



SuperLoader™ 3

Quick Start Guide

The Quantum® SuperLoader 3 is an automated storage and retrieval device consisting of a tape drive and up to two tape magazines holding up to eight cartridges each.

For more information, see the *Quantum SuperLoader 3 User's Guide* (PN 81-81317) on <http://www.quantum.com/serviceandsupport/softwareanddocumentationdownloads/superloader3/index.aspx>.

This quick start guide uses the following conventions:

Note: Notes emphasize important information related to the main topic.

Caution: Cautions indicate potential hazards to equipment and are included to prevent damage to equipment.

WARNING: Warnings indicate potential hazards to personal safety and are included to prevent injury.

This document explains how to unpack the SuperLoader 3 and install it in a standard 19-inch rack.

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Choosing a Location

The autoloader is designed to fit in a standard 19-inch rack using either the long or short brackets (depending on the depth of the rack). The autoloader uses standard rack mounting hardware.

Note: It is recommended that you review this entire document prior to beginning the installation

Choose a location that meets the following criteria:

Criteria	Description
Rack requirements	Standard 19-inch rack
Room temperature	10–35° C (50–95° F)
Power source	AC power voltage: 100–127 VAC; 200–240 VAC Line frequency: 50–60 Hz Note: Locate the AC outlet near the autoloader. The AC power cable is the product’s main disconnect device and must be easily accessible at all times.
Weight	14.1 kg (31 lb.) unloaded 17.2 kg (38 lb.) loaded with 2 magazines, 16 cartridges
Air Quality	Minimize sources of particulate contamination. Avoid areas near frequently used doors and walkways, cooling or exhaust vents, stacks of supplies that collect dust, printers, and smoke-filled rooms. Caution: Excessive dust and debris can damage tapes and tape drives.
Humidity	20–80% RH (non-condensing)
Clearance	Back: Minimum of 43.2 cm (17 in.) Front: Minimum of 68.6 cm (27 in.) Sides: Minimum of 5.08 cm (2 in.)

Preparing for the Installation

Before you begin the installation procedure in this section, make the following preparations as described in this section:

- [User-Provided Tools](#)
- [Taking ESD Precautions](#)
- [Preparing for Rack Mounting](#)

User-Provided Tools

Provide the following tools for unpacking and installing the autoloader:

- #2 Phillips screwdriver
- Level
- Antistatic wrist strap

Taking ESD Precautions

Some components within the autoloader contain static-sensitive parts. To avoid damaging these parts while performing installation procedures, always observe the following precautions:

- Ensure that the work area is free from conditions that could cause electrostatic discharge (ESD).
- Discharge static electricity from your body by touching a known grounded surface, such as your computer's metal chassis.
- Keep the autoloader turned off during all installation procedures.
- Use an antistatic wrist strap.
- Keep static-sensitive parts in their original shipping containers until ready for installation. Look for the ESD sticker to identify static sensitive parts.



- Avoid touching connectors and other components.

Note: Dry climates and cold-weather heating environments have lower relative humidity and are more likely to produce static electricity.

Preparing for Rack Mounting

Although not required, the autoloader can be rack mounted by attaching it directly to stationary cabinet rails.

Take the following general safety steps before beginning the rack-mount installation.

- 1 Lower the cabinet feet.
- 2 Extend the cabinet anti-tip device, if available.

Note: An anti-tip device may be extendable legs or similar equipment used to stabilize the cabinet. This anti-tip equipment is to help avoid over-balancing the cabinet when installing or removing equipment.

- 3 Ensure that the cabinet and all rack mounted equipment have a reliable ground connection.
- 4 Verify that the total current of all rack mounted components (including the autoloader) will not exceed the current rating of the power distribution unit or outlet receptacles.
- 5 Secure the help of at least one other person. At least two people are required to safely install the autoloader into a rack cabinet.

WARNING: Failure to take these safety steps may result in personal injury or equipment damage.

Caution: Do not remove the top cover of the autoloader during the installation process. Removing the top cover could result in damage to the autoloader.

Unpacking the Autoloader

Before you begin, clear a desk or table so that you can unpack the autoloader.

The *Quantum SuperLoader 3 Quick Start Guide* has all the necessary information to unpack and inspect your autoloader correctly.

