Thank you for your purchase of Premio eDrawer4048S-UN Skylake Dual Processor Storage Server!

1. Check the Content of the box. Please confirm that your package contains the following:

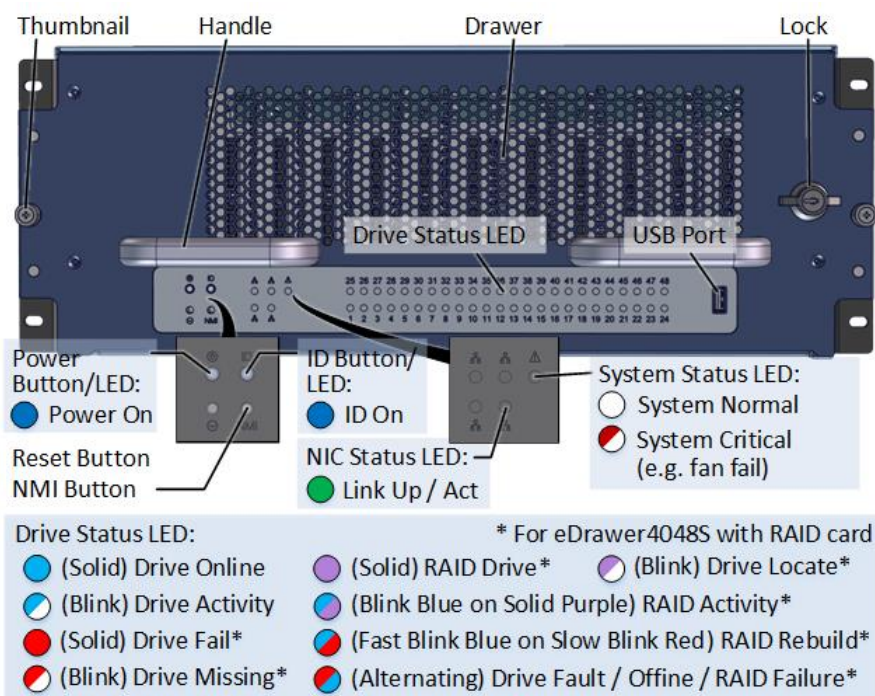| #	Description	Image / Description	Qty
1	eDrawer4048S-UN Enclosure		1
2	Motherboard	Gigabyte MZ32-AR0	1
3	CPU and memory	AMD EPYC and DDR4	2 sets
4	Heatsink		1
5	Internal SAS cables	4x SFF8643, 1x SFF8087	1 set
6	2.5" Drive Trays		4
7	Rail Blade		1 set
8	Power Cable*		2
9	Serial Cable*		1
10	Side Handles*		2

* Inside the accessories box. Box may consist of screw sets for rail kit or drives. If any items are missing, please contact your reseller or sales rep.
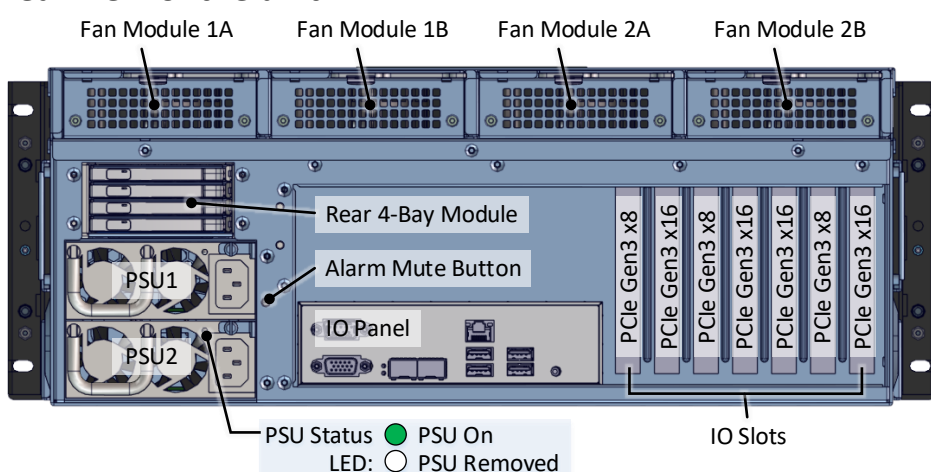
2. Get Familiar with the Unit.

