



**D-Link Systems, Inc.™**  
**xStack Storage DSN-3200 & DSN-3400**  
**ECN – Drive Activity Light Fix (rev. 1)**

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## 1 Introduction

Note: For the remainder of this document, issues that pertain to both the DSN-3200 and DSN-3400 units will be identified as DSN-3200/3400.

D-Link Systems, Inc.<sup>™</sup> has identified an issue wherein the drive activity light is constantly illuminated when using a Seagate Barracuda ES.2 1TB SATA-II hard drive (Seagate part number ST31000340NS). This issue affects DSN-3200/3400 units shipped before January 2008. Please review section 1.3 of this document for a detailed description of how to determine if your system is in need of this resistor pack update. If you determine that your system is affected, then please proceed to the step-by-step update guide in Section 2.

### 1.1 Purpose

The purpose of this document is to communicate the steps required to identify affected DSN-3200/3400 units shipped before January 2008. This document will include how to identify affected systems and the steps required to fix the issue.

### 1.2 Scope

This document is an ECN (Engineering Change Notice) concerning the identification of affected DSN-3200/3400 units shipped before January 2008 and the installation of four resistor packs to fix the issue.

	<p>This ECN relates to any DSN-3200/3400 units shipped from D-Link before January 2008.</p> <p>This issue does not affect the functionality of the DSN-3200/3400 unit, nor does it affect the data storage functionality of the Seagate ST31000340NS 1TB hard drive. The drive activity light simply remains illuminated at all times.</p>
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### 1.3 Identification of Affected Systems

DSN-3200/3400 units shipped after January 2008 will be modified at the factory to contain the four resistor packs described in this document. However, any units shipped before this date will need to be examined.

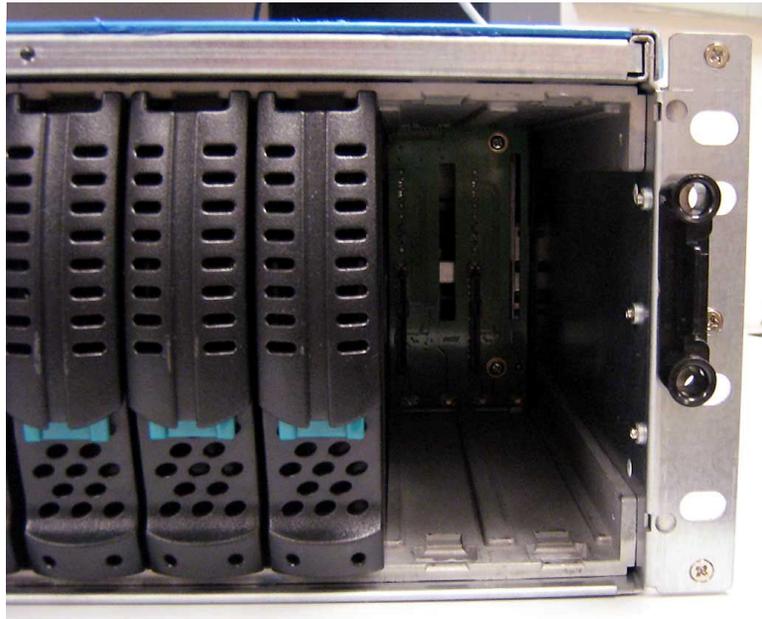
Definitive identification of affected DSN-3200/3400 units will require two steps. For this procedure it is highly recommended that the system be shut down and power cords removed to minimize the electrical shock risk.

Please follow these steps for inspection:

Step 1) Shut down the DSN-3200/3400 through your management GUI. Please follow the instructions in your xStack Storage User's Guide.

Step 2) In order to minimize electrical shock risk, remove the three power cords from your DSN-3200/3400 unit's power supply.

Step 3) Remove the two right-most drives from the enclosure as shown in figure 1.



