

hp StorageWorks

edge switch 2/24 rack mount kit installation instructions

Part Number: AA-RTDGB-TE/958-000285-001

Second Edition (January 2003)

These installation instructions provide the procedures used for installing an HP StorageWorks Edge Switch 2/24 in an appropriate rack.



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Printed in the U.S.A.

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About this Guide

These installation instructions provide information to help you:

- Install the HP StorageWorks™ Edge Switch 2/24 in an appropriate rack.
- Contact technical support for additional assistance.

Intended Audience

This book is intended for use by technicians who are experienced with:

- Setting up SAN equipment.
- Fibre Channel technology.

Related Documentation

For a list of corresponding documentation included with this product, see the Related Documents section of the HP StorageWorks Edge Switch Release Notes.

For the latest information, documentation, and firmware releases, please visit the HP StorageWorks website:

<http://h18006.www1.hp.com/storage/saninfrastructure.html>

For information about Fibre Channel standards, visit the Fibre Channel Industry Association website, located at <http://www.fibrechannel.org>.

Document Conventions

The conventions included in [Table 1](#) apply.

Table 1: Document Conventions

Element	Convention
Cross-reference links	Blue text: Figure 1
Key names, menu items, buttons, and dialog box titles	Bold
File names, application names, and text emphasis	<i>Italics</i>
User input, command names, system responses (output and messages)	Monospace font COMMAND NAMES are uppercase unless they are case sensitive
Variables	<i>Monospace, italic font</i>
Website addresses	Sans serif font (http://thenew.hp.com)

Symbols in Text

These symbols may be found in the text of this guide. They have the following meanings.



WARNING: Text set off in this manner indicates that failure to follow directions in the warning could result in bodily harm or loss of life.



CAUTION: Text set off in this manner indicates that failure to follow directions could result in damage to equipment or data.

IMPORTANT: Text set off in this manner presents clarifying information or specific instructions.

NOTE: Text set off in this manner presents commentary, sidelights, or interesting points of information.

Symbols on Equipment



Any enclosed surface or area of the equipment marked with these symbols indicates the presence of electrical shock hazards. Enclosed area contains no operator serviceable parts.

WARNING: To reduce the risk of injury from electrical shock hazards, do not open this enclosure.



Any RJ-45 receptacle marked with these symbols indicates a network interface connection.

WARNING: To reduce the risk of electrical shock, fire, or damage to the equipment, do not plug telephone or telecommunications connectors into this receptacle.



Any surface or area of the equipment marked with these symbols indicates the presence of a hot surface or hot component. Contact with this surface could result in injury.

WARNING: To reduce the risk of injury from a hot component, allow the surface to cool before touching.



Power supplies or systems marked with these symbols indicate the presence of multiple sources of power.

WARNING: To reduce the risk of injury from electrical shock, remove all power cords to completely disconnect power from the power supplies and systems.



Any product or assembly marked with these symbols indicates that the component exceeds the recommended weight for one individual to handle safely.

WARNING: To reduce the risk of personal injury or damage to the equipment, observe local occupational health and safety requirements and guidelines for manually handling material.

Rack Stability



WARNING: To reduce the risk of personal injury or damage to the equipment, be sure that:

- The leveling jacks are extended to the floor.
 - The full weight of the rack rests on the leveling jacks.
 - In single rack installations, the stabilizing feet are attached to the rack.
 - In multiple rack installations, the racks are coupled.
 - Only one rack component is extended at any time. A rack may become unstable if more than one rack component is extended for any reason.
-

Getting Help

If you still have a question after reading this guide, contact an HP authorized service provider or access our website: <http://thenew.hp.com>.

HP Technical Support

In North America, call technical support at 1-800-652-6672, available 24 hours a day, 7 days a week.

NOTE: For continuous quality improvement, calls may be recorded or monitored.

Outside North America, call technical support at the nearest location. Telephone numbers for worldwide technical support are listed on the HP website under support: <http://thenew.hp.com/country/us/eng/support.html>.

Be sure to have the following information available before calling:

- Technical support registration number (if applicable)
- Product serial numbers
- Product model names and numbers
- Applicable error messages
- Operating system type and revision level
- Detailed, specific questions

HP Website

The HP website has the latest information on this product, as well as the latest drivers. Access storage at: <http://thenew.hp.com/country/us/eng/prodserv/storage.html>. From this website, select the appropriate product or solution.

