



DSN-4100/DSN-4200 Series Quick Start Guide

This Quick Start Guide provides the information needed to get your DSN-4100/DSN-4200 storage system out of the box and operational with a direct connection to a host computer. Follow the simple instructions in this guide, and in no time at all you will be part of the iSCSI revolution.

The DSN-4100/DSN-4200 storage system supports 16 3½-inch SAS or SATA hard disk drives, and it is expandable up to 80 drives when used with DSN-4000 Expansion Arrays. It is available with either four or eight 1-Gigabit iSCSI data ports.



Important Safety Information:

Before you install the DSN-4100/DSN-4200 storage system, please read all documentation provided on the Product CD.

1 Unpack the Package Contents

Before unpacking, inspect the outer shipping carton for damage. If any damage exists, file a claim with the carrier. Remove the items from the shipping carton and compare them to the packing list:

- The DSN-4100/DSN-4200 storage system with 16 empty drive carriers and mounting screws
- One rack-mount kit in a box (includes rails, mounting hardware, and instructions)
- Two AC power cords for your country and one RS-232 diagnostic cable.

- A Product CD containing installation and operation information, and tutorials
- Additional documentation (may include warranty information, End-User License Agreement and product registration information)

If any contents are missing or damaged, please contact your supplier. Save all of the packing materials in case you need to return the unit.

2 What Else You Need

To complete the installation, you need the following items:

- One or more computer systems that will act as the iSCSI initiators (see step 6). Please refer to the **D-Link Interoperability** matrix at: <http://www.dlink.com> for a list of compatible operating systems, Network Interface Cards (NIC's), Host Bus Adapters (HBA's), and network infrastructure
- A static IP address and CAT5E or CAT6 network cable for each 1GbE iSCSI data port that will connect to your SAN
- Independent AC power supply within 6 feet (2 meters) of the DSN-4100/DSN-4200 storage system
- SAS or SATA Disk drives: refer to the *DSN-4000_Series Hardware Reference Guide* for instructions for drive installation.
- *Optional:* In addition, a separate computer may be used as the Management console (refer to Step 7)
- *Optional, but recommended:* Uninterruptible power supply
- *Optional:* Ethernet switch

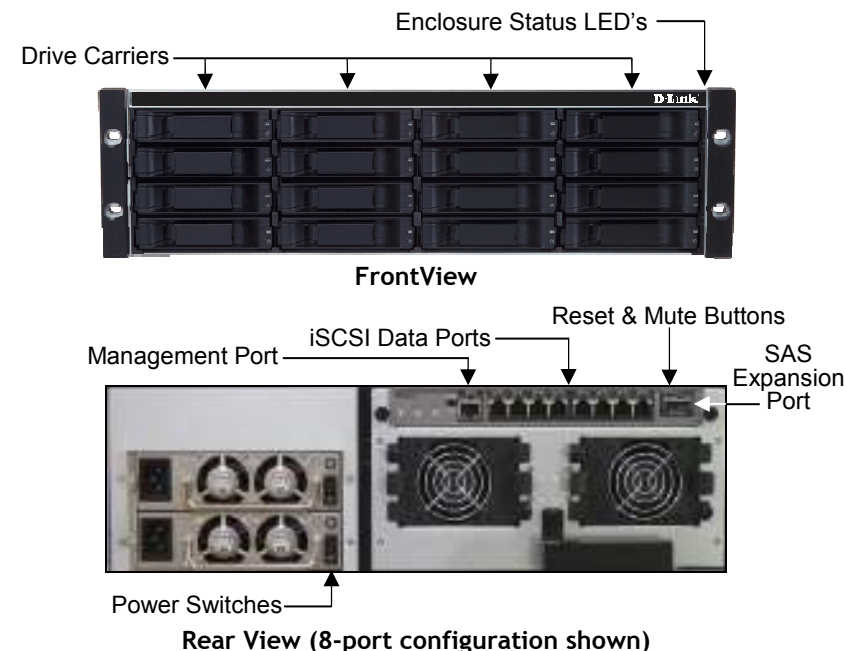
3 Rack-Mount Instructions

The DSN-4100/DSN-4200 storage system can be mounted in a standard 19-inch rack using the Rack-Mount Kit that is included with the product. The rack cabinet must provide sufficient airflow to the front and back of the DSN-4100/DSN-4200 storage system to maintain correct cooling. It must include ventilation sufficient to exhaust the heat generated by equipment in the rack. Always plan the installation with the heaviest item on the bottom of rack.

- Ensure that power is not being applied by removing the AC power cords and attaching the mounting hardware provided to the left and right sides of the rack supporting the DSN-4100/DSN-4200 storage system.
- With the help of another person, slide the DSN-4100/DSN-4200 storage system into place and secure with the mounting hardware.

4 Install the Enclosure and Hard Drives

The DSN-4100/DSN-4200 is a full iSCSI storage system, supporting up to 80 3½-inch SAS or SATA hard disk drives. The Enclosure Status and Drive Status LED's are on the front of the unit. The two Power switches, Reset button, Mute Audio Alarm button, network data ports, and port speed and activity LED's are on the rear panel.



To install the hard drives into the drive carriers:

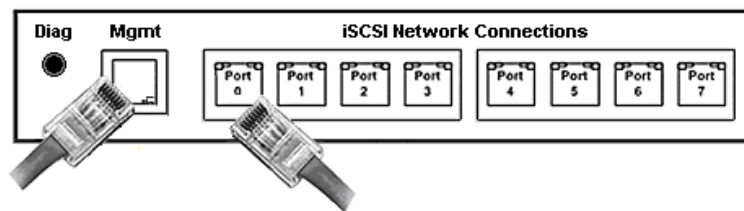
- Remove each empty drive carrier by squeezing the release latch and pulling the drive carrier out of the enclosure.