You also need to select an open 2U computer rack location near the server that will host the autoloader.

Caution: If the room in which you are working differs from the temperature in which the autoloader was shipped or stored by 15° C (30° F) or more, let the autoloader acclimate to the surrounding environment for at least 12 hours before removing it from the shipping carton.

Caution: If your unit was ordered as a one-magazine autoloader, be sure to remove the plastic shipping insert from the magazine bay before connecting or operating your autoloader. Insert either a magazine or a magazine blank into the bay. The autoloader will not function without both magazine bays equipped with either a magazine or a magazine blank.

Carefully unpack and inspect your new Quantum SuperLoader 3 by doing the following:

- 1 Inspect the shipping box for damage. If you notice any damage, report it to the shipping company immediately.
- 2 Open the shipping box and remove the accessories package. Set the accessories package aside for now.
- 3 Carefully remove the plastic inserts from the autoloader.
- 4 Lift the autoloader out of the box and place it on the work surface, top facing up. *Do not set the autoloader on either end or sides.*
- 5 Remove the bag from the autoloader.

Note: If the cover must be taken off, there are 26 screws that need to be removed.

Checking Accessories

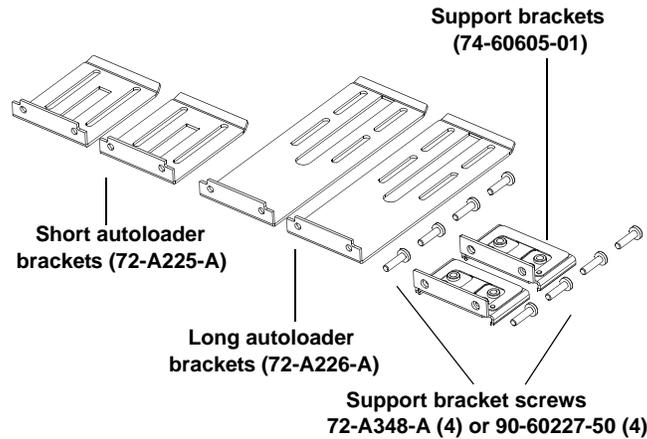
The following accessories are shipped with the Quantum SuperLoader 3:

- Quantum SuperLoader 3 Quick Start Guide
- One of the following drive kits:
 - SAS tape drive kits
 - SAS cable
 - Fibre Channel tape drive kits
 - Fibre Channel cable
- Ethernet cable
- Hardware to rack mount the autoloader (see [figure 1](#))
 - Four autoloader brackets (two long and two short to accommodate different rack depths)
 - Two support brackets
 - Two sets (decimal and metric) of four support bracket 10-32 x 1/4 inch button head screws (two per support bracket)
- TORX[®] L-Key drivers (T8 and T10)
- Power cables
- Bar code labels
- Eight rack screws

You will also need the following parts if you want to place your SuperLoader 3 on a rack:

- Eight clip nuts and screws
- C13/C14 power cable

Figure 1 Rack Mount Hardware



Rack Mounting the Autoloader

This section provides the steps for attaching the autoloader directly to the stationary rails of a rack. Refer to [table 1](#) for information on common rack hole types.