eDrawer4048S-UN is a storage server supporting AMD EPYC processor and front drawer 48x 3.5" HDDs, rear 4x 2.5" drive, and 2x 2.5" OS disk in a 4U space. Gigabyte MZ32-AR0 are preinstalled. IO cards, CPU, and memory can be preinstalled upon request.
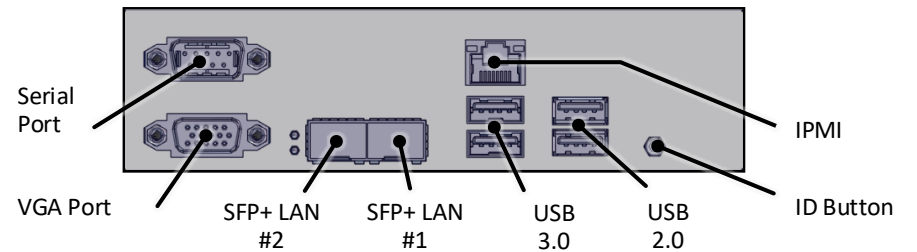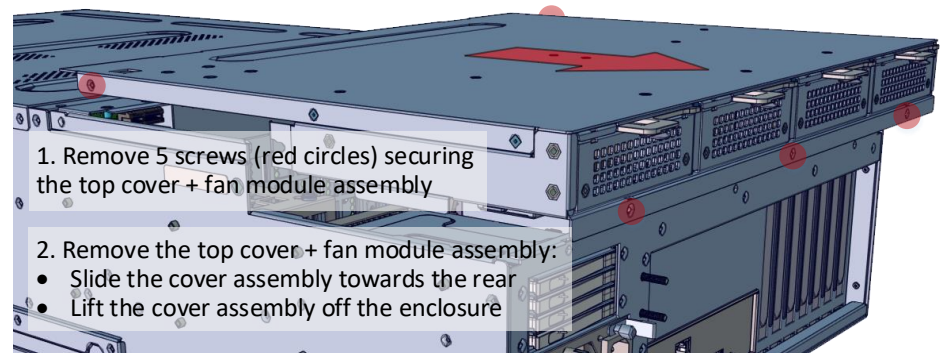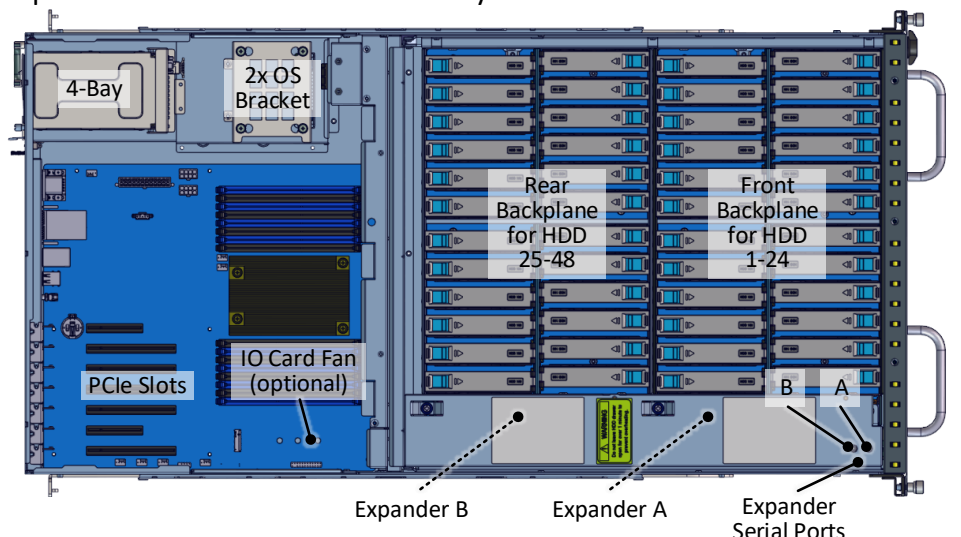
Front view of the unit

