

WARNING!

- Only qualified service personnel should install and service this product to avoid injury.
- Observe all ESD procedures during installation to avoid damaging the equipment.

1. Preparing the tools

Unpack the equipment and ensure that the following tools are available before installation.

1.1 User-provided tools

- Phillips screwdriver (medium size)
- Flat blade screwdriver (small size)
- Anti-static wrist wrap

1.2 Accessory box contents

- Screws: M5, M6, No. 10-32, No. 6-32
- Cables: Power cord x 2

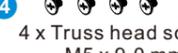
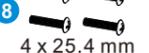
NOTE:

Refer to the **Unpacking List** for the exact number of items bundled in the package.

2. Installing the rackmount

2.1 Rack ear mount kit

2.1.1 Checking the contents of the rack ear mount kit

- | | | |
|--|--|--|
| 1  | 3  | 6  |
| 1 x Mounting bracket assembly, left side | 8 x Hexagon washer screws, No. 6-32 mm | 4 x 25 mm M5 screws |
| 2  | 4  | 7  |
| 1 x Mounting bracket assembly, right side | 4 x Truss head screws M5 x 9.0 mm | 4 x 25 mm M6 screws |
| 5  | 8  | |
| 4 x M5 cage nuts | 4 x 25.4 mm No. 10-32 screws | |

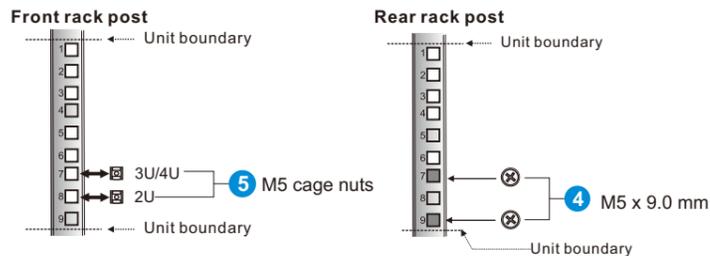
WARNING!

DO NOT install the HDDs into the drive trays before inserting the chassis to the rack.

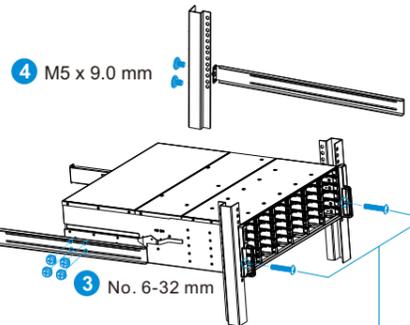
2.1.2 Installing the rack ear mount kit

- Determine the position where the enclosure will be installed to the front and rear rack posts, then insert the cage nuts into the designated holes of the front rack posts.

Position for chassis/M5 cage nut:



- Install the fixed rails to the rear posts using the truss head screws.



- With the assistance of another person holding the enclosure at the installation height, secure the enclosure in place with two 25 mm. M5 or M6 screws at the front and eight 32 mm. no. 6 screws on the side panels, four on each side.

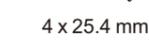
- 6** 25 mm M5 or **7** 25 mm M6 or **8** 25.4 mm No. 10-32

NOTE:

If the rack does not require an M5 cage nut and has its own screw threads, use the M6 or no. 10-32 screws for the front posts.

2.2 Slide rail kit

2.2.1 Checking the contents of the slide rail kit

- | | | |
|--|--|--|
| 1  | 4  | 7  |
| 1 x Mounting bracket assembly, left side | 6 x Flathead screws No. 6-32 L4 | 4 x 25 mm M5 screws |
| 2  | 5  | 8  |
| 1 x Mounting bracket assembly, right side | 8 x Truss head screws M5 x 9.0 mm | 4 x 25 mm M6 screws |
| 3  | 6  | 9  |
| 2 x inner glides | 4 x M5 cage nuts | 4 x 25.4 mm No. 10-32 screws |