Table 1 Rack Hole Types

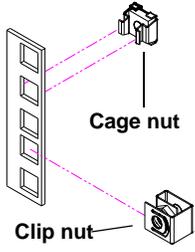
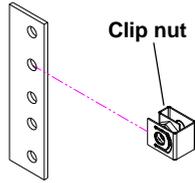
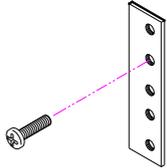
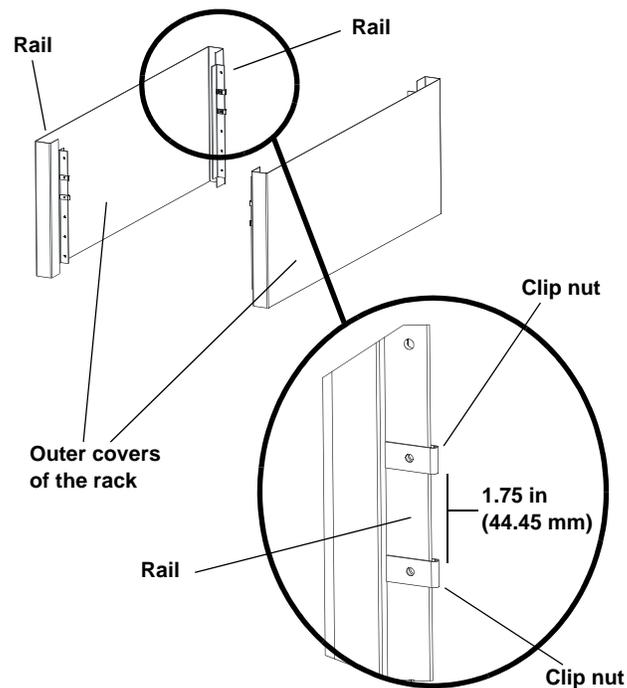
Figure	Description
 <p>The diagram shows a vertical rack rail with four square holes. A cage nut is shown being inserted into the back of the rail, and a clip nut is shown being attached to the side of the rail. Pink dashed lines connect the labels to the corresponding parts in the diagram.</p>	<p>Square rack holes are the most common type of rack holes. They can accept either cage nuts which mount from the back of the rail or clip nuts which clip on from the side of the rack rail.</p>
 <p>The diagram shows a vertical rack rail with four circular through holes. A clip nut is shown being attached to the side of the rail, with pink dashed lines connecting the label to the clip nut and the hole.</p>	<p>Through holes require clip nuts to accept mounting hardware.</p>

Figure	Description
	<p>Threaded holes require neither cage or clip nuts to accept mounting hardware.</p>

Note: The rails within the rack have a hole pattern that repeats throughout the rail.

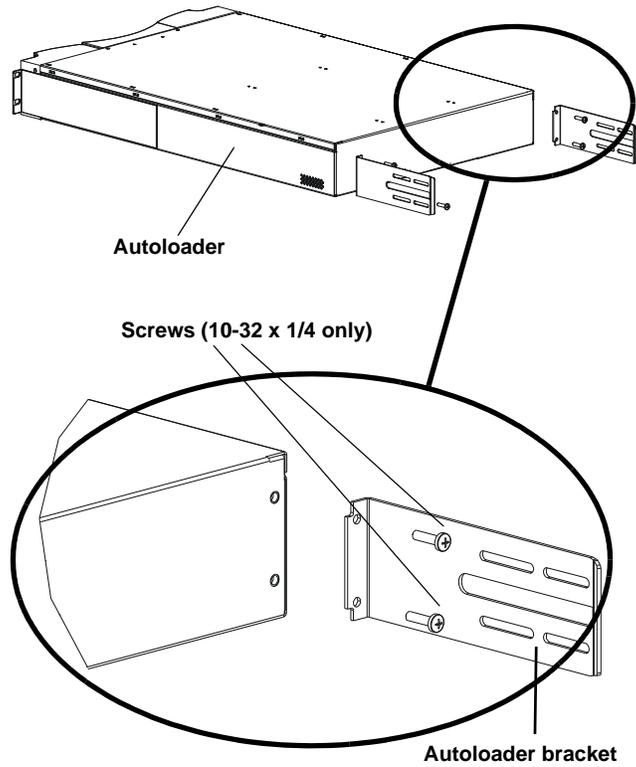
- 1 Install two clip nuts, 1.75 in. (44.45 mm) apart, onto each of the four rails of the rack, making sure that you install each pair of clip nuts at exactly the same level (see [figure 2](#)).

Figure 2 Installing Two Clip Nuts



- 2 Select the long or short autoloader brackets (depending on the depth of the rack), and then attach them to the rear of the autoloader (see [figure 3](#)). Use the long autoloader brackets (72-A226-A) when the distance from the front mounting rail to the rear mounting rail is less than 30.25 in. (76.84 cm). Otherwise, use the short autoloader brackets (72-A225-A).