Thumbnail | Handle | Drawer | Lock

Drive Status LED | USB Port

Power Button/LED: 🔵 Power On
Reset Button
NMI Button

ID Button/LED: 🔵 ID On
NIC Status LED: 🟢 Link Up / Act

System Status LED:
⚪ System Normal
🔴 System Critical (e.g. fan fail)

Drive Status LED:
- 🔵 (Solid) Drive Online
- 🔵 (Blink) Drive Activity
- 🔴 (Solid) Drive Fail*
- 🔴 (Blink) Drive Missing*

* For eDrawer4048S with RAID card
- 🟣 (Solid) RAID Drive*
- 🟣 (Blink Blue on Solid Purple) RAID Activity*
- 🟣 (Fast Blink Blue on Slow Blink Red) RAID Rebuild*
- 🟣 (Alternating) Drive Fault / Offine / RAID Failure*
- 🔵 (Blink) Drive Locate*

Rear view of the unit

Fan Module 1A | Fan Module 1B | Fan Module 2A | Fan Module 2B

Rear 4-Bay Module
Alarm Mute Button
IO Panel
PSU1
PSU2

PCIe Gen3 x8 | PCIe Gen3 x16 | PCIe Gen3 x8 | PCIe Gen3 x16 | PCIe Gen3 x8 | PCIe Gen3 x16

PSU Status LED: 🟢 PSU On ⚪ PSU Removed

IO Slots

Rear IO Panel

Serial Port
VGA Port
SFP+ LAN #2
SFP+ LAN #1
USB 3.0
USB 2.0
IPMI
ID Button

3. Remove the Top Cover of the unit as indicated.

1. Remove 5 screws (red circles) securing the top cover + fan module assembly

2. Remove the top cover + fan module assembly:
- Slide the cover assembly towards the rear
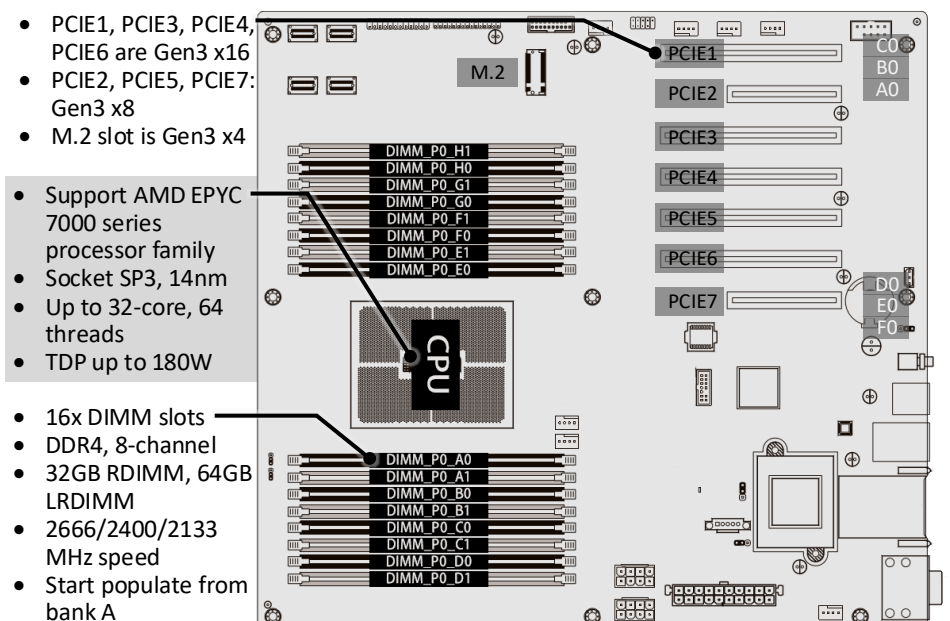- Lift the cover assembly off the enclosure