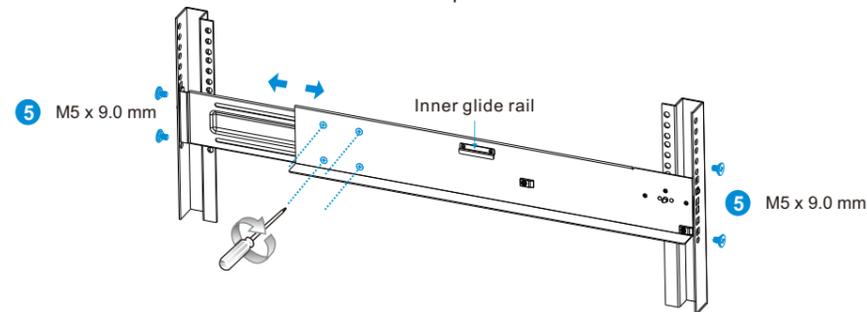
2.2.2 Installing the slide rail kit

- Determine the exact position to install the enclosure to the front and rear rack posts, then insert the cage nuts into the designated holes of the front rack posts.

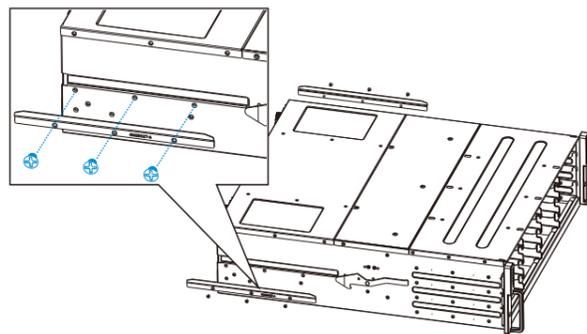
NOTE:

Refer to section 2.1.2 **Installing the rack ear mount kit** for the position of M5 cage nuts and truss head screws on the rack posts.

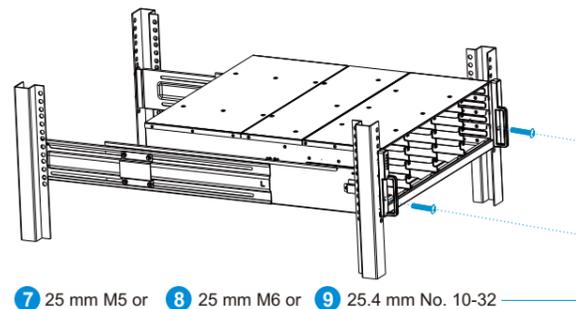
- Loosen the four screws on the slide rail to adjust the length. After the length adjustment, secure the slide rails to the front and rear posts with the truss head screws.



- Attach the inner glides to both sides of the enclosure using flathead screws No. 6-32.



- With the assistance of another person, lift and insert the enclosure onto the slide rail. Ensure that the inner glides on both sides of the enclosure meet the inner glide rail. Secure the enclosure using the M5, M6, or No. 10-32 screws from the front.



NOTE:

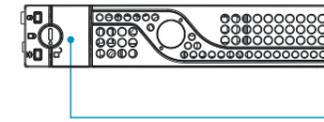
Refer to section 2.1.2 **Installing the rack ear mount kit** for the position of M5 cage nuts and truss head screws on the rack posts.

3. Installing the hard drives

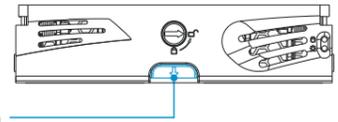
This expansion system supports 2.5-inch and 3.5-inch hard drives.

- Press the release button to open the bezel and gently pull the HDD tray from the enclosure.

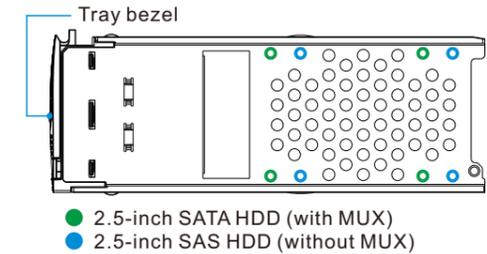
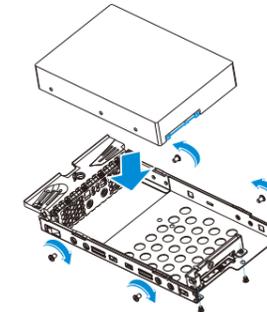
2.5-inch tray



3.5-inch tray

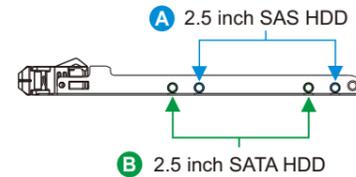


- Orient the hard drive to the tray with the interface connectors facing the open side of the tray and the label is facing up.

