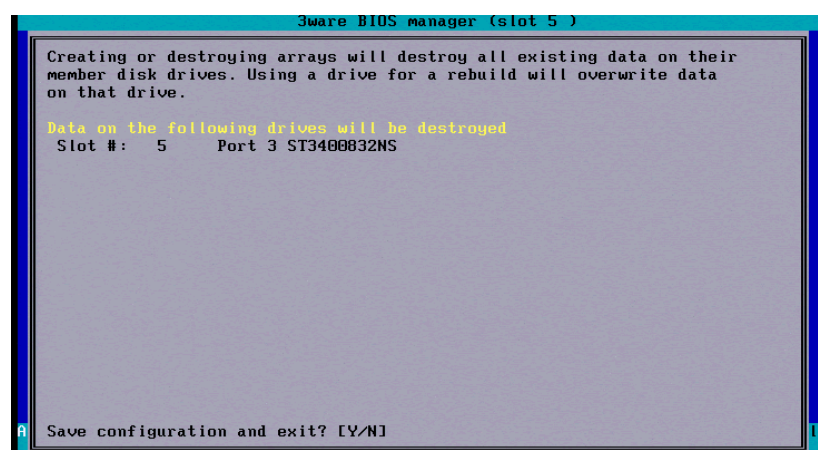


Figure 14 Final Warning Message



Note: On some smaller keyboards, you may need to press <F Lock> to enable the <F8> function for the dual-use keys.

11. Press <Y> to save the configuration.
12. Reboot the system. The screen blanks and the DSS200 begins its normal boot process using the three functioning internal drives.
The internal drives begin rebuilding automatically a few minutes after the DSS200 boots up. While rebuilding, the failed drive's LED flashes alternately in red and yellow. This is normal and does not indicate a problem. When the rebuilding process is completed, the failed drive's LEDs stop flashing, and turns green.