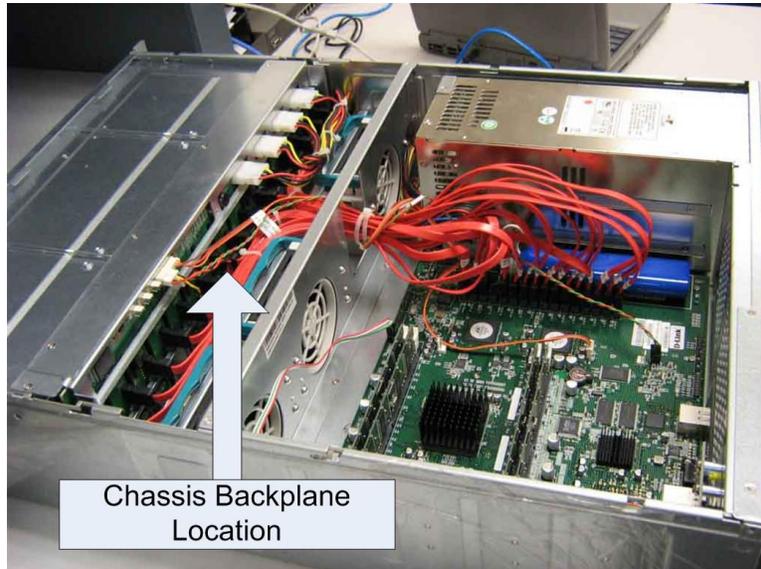
**Figure 1: Remove the two right-most drive trays**

Step 4) Using a flashlight, examine the upper portion of the now visible chassis backplane PCB (Printed Circuit Board) located at the rear of the space. You should see something similar to that found in figure 2. Here you will see a revision number. If your backplane has revision 1.4 or later, then your system is up to date and needs no changes. If your system has Revision 1.1, 1.2 or 1.3, then you will need to continue to step 5. You may now reinsert the drive trays.



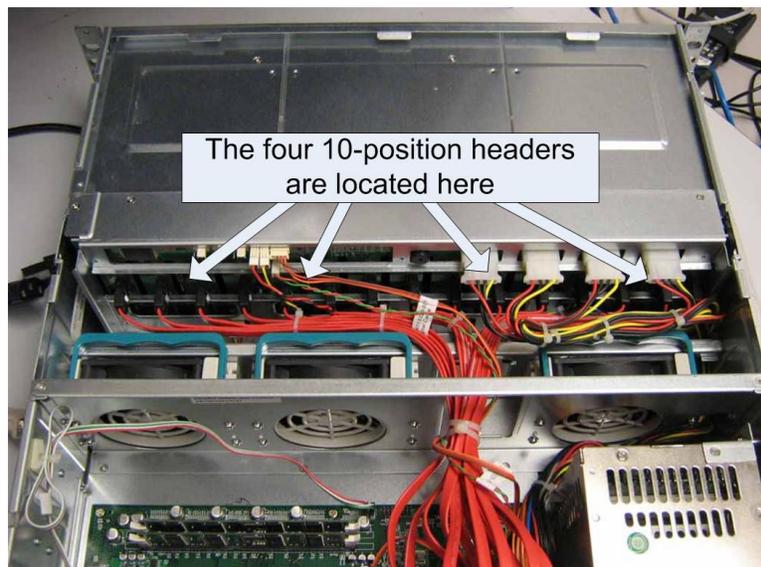
**Figure 2: Identifying the backplane revision number**

Step 5) Remove the top cover from the DSN-3200/3400. Located in the middle of the chassis is the chassis backplane as shown in figure 3.