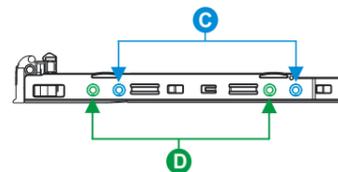


- Secure the hard drive to the tray according to the screw positions:

- A. 2.5-inch SAS HDD (without MUX board)
- B. 2.5-inch SATA HDD (with MUX board)

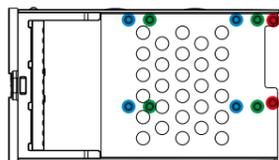


- C. 3.5-inch SAS HDD in single controller systems
- D. 3.5-inch SATA HDD in single controller systems

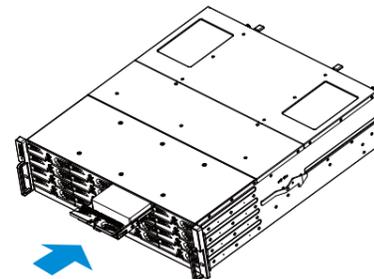


Screw holes for 2.5-inch SATA HDD/MUX board in a 3.5-inch tray

- 2.5-inch SAS HDD/SSD (without MUX)
- 2.5-inch SATA HDD/SSD (with MUX)
- MUX board holes



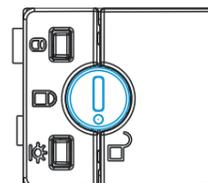
- Insert the assembled HDD and drive tray to the enclosure with its tray bezel open.



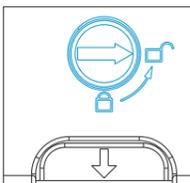
- Once fully inserted, close the bezel, then turn the bezel lock to its lock position using a small-sized flathead screwdriver.



2.5-inch tray



3.5-inch tray

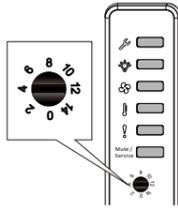


4. RAID to JBOD connections

4.1 Setting the expansion enclosure IDs

To set up the expansion enclosure ID:

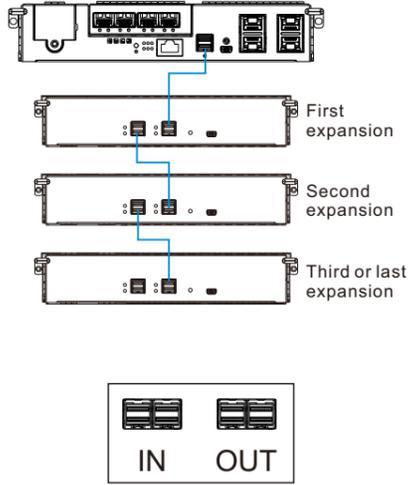
1. Locate the enclosure ID switch on the front of the expansion enclosure.
2. Use a small flat-blade screwdriver to set a unique ID(s). Use a unique ID number for each expansion enclosure.



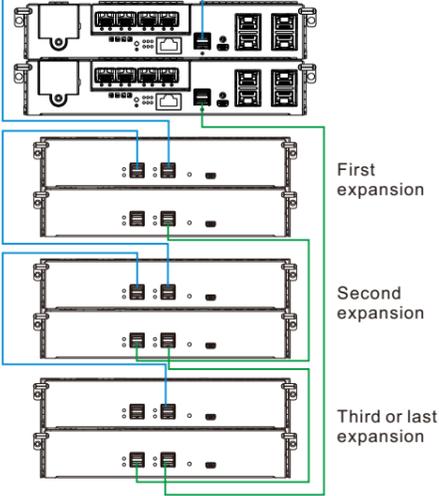
NOTE:
Storage systems are assigned with ID 0 by default.

4.2 Making connections

Single controller



Dual controller

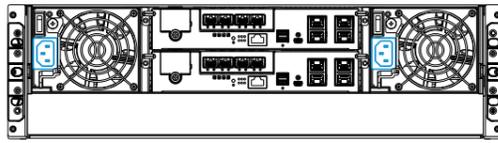


IMPORTANT!
Connect the dual controller SAS expansion to the opposite ends of the daisy-chain expansions (first expansion and last expansion) to ensure redundancy.