HP Authorized Reseller

For the name of your nearest HP Authorized Reseller:

- In the United States, call 1-800-345-1518
- In Canada, call 1-800-263-5868
- Elsewhere, see the HP website for locations and telephone numbers: <http://thenew.hp.com>.

Installation Instructions

Read these instructions to rack mount the HP StorageWorks Edge Switch 2/24 in the appropriate HP, or comparable, 19-inch Electronic Industries Association (EIA) rack:

- HP 9000 series, 10000 series and 11000 series racks
- HP rack system/e or 19-inch EIA rack

Edge Switch Rack Mount Kit Checklist

The hardware kit includes parts not required for the configuration described in these instructions.

Mounting Hardware

- Two (2) two-hole bar nuts
- Six (6) three-hole bar nuts (only 4 used)
- Eight (8) square alignment washers (required only for HP 9000, 10000 and 11000 series racks)
- Eight (8) Phillips panhead screws (10-32 x 1/2) with split lock and flat washers
- Four (4) Phillips flathead screws (8-32 x 7/16)
- Ten (10) Phillips panhead screws (10-32 x 5/8) with flat washer (only 2 used)
- Six (6) Phillips flathead screws (6-32 x 3/8) (not used)
- Twelve (12) Phillips panhead screws (10-32 x 3/8) (not used)
- Four (4) 8-32 Keps nuts (not used)

Brackets and Rails

Brackets and rails included in the kit are shown in Figure 1:

- ❶ Two (2) fixed-length slide rails (one left and one right)
- ❷ Two (2) Front brackets
- ❸ Two (2) Rear brackets (long)
- ❹ Two (2) Rear spacing bracket
- ❺ Rear bracket (short) - not used in this configuration

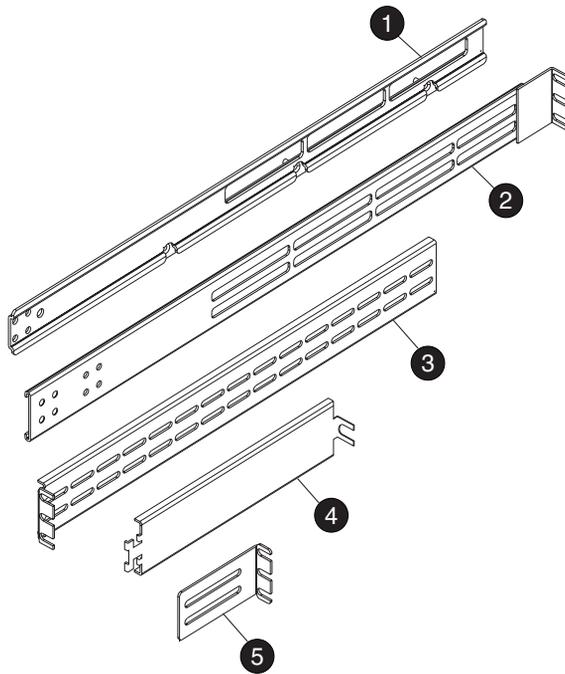


Figure 1: Brackets included in kit

Required Tools

The following tools are required, but are not included in the kit:

- Torque driver with a T10 Torx bit
- #2 Phillips screwdriver

Rack-mounting the Edge Switch 2/24

Read this section to install the Edge Switch rack mount kit in the appropriate rack.

Mounting the Adjustable Brackets in the Rack

Use these steps to install the adjustable brackets on the rack. You will need a #2 Phillips screwdriver and eight 10x32 panhead screws to complete this procedure.

NOTE: If you are installing the Edge Switch 2/24 in an HP 9000, 10000 and 11000 series rack, you will also need eight square alignment washers to complete this procedure.

1. Determine the position of the switch in the rack. Each Edge Switch 2/24 is 1.75 inches or 1U high.
2. Attach four bar nuts (three-hole bar nuts) to the cabinet frame using eight (8) Phillips panhead screws (10-32 x 1/2) with split lock and flat washers.

NOTE: Do not install a screw in the center hole of each bar nut.

