NEXSAN E-Series[™] J=XSA E18-E18X and E32-E32X Quick Start

This Quick Start Guide is intended to help you quickly get your Nexsan Storage System and Nexsan Storage Expansion unpacked, mounted, and connected. For detailed instructions, see the relevant Installation Guide and the Nexsan High-Density Storage User Guide, available at https:// helper.nexsansupport.com/esr_downloads.html

NOTE: If you are installing a Nexsan Storage Expansion as part of a Unity Storage System, refer to the Unity System Quick Start Guide for information about installation order, cabling, and connectivity.

Required tools and equipment

To perform the installation, you will need the following tools and equipment:

- a suitable equipment rack (1,000mm deep recommended) with sufficient load capacity to hold the system .
- a size P1 Phillips-head screwdriver
- For Nexsan E18 and Nexsan E32 Storage Systems, you will also need:
- enough CAT5 or CAT6 Ethernet cable to connect the system to the local area network (LAN)
- enough CAT6 Ethernet cable, fiber-optic cable, twisted-pair copper cable, or SAS cable to connect the system to the storage area network (SAN)

Before you begin

Before installing the Nexsan Storage System, prepare the installation site and rack. The Nexsan E18 and E32 Storage Systems require 2U of rack space and are designed to run from a 100–240V power supply.

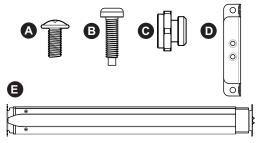


CAUTION:

- Ensure that the ambient temperature at the installation is between 10°C (41°F) and 35°C (86°F). If the temperature at the site is not actively regulated, ensure that daily and seasonal temperature changes will not result in the ambient temperature going outside these limits.
- Always fully stabilize racks with wall anchors or stabilizing legs, or both, before mounting the Nexsan storage system or any other components on the rack.
- Place the rack to allow full air flow at both the front and rear of the Nexsan storage system.
- Ensure that the floor beneath the mounting rack has enough load-bearing capacity to support the rack and all mounted components.
- Ensure that the power drawn by the Nexsan storage system does not overload the available • electrical supply.

Unpacking the system

- Remove the outer packaging sleeve.
- 2 Remove the accessory box and disk box.
- 3 Open the accessory box and make sure that all expected contents are present:
 - Rack mounting hardware package:



- A ten (10) bolts for securing the rails to the rack
- **B** two (2) large bolts for securing the enclosure to the mounting spacers **C** ten (10) rail nuts
- **D** two (2) mounting spacers
- E two (2) rail assemblies, one left and one right
- Two (2) power cables
- One (1) disposable ESD strap
- For Nexsan E18X and E32X Storage Expansions only, four (4) SAS cables for attaching the storage expansion to the main storage system
- Any additional items that may have been ordered, such as Fibre Channel cables
- Remove the foam lid covering the system.

5 With the help of a second person, carefully lift the system out of the box.

CAUTION:

- Nexsan Storage Systems are heavy and require two people to lift and slide onto the mounting rails. Do NOT attempt to mount the system enclosure onto the rails without assistance.
- When removing the system enclosure from the packaging, DO NOT lift the enclosure by any plastic parts or module handles on the chassis. Lift the enclosure ONLY by the bottom edges of the chassis.

NOTE: The packaging that the system ships in is reusable and should be retained for future re-shipment.

Preparing the system

Remove the PSUs from the enclosure.



CAUTION: Handle the PSUs, RAID Controllers, and Expansion Controllers ONLY by the handles and outer coverings. DO NOT touch any internal components or connectors. Doing so may harm the electronics inside.

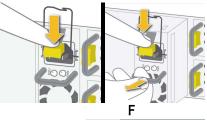
Removing the power supply units (PSUs)

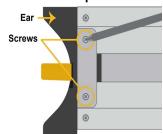
- 1 Press the spring lock tab down.
- 2 Carefully remove the PSU from the enclosure. Support the weight of the PSU with your free hand while removing it.

NOTE: Due to the close fit, a firm, steady pressure is required to remove the PSU.

Attaching chassis rack-mount ears

• Attach the rack mount ears from the supplied kit (F) to the front of the enclosure with the screws included in the kit.





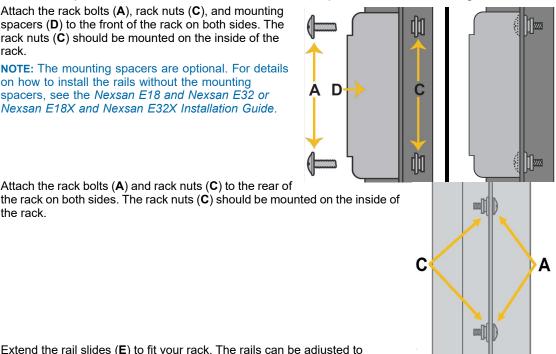
Attaching the rails to the rack

NOTE: The rails are labeled "L" (left) and "R" (right) on the outside surfaces. When installing them into the rack, be sure to place them on the correct sides and with the tapered end of the rail facing forward.