5. Power up

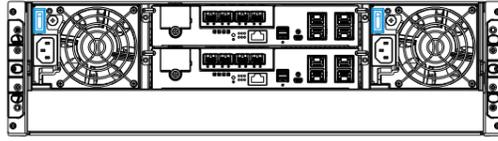
5.1 Connecting the power cord

Connect the bundled power cord(s) to the power sockets.



5.2 Powering up the JBOD system

1. Turn on the networking devices.
2. Turn on the expansion enclosures by pressing the power switches on the rear panel.
3. Power up the storage system.



4. Turn on the application servers.

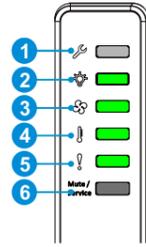
5.3 Verifying the status LEDs

Observe the LEDs located at the front and rear panels of the enclosure. If the LEDs show different status than what's described below, or if you hear an audible alarm, contact the customer support.

Front panel

Status LEDs:

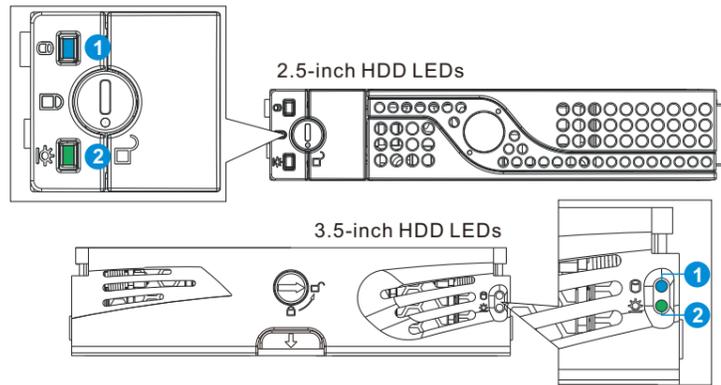
Item	Interface	Description
1	LED	Service: OFF
2	LED	Power: ON
3	LED	Cooling: ON
4	LED	Thermal: ON
5	LED	System: ON
6	Button	Mute/Service



Drive tray status LEDs:

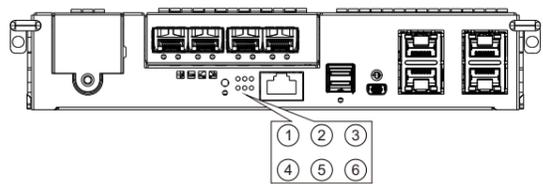
1. Drive activity:
 - **ON**
 - **Flashing** (Read/Write activity)

2. Power status:
 - **ON**
 - **ERROR**



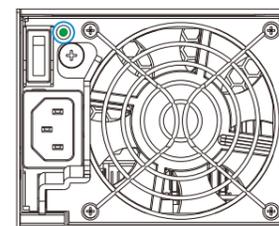
Rear panel

Status LEDs:



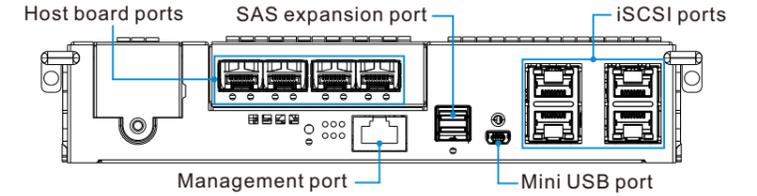
Item	Description	Item	Description
1	Ctrl status: ON	4	CBM status: OFF/ON
2	C_Dirty: OFF	5	Hst Bsy: OFF/Blinking
3	Temp: ON	6	Drv Bsy: OFF/Blinking

PSU LEDs: **OFF/ON**



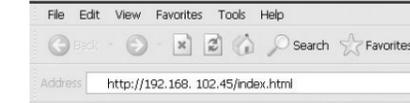
6. Connecting to interfaces

6.1 Interface overview



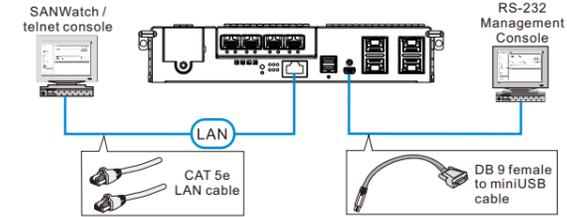
Manage and monitor the storage system via these types of interfaces:

- **Host PC (in-band connection)**
Access the storage system from the host servers through the host links.
- **Ethernet management port (Out-of-band connection)**
Access the storage system from a remotely connected computer using Ethernet cables. You must obtain the IP address, static IP address, or DHCP from your network administrator. If neither is available, use the default address <10.10.1.1>.