4. Inspect the Inside of the unit. Internal components comprise of a Gigabyte motherboard, 1x SFF8087 for rear 2.5" 4-Bay, a bracket for 2x 2.5" OS disks, 4x SFF8463 SAS cables for 48-Bay and an optional IO card fan. Front backplane and Fan 1A/2A are routed to Expander A; rear backplane, rear 4-Bay, and Fan 1B/2B are routed to Expander B. All fans are controlled by the motherboard.

4-Bay
2x OS Bracket
Rear Backplane for HDD 25-48
Front Backplane for HDD 1-24
PCIe Slots
IO Card Fan (optional)
B   A
Expander B | Expander A | Expander Serial Ports

5. Install Motherboard Components (CPU, heatsink, memory). Below are motherboard diagrams for Gigabyte MZ32-AR0. For detail, refer to the motherboard user's guide.
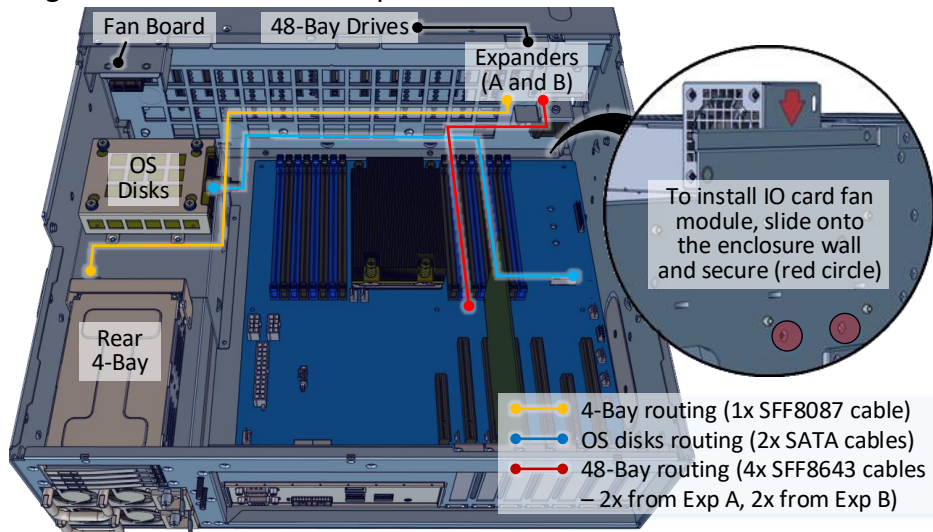
- PCIE1, PCIE3, PCIE4, PCIE6 are Gen3 x16
- PCIE2, PCIE5, PCIE7: Gen3 x8
- M.2 slot is Gen3 x4

- Support AMD EPYC 7000 series processor family
- Socket SP3, 14nm
- Up to 32-core, 64 threads
- TDP up to 180W

- 16x DIMM slots
- DDR4, 8-channel
- 32GB RDIMM, 64GB LRDIMM
- 2666/2400/2133 MHz speed
- Start populate from bank A