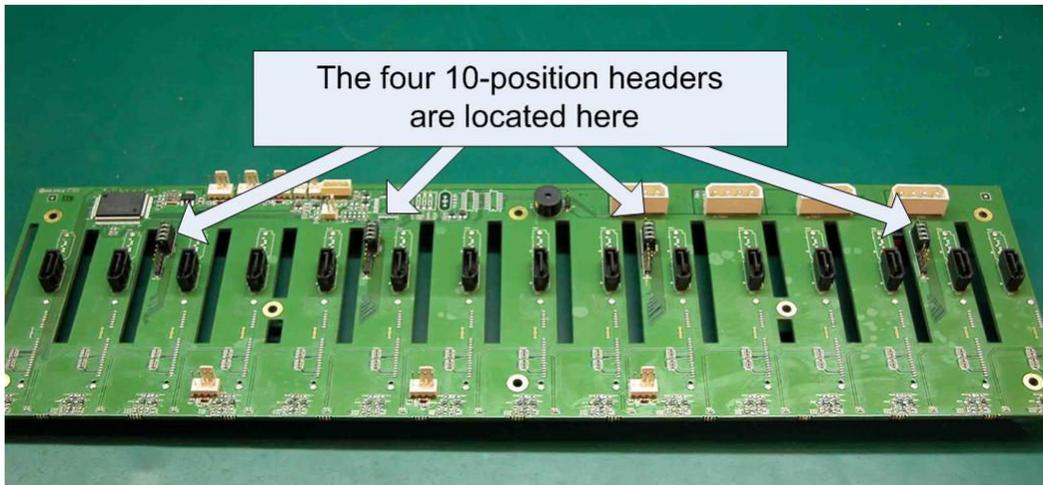


**Figure 3: Identifying the chassis backplane**

Step 6) Located on the backplane are four 10-position headers labeled NA1315, NA0912, NA0508 and NA0104. The labels themselves are extremely small and difficult to read. Please see figure 4 to identify these headers. Note that the two right-most headers are made difficult to see because of the placement of four (4) four-position Molex power connectors. (In order to better orient you to the position of these jumpers, please see the bare backplane and identified headers shown in figure 5)

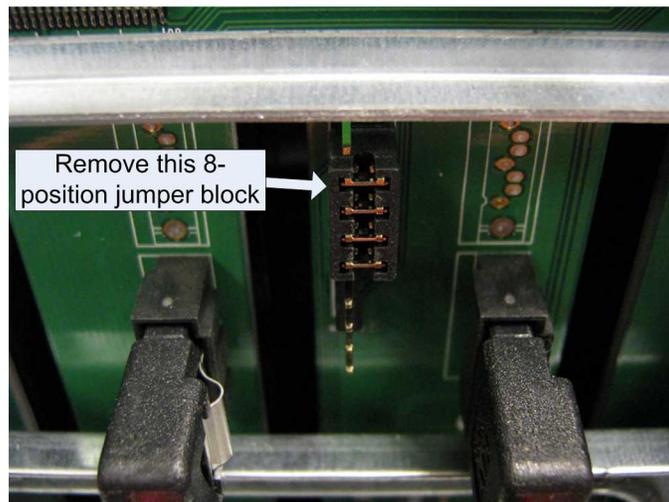


**Figure 4: Identifying the four 10-position headers**

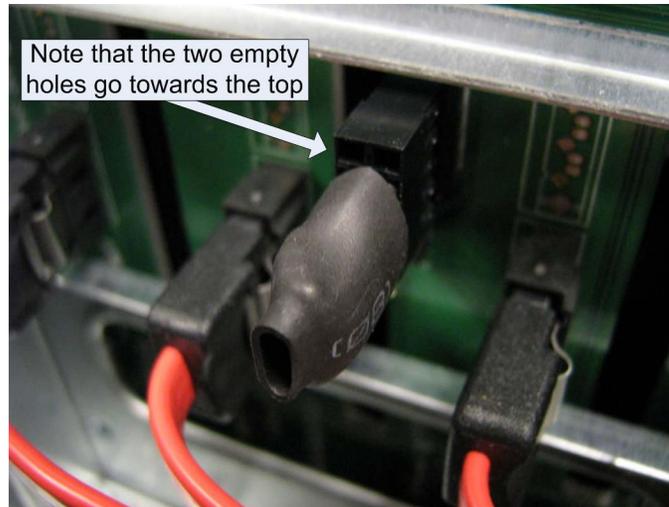


**Figure 5: A bare chassis backplane showing the four 10-position headers**

Step 7) If you see a jumper block installed on each of these four headers like that shown in Figure 6, then you will need to proceed to Section 2 for instructions on installing the new resistor packs. If you see a modified jumper like that found in figure 7, then your system has been modified with the necessary resistor packs. You may close your unit's cover and return to normal operation.