- **Serial port**

Access the storage system directly from the computer via the RS-232C port.



Item	Description
Baud rate	38400
Data bit	8 bit
Parity	None
Stop bit	1
Flow control	Hardware

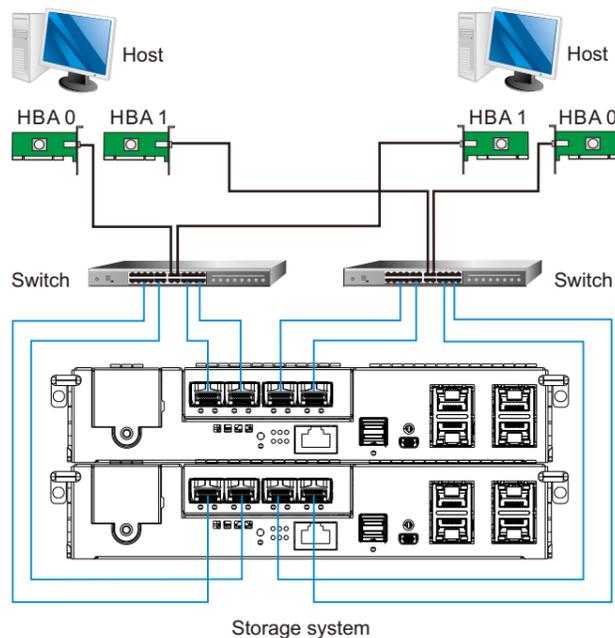
NOTES:

- The serial cable for single-controller models is supplied by the user.
- Due to the architecture, DS 1000 Gen2 can only work with S cable. Y cable is not supported.

5. Making host connections

See below diagram for the recommended connections between the storage system, switches, and hosts.

For more information, refer to the hardware manual in your product CD-ROM.



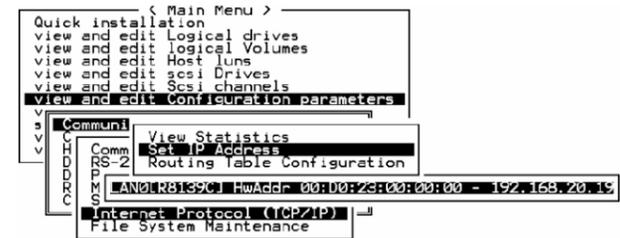
NOTE:
The host link cables are not included in the package.

6.2 Accessing the management tools

Control the storage system using the firmware menu (via RS-232C interface), or the SANWatch GUI software (via the Ethernet or host PC interface). For more tools and their details, refer to the manuals in the CD-ROM.

Using the firmware menu:

1. Connect your computer to the storage system via an RS-232C cable.
2. Launch VT-100 terminal emulation software on your PC.
3. Configure the serial ports as shown in section 6.1 **Interface overview** to connect the system. The main firmware menu appears.
4. Use the arrow keys to select from the menu.



Using SANWatch:

1. Connect the storage system to a remote computer via the Ethernet port or to a host PC.
2. Insert the bundled CD-ROM in your computer's CD drive and install SANWatch software suite.
3. If your operating system is Windows 2003, install EonPath (multi-pathing driver). For other operating systems, use the built-in native multi-pathing driver.
4. On SANWatch, go to **Connection View** then select the storage system.
5. Go to **Tasks** then select **License Information** and generate a license application file.
6. Visit <http://www.infortrend.com/DSLS> to register the software license. The license key is attached to the software license envelope.
7. Activate the software features using the license information and continue operating SANWatch.

NOTE:

The functions and settings in each tool are different from each other. For more details, refer to their respective manuals.