⚠️ Installation and service of this product should be conducted by a trained personnel to avoid bodily injury from electric shock or heavy object
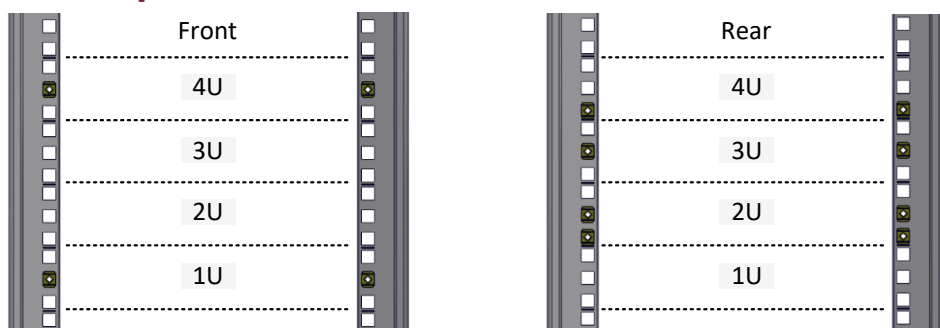
⚠️ Observe ESD (Electrostatic Discharge) practices during integration to avoid possible damage to the board and / or other components
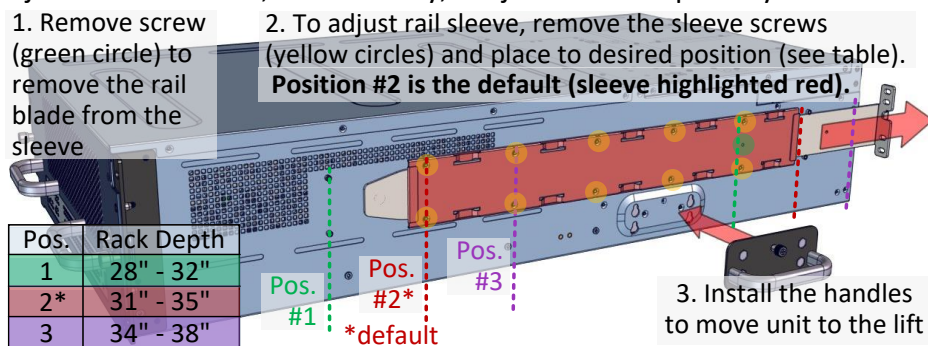
6. Setup Internal Cable Connection.

Below is a recommended connection: OS disks to motherboard on-board SATA port, rear 4-Bay connected to Expander B then to IO card, 48-Bay disks to Expanders to HBA/RAID IO card. Install IO cards to PCIe slots using full height brackets. Close the top cover after finished.
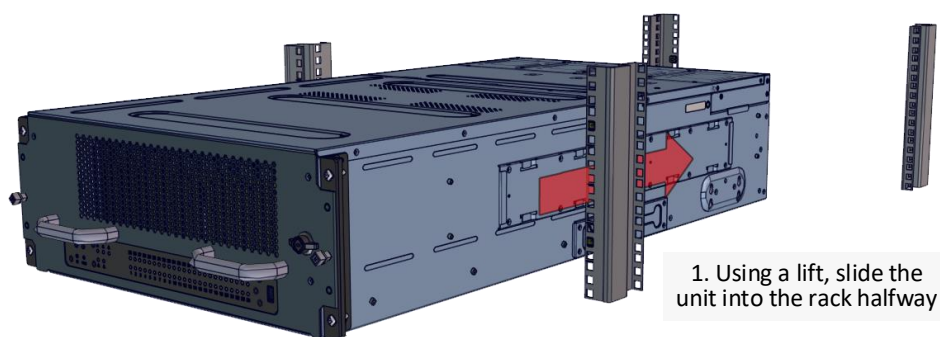
Fan Board
48-Bay Drives
Expanders (A and B)
OS Disks
Rear 4-Bay

To install IO card fan module, slide onto the enclosure wall and secure (red circle)

- 4-Bay routing (1x SFF8087 cable)
- OS disks routing (2x SATA cables)
- 48-Bay routing (4x SFF8643 cables – 2x from Exp A, 2x from Exp B)