**Figure 6: A jumper block installed on a 10-position jumper**



**Figure 7: A resistor pack installed on a 10-position jumper.**

## 2 Installing the Resistor Packs

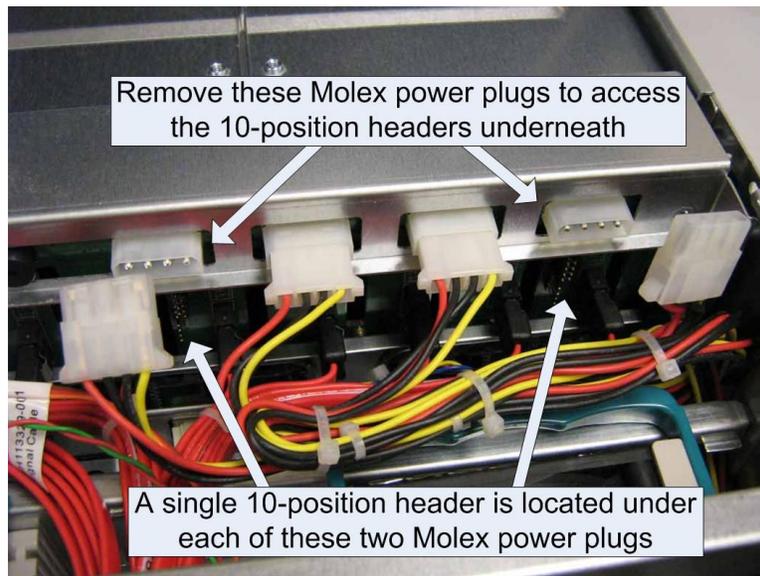
If you have followed the steps outlined in Section 1.3 and determined that you need to install the resistor pack modification, then please contact D-Link or your reseller to obtain the four (4) necessary resistor packs. These resistor packs will take the place of each of the four jumpers found on the four 10-position headers labeled NA1315, NA0912, NA0508 and NA0104.

Step 1) Shut down the DSN-3200/3400 through your management GUI. Please follow the instructions in your xStack Storage User's Guide.

Step 2) In order to minimize electrical shock risk, remove the three power cords from your DSN-3200/3400 unit's power supply.

Step 3) Please remove the cover from your DSN-3200/3400 to gain access to the chassis backplane PCB. The backplane is identified in figure 3.

Step 4) Identify the four 10-position headers as shown in figures 4 & 5. The two right-most headers are blocked by the power connectors. Remove the two (2) Molex power connectors labeled CN4 and CN7 to gain easier access to the two (2) 10-position jumpers found below them. Please see figure 8 for details.



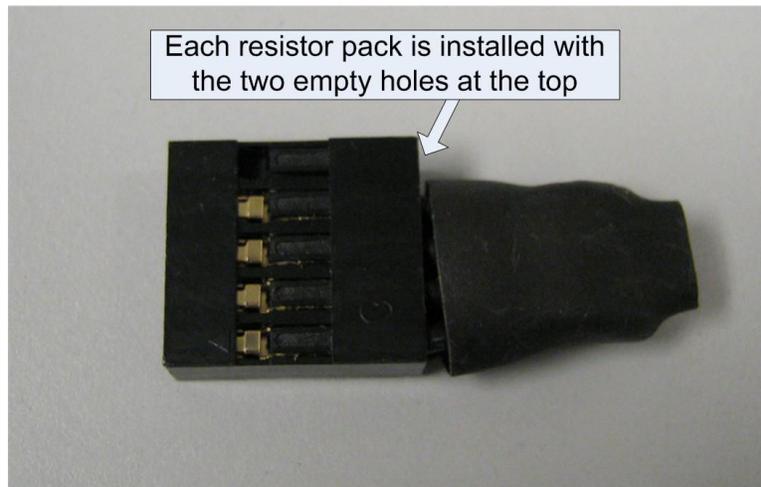
**Figure 8: Removing the CN4 and CN7 Molex power connectors**

Step 6) For each 10-position header, you must remove the 4-position jumper block as seen in figure 6. You will then see an empty 10-position header like that shown in figure 9. The top-right pin is removed and will provide a guide for installation of the new resistor pack.