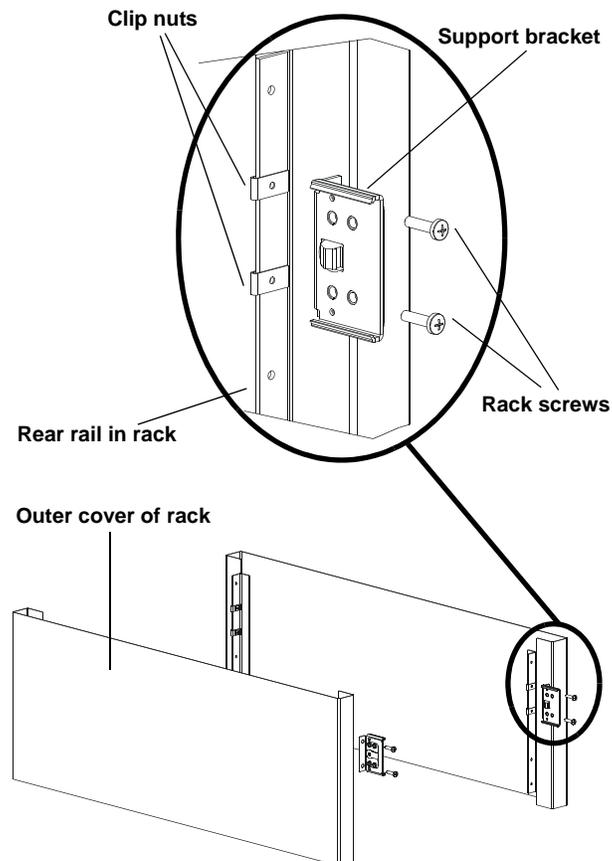
Figure 3 Attaching Autoloader Brackets



- 3 Using rack screws, attach a support bracket to the clip nuts on each rear rail (see [figure 4](#)).

Tighten the screws just enough to hold the support brackets firmly against the rail while still allowing the support bracket to be slightly shifted by hand. This shifting will help facilitate the engagement of autoloader brackets as the autoloader is installed in the rack. You will fully tighten the screws in [Step 8](#).

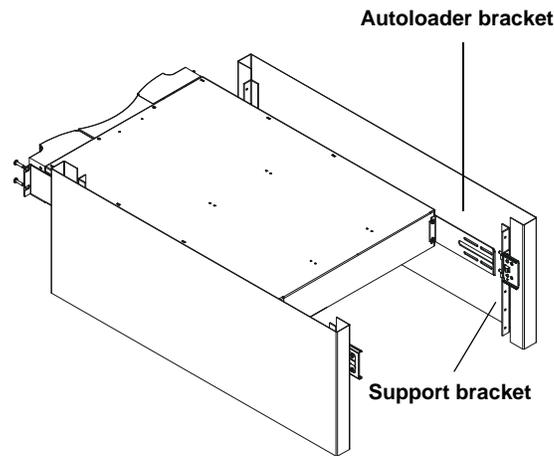
Figure 4 Attaching Support Brackets



- 4 With the help of a second installer, insert the autoloader into the rack so that the autoloader brackets slide into corresponding support brackets on the rear rails and the tabs at the front of the autoloader align flush with the clip nuts on the front rails (see [figure 5](#)).

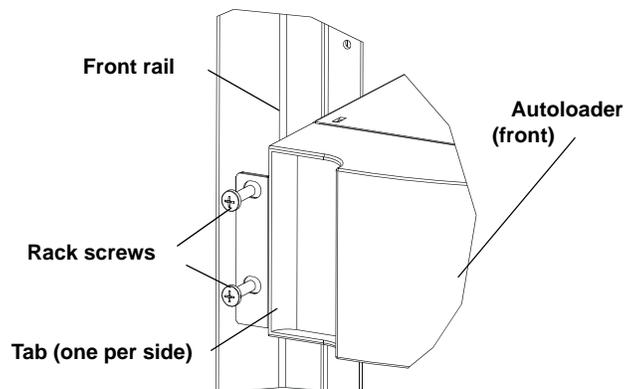
Caution: Do not release the front end of the autoloader until it can be secured to the rack.