7. Prepare the Rack by installing square nuts:

Front	Rear
4U	4U
3U	3U
2U	2U
1U	1U

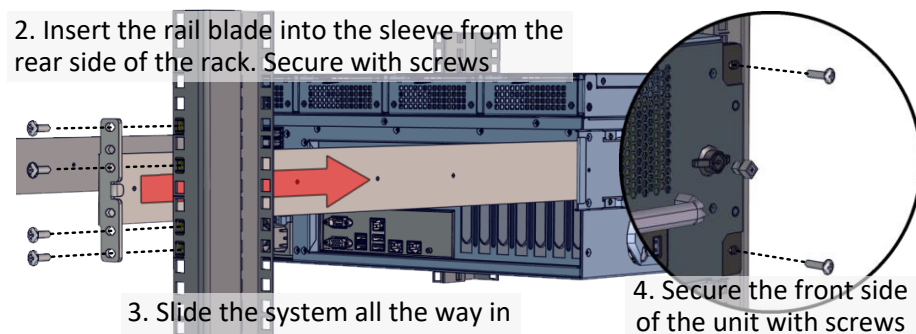## 8. Prepare the Rails by removing it from the enclosure and adjust the rail sleeve, as necessary, subject to the depth of your rack:

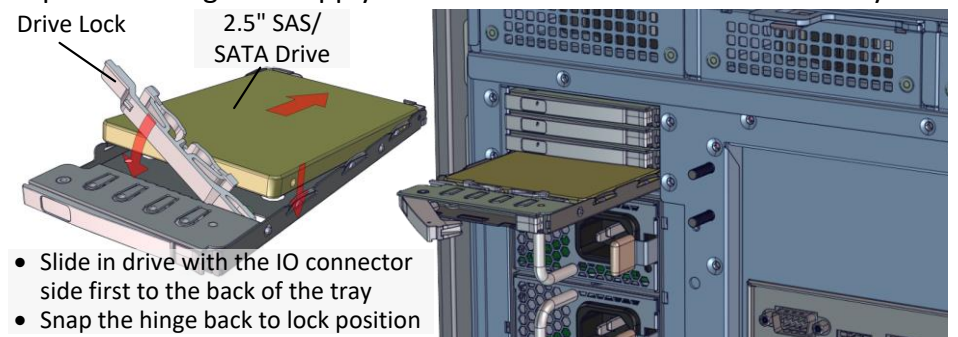1. Remove screw (green circle) to remove the rail blade from the sleeve

2. To adjust rail sleeve, remove the sleeve screws (yellow circles) and place to desired position (see table). **Position #2 is the default (sleeve highlighted red).**

Pos.	Rack Depth
1	28" - 32"
2*	31" - 35"
3	34" - 38"

Pos. #1
Pos. #2* *default
Pos. #3

3. Install the handles to move unit to the lift

9. Install the Unit to the Rack as follows:

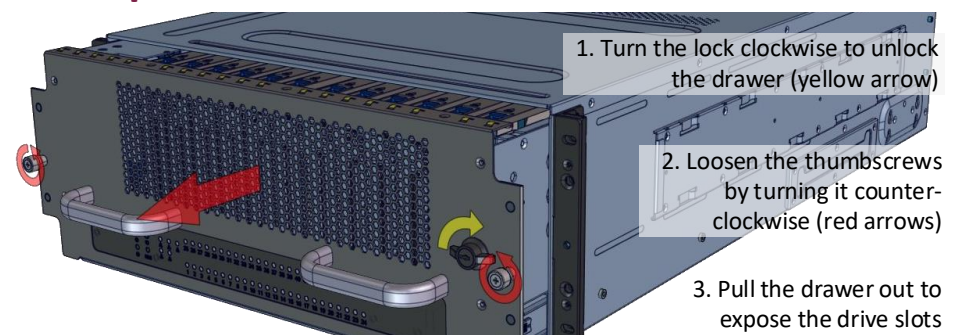1. Using a lift, slide the unit into the rack halfway