1 Attach the rack bolts (A), rack nuts (C), and mounting spacers (**D**) to the front of the rack on both sides. The rack nuts (C) should be mounted on the inside of the rack.

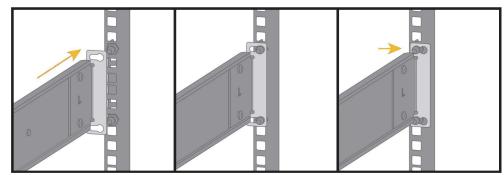
NOTE: The mounting spacers are optional. For details on how to install the rails without the mounting spacers, see the Nexsan E18 and Nexsan E32 or Nexsan E18X and Nexsan E32X Installation Guide.

2 Attach the rack bolts (A) and rack nuts (C) to the rear of



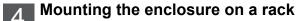
- the rack.
- 3 Extend the rail slides (E) to fit your rack. The rails can be adjusted to between 26" (66cm) and 36" (91.4cm).

4 Attach the front of the left rail to the rack nuts by sliding the large part of the mounting hole over the rack nut and then pressing outward to seat the nut in the small part of the mounting hole.



- 5 Repeat Step 4 for the rear of the left rail.
- 6 Repeat Step 4 and Step 5 for the right rail.

NOTE: The rails may seem loose before the system is mounted on them. This is normal. Once the system is on the rails, the rails are stabilized by the enclosure.





CAUTION:

- Nexsan storage systems are heavy and require two people to lift and slide onto the mounting rails. Do NOT attempt to mount the system onto the rails by yourself.
- When removing the system from the packaging, DO NOT lift the enclosure by any plastic parts
 or module handles on the chassis. Lift the enclosure ONLY by the bottom edges of the chassis.
- 1 With the help of another person, carefully lift the system enclosure and slide it onto the mounting rails so that the mounting ears sit against the spacers (if installed) or the rack face.



2 Using the supplied bolts (see "B" in step 1), tightly bolt the front of the enclosure to the mounting spacers (if installed) or the rack.



CAUTION: Always fully secure all rack-mounting hardware when installing the Nexsan storage system in a rack. Insufficient rack-mount support may allow the system to fall onto other rack-mounted hardware or onto the floor, potentially damaging equipment or causing injury to nearby personnel.



Replacing the PSUs

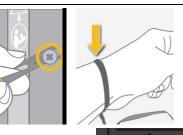


CAUTION: Handle the PSUs, RAID Controllers, and Expansion Controllers ONLY by the handles and outer coverings. DO NOT touch any internal components or connectors. Doing so may harm the electronics inside.

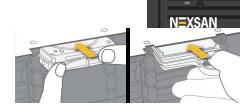
Replace the two Power Supply Units (PSUs), sliding them into the PSU slots until the top tab clicks.
 NOTE: Make sure that the PSU is right side up. The spring lock tab should be at the top.
 NOTE: DO NOT connect the power cords to the PSUs at this time.

CAUTION:

- **Only open ONE drawer at a time**. Close and lock each drawer before opening another one. Failure to do so may overbalance the rack, causing equipment damage or injury to personnel.
- Do not lean on or place any heavy object on an open drive drawer. Doing so may damage the drawer slide mechanism or overbalance the rack.
- Before opening any drive drawers on the Nexsan storage system, be sure that the internal temperature is 10°C (50°F) or above. If the system has been shipped or stored in low temperatures, allow the system to come to room temperature. Failure to do so may result in internal cable damage.
- Computer components and disk drives are sensitive to electrostatic discharge (ESD). Be sure to **ground any electrostatic charge from your person** before touching components with your hands or with any tools. While installing the system, **use the included anti-static wrist-strap**.
- 1 Ground any electrostatic charge from your person by touching a metal part of the rack or any properly grounded conductive object (such as the ground point at an anti-static workstation).
- 2 Attach the clip end of the anti-static wrist strap to the rack's ESD grounding pin or to any bare metal part of the rack. Secure the loop end around your wrist.



- 3 Turn the lock clockwise to unlock the drawer.
- 4 Carefully slide the drawer all the way out until the side rail locking tab clicks into place.
- 5 Starting at the front of the drawer, and using the drive mounting guide printed on the top of the drawer to help you orient the disks, carefully load each disk drive into a drive slot. Make sure that each disk is fully seated.

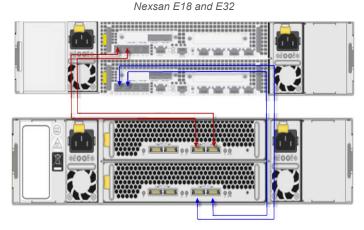


CAUTION: ALWAYS load disk drives in stacks of three. Leaving large gaps between disk drives decreases cooling efficiency and may result in some disk drives overheating.

