TrueNAS E24 Storage Expansion Shelf

Basic Setup & Deployment

TrueNAS®

Step 1. Check the contents of the box. Confirm that your package contains the following:

#	Description	Image / Description	Qty
1	TrueNAS E24 Expansion Shelf		1
2	Populated 3.5" Drive Trays		Up to 24*
3	Power Cable		2
4	SAS cable		2**
5	Rail Kit		1
6	This Guide		1

* Unused drive bays will be populated with drive tray blanks to maintain proper airflow.
** Second SAS cable provided for Dual Controller / HA Configurations Only

Note: If your TrueNAS E24 Expansion Shelf arrived in less than pristine condition, immediately take pictures and contact iXsystems Support. To contact iXsystems Support, email truenas-support@ixsystems.com and have your TrueNAS E24 Expansion Shelf serial number ready (located on the front left side of the system face).

Step 2. Get familiar with the system.

System Identify LED
System Fault/OK LED
ID Button

Front view of the E24 Expansion Shelf with drives mounted

SAS Interface Module
Power Socket
Power Switch
Service Port (Troubleshooting)
Management Port (Not Used)
SAS Out Connector (Not Used)

Rear view of the E24 Expansion Shelf

System Drive Tray

Note: Do not install drives yet. It is safer to load the drives after the chassis has been installed in the rack.

Step 3. Install rack mounting rails. The rail set and three sets of screws are supplied in the Rail Kit box. Use only the screws labeled for use in the type of rack you have. Each rail is labeled with its orientation to ensure it is installed correctly. With two people, mount each rail to the rack using the top and bottom screw holes. The rail surface should remain inside of the rack boundaries. The following images show the front left and rear right of the rails mounted correctly.

Front Left View

Rear Right View

Step 4. Place the E24 Expansion Shelf on the rack. With two people, place the expansion shelf gently on the rails and push it back until the front panel of the Expansion Shelf is flush with the front of the rack.

Step 5. Attach the Expansion Shelf to the front of the rack. Press in and turn the built-in thumbscrews to the front of the rack.

E24 Expansion Shelf Thumb Screws

Step 6. Install the drives in the expansion shelf. After installing your expansion shelf, insert the drives. To insert a drive, release the handle with the tab on the left side, push it into a drive bay until the drive handle begins to move into place, then push it the rest of the way in with the handle until the handle locks into place.
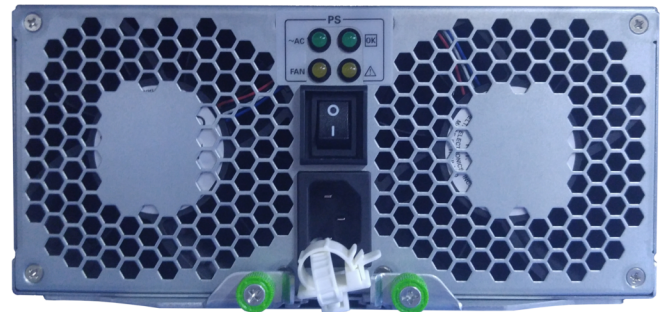
Note: Drives are not numbered and may be installed in any available bay.

Step 7. Plug In the SAS cables. Note the labels on the SAS ports on your TrueNAS Array and the letter label on your Expansion Shelf. Connect the left "In" SAS port of the left side expander to the SAS port with the same letter on your TrueNAS Array's Controller 1. If you have a HA system, connect the left SAS port of the right side expander to the port with the same letter label as your Expansion Shelf. **See back page for the basic wiring guide.**

Note: If your TrueNAS Array possesses only one storage controller, please retain the second SAS cable. This extra cable will be required to connect your Expansion Shelf to Storage Controller 2 if later you choose to upgrade your TrueNAS Array to High Availability (HA).

Step 8. Plug in the Power Cables. Verify the power switches on both power supplies are in the **Off** (Circle) position. Using the power cables provided, plug both power cables into appropriate power outlets and secure the cables with the plastic cable locks.

Note: Service and management ports are not used during normal operation and should not be connected.

Power Supply Module

Step 9. Turn on the Expansion Shelf. After all the power and data connections have been set up, turn on the Expansion Shelf by moving the power switches on both power supplies to the **On** (Line) position.

Note: If setting up a TrueNAS Storage Array for the first time, wait two minutes after turning on the Expansion Shelf before powering on the TrueNAS Array. If you already have a TrueNAS Array in operation, you may power on the Expansion Shelf at any time.