- Place the hard drive into the drive carrier and attach it using four mounting screws through the sides of the drive carrier (two screws on each side).
- Gently insert the assembled drive carrier into the enclosure until the latching mechanism engages with the chassis.

For more detailed information, please refer to the *DSN-4000_Series Hardware Reference Guide*, which is available on the Product CD.

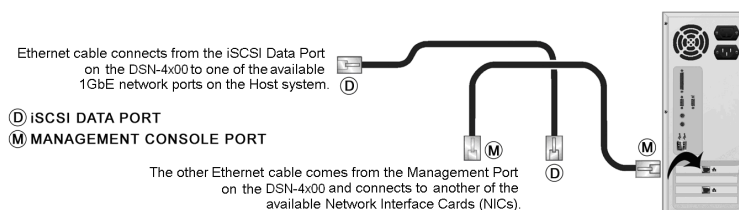
5 Connect to the DSN-4100/DSN-4200



Rear Connection Panel (8-port configuration shown)

- A. Connect the iSCSI data ports by attaching an Ethernet cable to 1GbE data port 0 on the rear panel and to your server or SAN switch. Facing the rear of the DSN-4100/DSN-4200 enclosure, the iSCSI data ports are located above the cooling fans. To connect additional data ports to your SAN, repeat this step using another Ethernet cable and the next data port.
- B. Connect the Management Ethernet port to your host server either by directly attaching a standard CAT5e network cable, or via a switched infrastructure using standard CAT5e network cables.

Facing the rear of the DSN-4100/DSN-4200 enclosure, the Management Ethernet Port is to the left of the iSCSI data ports. By default, the Management Port is set to the IP address of 192.168.1.1. This can be changed using the web-based Start-up Wizard.
- C. The RS-232 Serial Diagnostic Port (DIAG) can optionally be used for diagnostics. It connects to an RS-232 serial port on your host computer configured for a baud rate of 115,200-bps, with eight data bits, no parity bit, one stop bit and no hardware handshake, using the special serial cable that was included with the product (3.5mm stereo plug at one end and a standard DB9 connector at the other end).



Network Cabling to the Host Server

6 Prepare Your Server

The host server must have a 10/100/1000 Mbps Network Interface Card (NIC). All system updates, Service Packs, and drivers for the operating system and NIC must also be installed.

Microsoft Windows systems: You should install the latest version of Microsoft's iSCSI initiator software (available at no cost) from: <http://www.microsoft.com/downloads>

Apple Macintosh systems: You should install one of the following third-party software iSCSI initiators:

GlobalSAN from Studio Network Solutions (available at no cost from: <http://www.studionetworksolutions.com>)

Xtend SAN from ATTO Technology (not free, but available from: <http://www.attotech.com>)

7 Prepare the Management Port

- A. The Management Port has a default IP address of 192.168.1.1. Therefore, the NIC must have a static IP address of 192.168.1.n (e.g., 192.168.1.2). After you set up the DSN-4100/DSN-4200 storage system via the web-based Start-Up Wizard, you can change the management port to the desired IP address.
- B. Download the Java Runtime Environment 6 (JRE 6), v1.6.0.0 or later. That software is available at: <http://java.com>

8 First-Time Startup

- A. Plug-in both power cords into the AC source and power up the DSN-4100/DSN-4200 storage system using the power switch on the rear panel. The system will start to boot:
 - The system boot-up process can take up to five minutes.
 - When the system is ready, the **Global Enclosure Status LED** illuminates solid green.
- B. Point your Web browser on your management computer to the following default IP address: 192.168.1.1
- C. When the Start-up Wizard's Welcome screen appears, click the "I Accept the End User License Agreement" button.
- D. At the Administrator Account screen, enter a case-sensitive password for the administrator account, if you wish to change the default value. Otherwise, you can accept the default username of **admin** and the default password of **admin**. Click **Next**.
- E. At the Management Port screen, enter the IP address, subnet mask, and default gateway that computers will use

to access the management port. Change the host name if desired. Click **Next**.

- F. At the Data Port screen, enter the IP address, subnet mask, and default gateway for each iSCSI data port. You can skip any or all of these items, and assign them later. Click **Next** or "Skip To Email Notification".
- G. At the Email Notification screen, you can optionally enable email notifications. Enter an SMTP server IP address and port number, return email address, and the email address to which alerts should be sent. Click **Next**.
- H. Review your settings. Use the **Back** button to change any settings that need to be edited. Then click **Finish** and wait for the system to restart (if necessary). You are now ready to use your DSN-4100/DSN-4200 storage array.

Note: For more information about the Start-up Wizard or setting the system date and time, refer to the **xStack Storage Software User's Guide**.

9 Configure the Storage System

To configure the DSN-4100/DSN-4200 storage system after the first-time startup, wait for the unit to reboot (up to five minutes, and the **Global Enclosure Status LED** illuminates solid green), then start your Web browser to match the IP address identified in step 8E above (default is 192.168.1.1).

When the browser connects and the GUI is operational, the Login Screen appears and you are ready to connect to the iSCSI world. Enter your Administrative username and password, then select **System Administration** from the View Panel, select the **Settings** tab, and select **System Policy** to ensure that the proper battery policy is defined for your environment.

Refer to the **xStack Storage Software User's Guide** on the Product CD for the next steps to configure and begin using iSCSI storage with the DSN-4100/DSN-4200 storage system.

10 Warnings and Cautions

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to adequate measures. There is a risk of explosion if the battery is replaced by the incorrect type. Dispose of used batteries according to the instructions that accompany the battery. This product supports disk drive hot-swapping. To avoid hand contact with an electrical hazard, do not remove more than one drive carrier at a time.