- a. If you are installing the Edge Switch 2/24 in an HP 9000, 10000 and 11000 series rack, place a square alignment washer on each panhead screw before inserting in the square cabinet frame holes.
 - b. Mount the bar nut on the inside of the cabinet frame. Orient the holes in the bar nut so that they are aligned closest to the inside edge of the cabinet frame.
 - c. Secure, but do not completely tighten all screws.
3. Measure cabinet depth from inside edge to inside edge of the cabinet frame.
 4. Assemble two sets of front and rear brackets so that the combined brackets are equal to the depth of the cabinet.
 5. Attach a two-hole bar nut using four (4) Phillips flathead screws (8-32 x 7/16) to hold each assembled bracket together. Do not completely tighten but tighten enough to hold the brackets together.
 6. Install the assembled brackets in the cabinet by sliding the mounting brackets between the bar nut and cabinet frame.
 7. Tighten the three-hole bar nut screws on the mounting brackets to where the rails are stable, but can be easily adjusted.
 8. Securely tighten the two-hole bar nut screws holding the front and rear brackets together.

Mounting the Slide Rails on the Sides of the Switch

Use these steps to install the slide rails on the sides of the switch as shown in Figure 2. You will need a torque driver with a T10 Torx bit (not supplied in the kit) and left and right slide rails to complete this procedure.

NOTE: You may want to remove the Edge Switch 2/24 power supplies, as this will make the device lighter and easier to handle.



WARNING: Before removing the power supplies, review the *edge switch 2/24 installation guide* for details on removing power supplies.

1. On the Edge Switch 2/24, remove the six screws (three screws per side) which help hold the switch cover in place.

NOTE: Do not discard these screws, as you will use them to attach the slide rails.

2. Using the torque driver and the screws you removed earlier, attach the left and right slide rails to the Edge Switch 2/24.

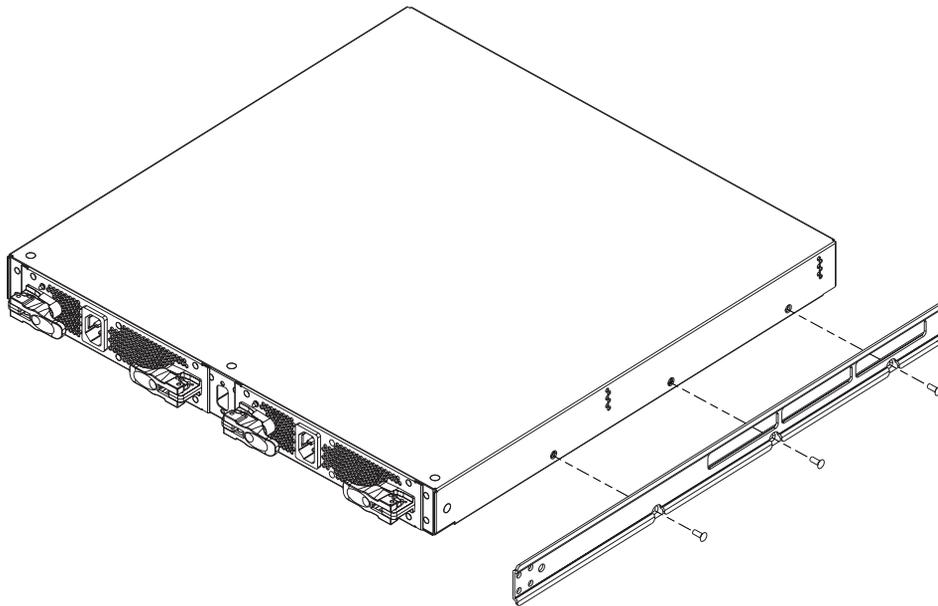


Figure 2: Attaching the slide rail to the switch

Installing the Switch in the Cabinet

Use these steps to install the switch in the cabinet. You will need a #2 Phillips screwdriver and two rear spacing brackets to complete this procedure.

1. From the front side of the cabinet, slide the switch into the mounting brackets and along the rails until the rear of the switch is flush with the rear of the cabinet.
2. Bring the rear spacing brackets to the rear of the cabinet.
3. Pull the switch toward the rear of the cabinet until it protrudes approximately 3 inches.
4. Orient the rear spacing bracket mounts so that they are pointed outward. Insert the tabs on each rear spacing bracket into the designated slots in each rail.
5. Push the switch forward using both rear spacing brackets until the rear spacing bracket mounts contact the cabinet rail.
6. Attach the rear spacing brackets to the cabinet using two Phillips panhead screws (10-32 x 5/8) with flat washer.
7. Ensuring that the square alignment washers are seated properly within the square cabinet frame holes, use a Phillips head screwdriver to tighten the rear and front mounting screws.