Note: See the wiring diagrams on the back page of this guide for all basic wiring options. Refer to the model of system and number of expansion shelves you purchased.

For TrueNAS Documentation:

The complete TrueNAS Admin Guide is available by selecting **Guide** from within the TrueNAS UI

If you require assistance, contact your TrueNAS Support Representative:

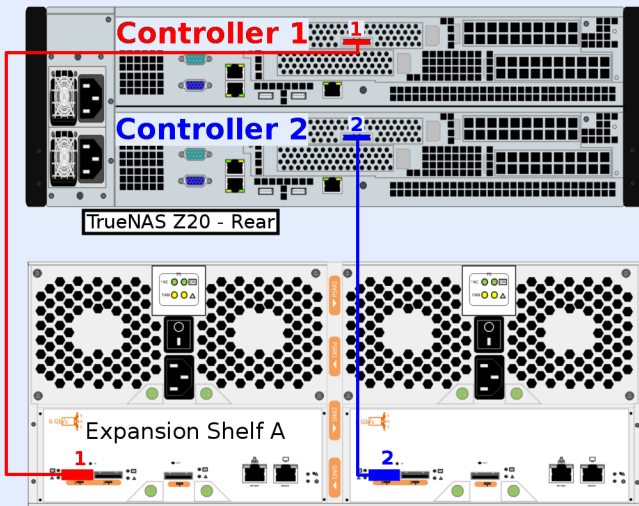8x5: 1 (855) 473-7449 option 2 (US only toll-free); +1 (408) 943-4100 option 2

Email: truenas-support@ixsystems.com

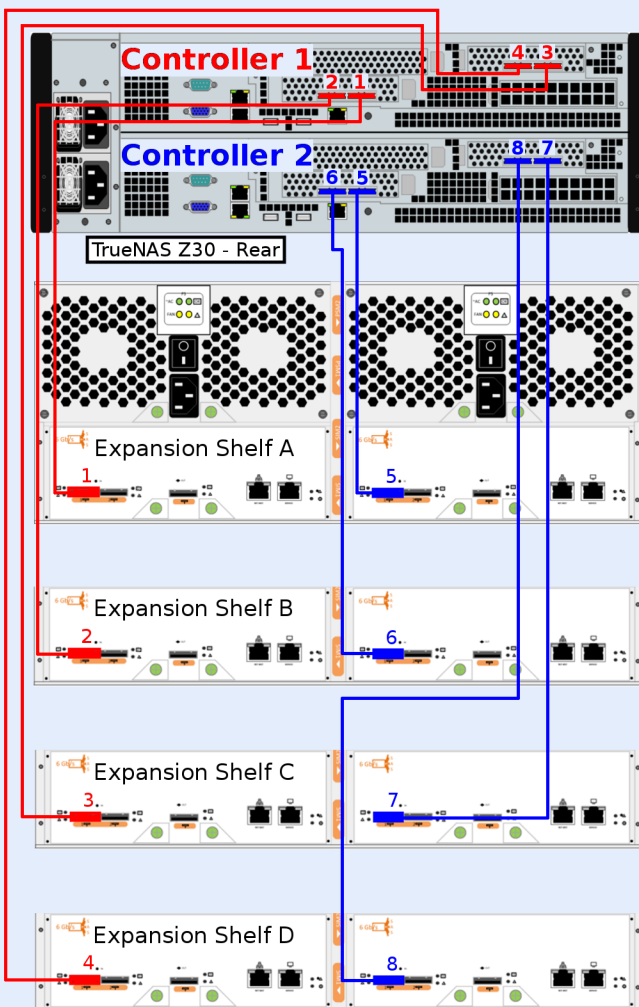**After Hours (24x7 Gold Level Support Only):**

1 (855) 699-1531 (US only toll-free); +1 (678) 835-6101 (local and international)

TrueNAS

TrueNAS E24 Storage Expansion Shelf
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Z20

Controller 1

Controller 2

TrueNAS Z20 - Rear

Expansion Shelf A

Z30

Controller 1

Controller 2

TrueNAS Z30 - Rear

Expansion Shelf A

Expansion Shelf B

Expansion Shelf C

Expansion Shelf D

Z35

Controller 1

Controller 2

TrueNAS Z35 - Rear

Expansion Shelf A

Expansion Shelf B

Expansion Shelf C

Expansion Shelf D

Expansion Shelf E

Expansion Shelf F

Expansion Shelf G

Expansion Shelf H