Figure 5 Sliding Autoloader into Rack



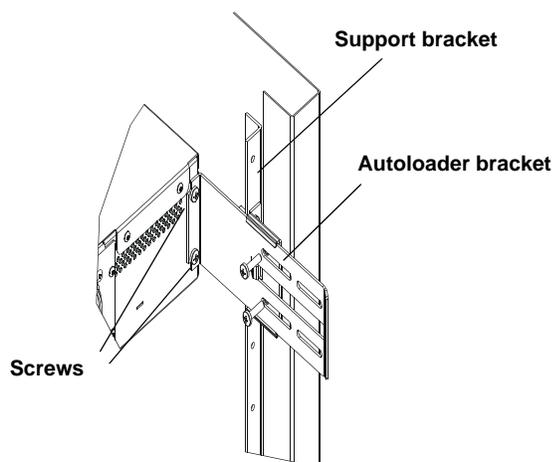
- 5 While the other installer holds the front end of the autoloader, secure the front end of the autoloader to the rack using four rack screws (two per tab) as shown in [figure 6](#). Tighten the screws just enough to secure the autoloader to the front rails.

Figure 6 Front Alignment



- 6 Install four screws (two per side) to secure the support brackets to the autoloader brackets (see [figure 7](#)).

Figure 7 Connecting Support Brackets

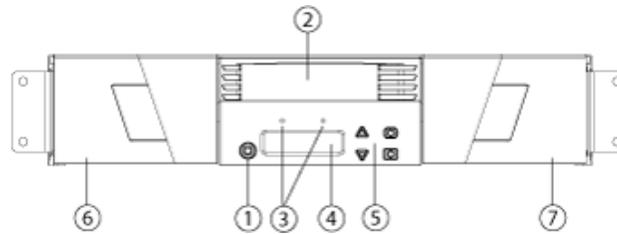


- 7 Verify that the autoloader is level. Adjust as needed.
- 8 When the autoloader is level, tighten all screws securing the autoloader to the rack. This includes the following:
 - Four screws securing the autoloader tabs to the front rails.
 - Four screws securing the support brackets to the rear rails.
 - Four screws securing the autoloader brackets to the support brackets.

Autoloader Panel Overviews

The front panel allows you to configure the autoloader, enter commands, and obtain status information.

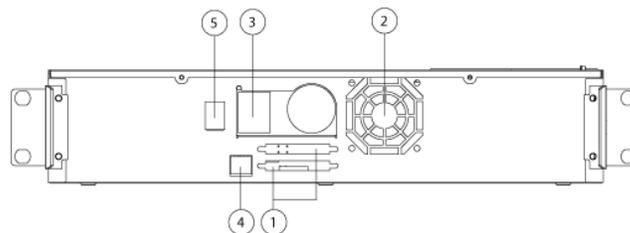
Figure 8 Front Panel Overview



1	Power switch
2	Mailslot
3	Front panel LEDs
4	Front panel LCD screen
5	Function keys
6	Left magazine (or blank)
7	Right magazine (or blank)

The Ethernet connector on the back panel allows you to connect to the autoloader remote management interface.

Figure 9 Back Panel Overview



1	Fibre Channel or SAS connector
2	Fan vent
3	Power connector
4	Autoloader remote management Ethernet port
5	Power switch

Connecting SAS, Fibre Channel and Power Cables

To connect the SAS, Fibre Channel and power cables to the autoloader, follow these steps:

- 1 Shut down and turn off the selected server. Turn off all attached accessory devices, such as printers and other devices.
- 2 Attach one end of the cable (included in the accessory kit) to one of the connectors on the back panel of the autoloader (see [figure 11](#)).
- 3 Attach the other end of the cable to the connector on the host adapter.

Figure 10 Cable Connectors
(SAS Tape Drive)