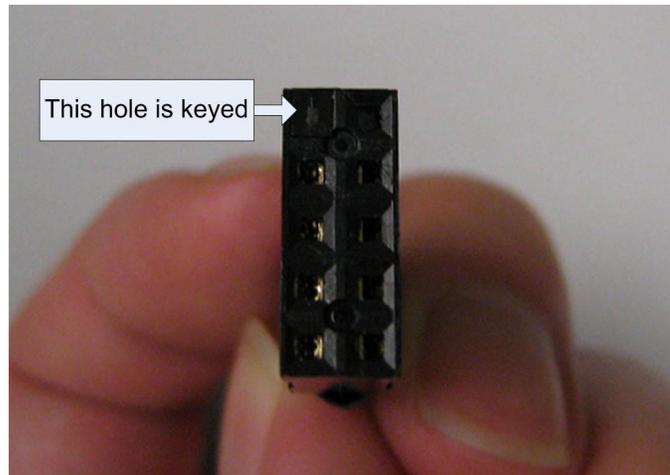


**Figure 9: The empty 10-position header**

Step 7) Familiarize yourself with the resistor pack. Note that two of the positions are empty as seen in figure 10. Also be aware that one of the holes on the connector has been blocked as shown in figure 11. This blocked hole will need to match with the missing pin shown in figure 9.

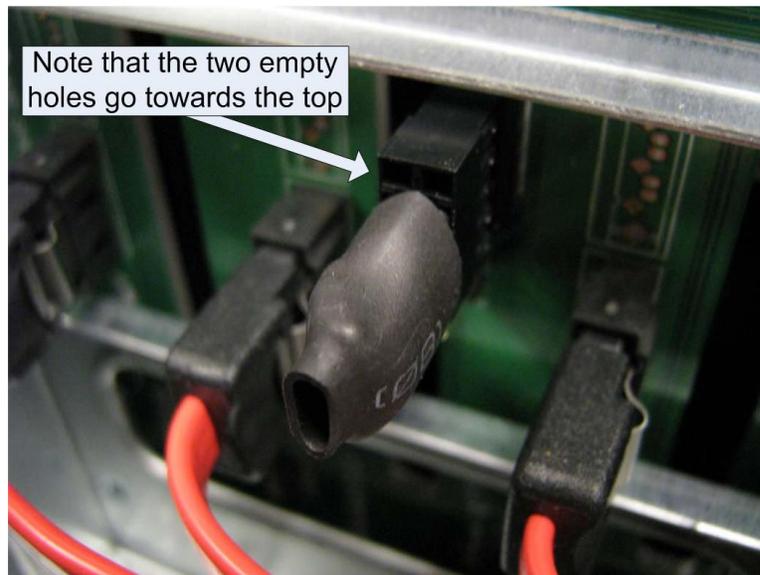


**Figure 10: The resistor pack: side view**

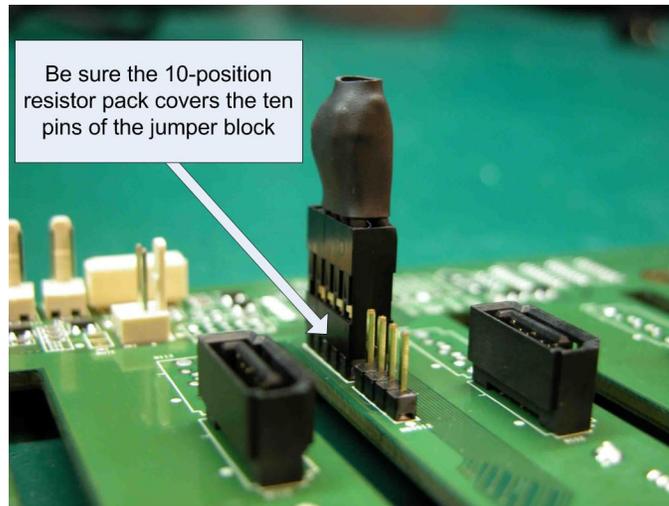


**Figure 11: The resistor pack: connector view**

Step 8) Carefully orient the resistor pack over the 10-position header, making sure the keyed hole matches the missing pin on the header. Press the resistor pack inwards until it is firmly seated. Figures 12 & 13 will give you a guide to what it will look like.



**Figure 12: An installed resistor pack**



**Figure 13: Another view of an installed resistor pack**

Step 9) Install a resistor pack on the remaining three 10-position headers.

Step 10) Install the two (2) Molex power connectors labeled CN4 and CN7. These were removed earlier as shown in figure 8.

Step 11) Replace the cover of the unit, reattach all cabling and power up the unit normally.

Step 12) Your DSN-3200/3400 is now ready to accept Seagate Barracuda ES.2 1TB SATA-II hard drives (Seagate part number ST31000340NS). The drive activity lights will blink when drive activity is detected.