Use side handles to help carry the unit to a table or a rack lift. Side handles are not to be used for rack mounting. At least two people are recommended for mounting process.
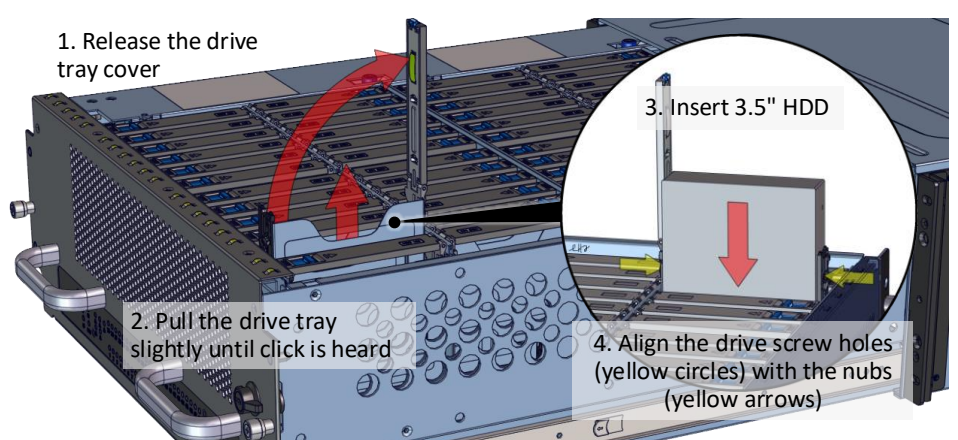
2. Insert the rail blade into the sleeve from the rear side of the rack. Secure with screws

3. Slide the system all the way in

4. Secure the front side of the unit with screws

10. Install 2.5" Disks to 4-Bay Drive Trays as necessary. SSD and HDD may be sold separately. M3 screws are required if using HDD. Apply screws to bottom side of the drive tray.
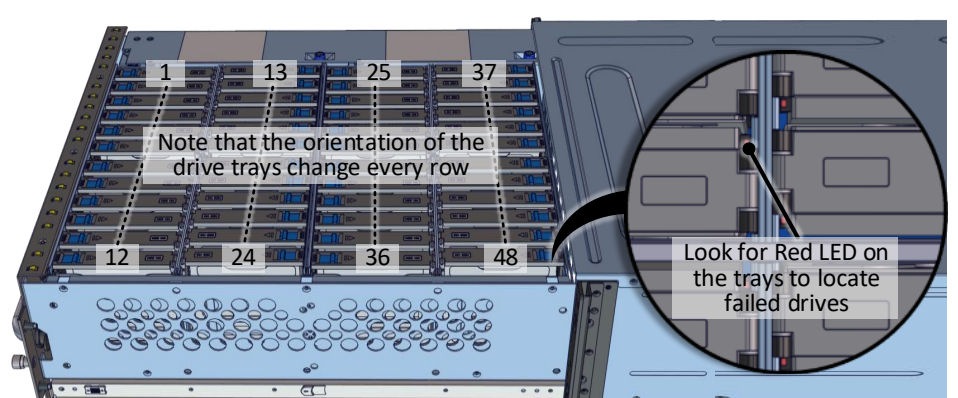
Drive Lock
2.5" SAS/SATA Drive

- Slide in drive with the IO connector side first to the back of the tray
- Snap the hinge back to lock position

11. Open Drive Drawer to install disk drives:

1. Turn the lock clockwise to unlock the drawer (yellow arrow)

2. Loosen the thumbscrews by turning it counter-clockwise (red arrows)

3. Pull the drawer out to expose the drive slots

12. Install 3.5" Drives to the enclosure as illustrated:

1. Release the drive tray cover

3. Insert 3.5" HDD

2. Pull the drive tray slightly until click is heard

4. Align the drive screw holes (yellow circles) with the nubs (yellow arrows)

13. Install 3.5" Drives to the enclosure as illustrated:

1	13	25	37

Note that the orientation of the drive trays change every row

12	24	36	48

Look for Red LED on the trays to locate failed drives

14. Plug in the Power Cords to the AC receptacles on the back of the unit.

15. Press the Power Button on the front of the unit
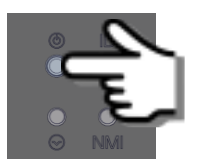
16. Access the Serial Console (when necessary) by connecting a serial audio cable to the one of the console ports. Pull out the drawer for serial port access. See picture for detail. Use a terminal console with baud set 115200, 8, N, 1, N. Type "help –a" for a list of commands.

Exp. B
Exp. A