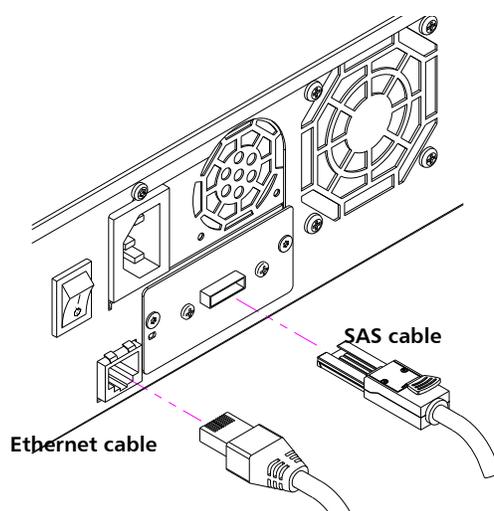
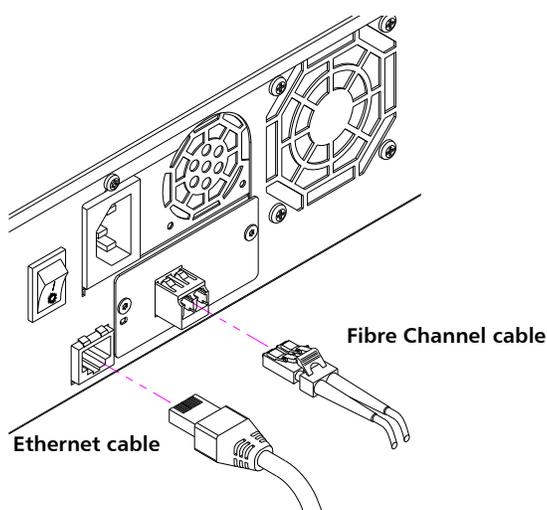


Figure 11 Cable Connectors
(Fibre Channel Tape Drive)



- 4 Attach one end of your Ethernet cable to the Ethernet port on the back panel of the autoloader for remote management.

- 5 Attach the other end of the Ethernet cable to your host network port or router.
- 6 Attach the female connector of the power cable to the power connector on the back panel of the autoloader.
- 7 Plug in the power cable to the nearest properly grounded power outlet.

Preparing the Host and Verifying the Connection

If necessary, install a SCSI, Fibre Channel, or SAS host adapter, software, and compatible drivers. Refer to the manuals for the host computer and SCSI, Fibre Channel, or SAS host adapter for detailed instructions. In addition, follow these general guidelines:

- When the host server is powered on, install software, and/or drivers that are compatible with the autoloader (see [Windows Operating System Support](#)). Software compatibility information is available at www.quantum.com. Most backup software packages require an additional module to communicate with the autoloader robotics.
- If the host server is connected to a network, check with the system administrator before turning off power.
- Use proper procedures to prevent electrostatic discharge (ESD). Use wrist-grounding straps and anti-static mats when handling internal components.
- Make sure that the host server has an open expansion slot.
- Make sure that your backup application supports the Fibre Channel or SAS host adapter.

Windows Operating System Support

There are two device drivers associated with the SuperLoader 3 autoloader. One for the autoloader itself, and a second for the tape drive within the autoloader.

Note: LTO-7 and LTO-8 drives require Windows 2012 or higher.

Note: Device drivers are required if you intend to use the Microsoft Windows native backup application. Commercial backup applications provide all necessary device driver support.

Refer to www.quantum.com for a list of compatible backup applications.

Please note that Microsoft Windows NT[®] does not include native support for autoloaders. A backup application must be used if using the SuperLoader 3 under Microsoft Windows NT.

Autoloader Device Driver

For the SuperLoader 3 device driver, go to:

<http://www.quantum.com/ServiceandSupport/SoftwareandDocumentationDownloads/SuperLoader3/Index.aspx#Drivers>.

Tape Drive Device Driver

For the tape drive (within the autoloader) device driver, go to the following URL and click the **Drivers** tab:

<http://www.quantum.com/serviceandsupport/softwareanddocumentationdownloads/superloader3/index.aspx>

After the Installation

From the front panel of the autoloader, use the menus to set the IP address (DHCP or Static), Subnet Mask (if required), Gateway (if required), SNMP Server (optional), and Time Server (optional). In addition, you can use the menus to enable SNMP. By default, SNMP is disabled.

The default IP address is **192.168.20.128**.

The default login and password for the On-board Remote Manager is **guest** and **guest**.

For detailed information on the setup, operation, and administration of your system, see the *Quantum SuperLoader 3 User's Guide* (PN 81-81317).



For assistance, contact the Quantum Customer Support Center:

USA: **1-800-284-5101 (toll free) or +1-720-249-5700**

EMEA: **+800-7826-8888 (toll free) or +49-6131-3241-1164**

APAC: **+800-7826-8887 (toll free) or +603-7953-3010**

Worldwide: **<http://www.quantum.com/ServiceandSupport>**

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