- 6 Press the latch on the outside rail of the drive drawer to disengage it, then carefully slide the drawer back into the enclosure, making sure that it is flush with the rest of the front panel.
- 7 Turn the lock counter-clockwise to lock the drawer.
- 8 Repeat Step 3 through Step 7 for the right drive drawer.

7 Attaching cables

- Insert one SAS cable into each SAS port (EXP 0 and EXP 1) on the top RAID Controller of the Nexsan Nexsan E-18 or Nexsan E32.
- 2 Insert the other ends of the SAS cables into the **EXP IN 0** and **1** expansion ports on the top Expansion Controller in the Nexsan E18X.



3 Repeat Step 3 and Step 2 for the bottom RAID Controller and Expansion Controller.



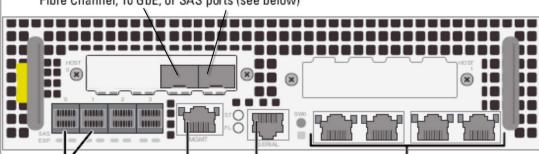
CAUTION: If you are installing two storage expansions onto a single main storage system, or if you need to "hot-add" the storage expansion to a running main storage system, you MUST follow the instructions under "Attach Expansion Unit to Main Storage Units" in the *Nexsan E18X Installation Guide*, available at https://helper.nexsansupport.com/esr_downloads.html.

Nexsan E18 and Nexsan E32

Connect all necessary communication cables (Fibre Channel/10Gb iSCSI/SAS, Ethernet, serial) to the appropriate connectors on each RAID Controller.

- 1 Connect the Nexsan Storage System to your local area network (LAN) by attaching CAT 5 or CAT 6 Ethernet cable to the Management (MGMT) port. This enables you to access the Nexsan Storage System graphical user interface (GUI).
- 2 Connect the Nexsan Storage System to your storage area network (SAN) by one of the following methods:
 - For 1Gb iSCSI, attach CAT6 Ethernet cables to the iSCSI ports (Net 0 and 1, or Net 0 through 3 if no other host port option is installed).
 - For Fibre Channel, attach either fiber-optic or twisted-pair copper cables to the Fibre Channel ports.
 - For 10GbE iSCSI, attach either fiber-optic or twisted-pair copper cables to the 10Gb Ethernet iSCSI ports.
 - For SAS-to-Host, attach SAS cables to the SAS ports.





Fibre Channel, 10 GbE, or SAS ports (see below)

Powering on



- When applying power to the system, use ONLY the IEC originally supplied power cords. Do NOT use other power cords, even if they appear identical to the supplied cords.
- The Nexsan E18 and Nexsan E32 and Nexsan E18X and Nexsan E32X series do not have power switches. Do NOT attach the power cords until the enclosure is fully installed, with all disk drives in place.

Nexsan E18 and E32 Storage Systems with Nexsan E18 Storage Expansion attached

1 Using the two supplied power cords, connect each PSU on the Nexsan E18 to main power, making sure to fold down the power cord retaining clip over each one.

NOTE: You may need to use the SW0 switch to initiate the power up sequence. Press and hold the SW0 switch until you hear the systems cooling fans start up and then release. Do not hold the SW0 switch in for longer than that as it may cause the storage system controllers to start in Emergency Mode.



NOTE: If an audible alarm sounds when the system is first powered on, this may be because the controller batteries are discharged. Press either **SW0** switch on the rear of the enclosure to silence the alarm.

- 2 Wait approximately 10 seconds, then power up Nexsan E18 and Nexsan E32 Storage System the Nexsan E18 Storage Expansion is attached to.
- 3 When the main storage system is fully powered up (this can take up to 5 minutes), check the **EXP IN L0** and **L1** LEDs next to the expansion ports on the Expansion Modules. Both LEDs should be green.

If either of the EXP IN LEDs are flashing amber:

• Power down both the Nexsan Storage System and Nexsan Storage Expansion, correct the cabling (see *Attaching cables*), and then repeat Step 1 through Step 3.

Nexsan E18 and E32 Storage Systems with no Storage Expansion

Using the two supplied power cords, connect each PSU to main power, making sure to fold down the power cord retaining clip over each one.

NOTE: You may need to use the SW0 switch to initiate the power up sequence. Press and hold the SW0 switch until you hear the system cooling fans start up and then release. Do not hold the SW0 switch in for longer than that as it may cause the product controllers to start in Emergency Mode.

NOTE: If an audible alarm sounds when the storage system is first powered on, this may be because the controller batteries are discharged. Press either **SW0** switch on the rear of the enclosure to silence the alarm.



Part number: P0450054 Rev: Q Release Date: February 2022 Related Documentation: Nexsan E18 and E18X and Nexsan E32 and E32X Installation and FRU Removal and Replacement Guides, Nexsan High Density Storage User Manual

Technical Support

By Email: support@nexsan.com By Web: http://helper.nexsansupport.com

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