SUPER®

Rack Installation for Supermicro Switches

USER'S MANUAL

1.0

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Preface

About This Manual

This manual is written for professional system integrators and PC technicians. It provides information for the installation Supermicro switches into a rack environment. Installation and maintenance should be performed by experienced technicians only.

This manual lists compatible parts available at the time of publication. Always refer to the Supermicro Web site for updates on supported parts and configurations at www.supermicro.com.

Manual Organization

Chapter 1 Introduction

The first chapter provides an overview of the optional CSE-PT52L rack mounting kit and safety information for Supermicro switches.

Chapter 2 Rack Installation

This chapter covers detailed instructions for installing the switch into a rack. You should follow the procedures given in this chapter when installing, removing or reconfiguring your switch into a rack environment.

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Chapter 1

Introduction

1-1   Overview

Some Supermicro switches can be equipped with an optional rail kit (CSE-PT52L) to make it easy to install them in a rack. This manual provides instructions for installing the CSE-PT52L mounting rails onto a rack and for installing the switch into the mounting rails. Following these steps in the order given should enable you to have the system operational within a minimum amount of time.

1-2   Unpacking the System

You should inspect the box the switch was shipped in and note if it was damaged in any way. If the switch itself shows damage you should file a damage claim with the carrier who delivered it.

Decide on a suitable location for the rack unit that will hold your switch. It should be situated in a clean, dust-free area that is well ventilated. Avoid areas where heat, electrical noise and electromagnetic fields are generated. You will also need it placed near a grounded power outlet. Be sure to read the Rack, General and Lithium Battery Precautions in the next section.

1-3   Preparing for Setup

The optional rail kit (CSE-PT52L) ships in a separate box and that box should include two sets of rail assemblies, two rail mounting brackets and the mounting screws needed to install the system into the rack. Read this section in its entirety before you begin the installation procedure outlined in the sections that follow.

Choosing a Setup Location

• Leave enough clearance in front of the rack to enable you to open the front door completely (~25 inches).

• Leave approximately 30 inches of clearance in the back of the rack to allow for sufficient airflow and ease in servicing.

• This product is for installation only in a Restricted Access Location (dedicated equipment rooms, service closets and similar environments).

 Warnings and Precautions!

Rack Precautions

- Ensure that the leveling jacks on the bottom of the rack are fully extended to the floor with the full weight of the rack resting on them.

- In a single rack installation, stabilizers should be attached to the rack.

- In multiple rack installations, the racks should be coupled together.

- Always make sure the rack is stable before extending a component from the rack.

- You should extend only one component at a time - extending two or more simultaneously may cause the rack to become unstable.

General Precautions

- Review the electrical and general safety precautions that came with the components you are adding to your switch (if any).

- Determine the placement of each component in the rack before you install the rails.

- Install the heaviest server components on the bottom of the rack first, and then work up.

- Use a regulating uninterruptible power supply (UPS) to protect the servers and switches from power surges, voltage spikes and to keep your system operating in case of a power failure.

- Always keep the rack's front door and all panels and components closed when not servicing to maintain proper cooling.

- Do not remove the cover of the switch, there are no user-serviceable components inside. Take unit to service center for repairs and servicing.

- Disconnect all power cords before servicing.

CAUTION: Slide/rail mounted equipment is not to be used as a shelf or work space.

Lithium Battery Precaution

This switch may contain a lithium battery. There is a danger of explosion if the battery is incorrectly replaced.

- Installing the battery upside-down may reverse the polarities and cause the battery to explode.

- Replace the battery only with the same or equivalent type recommended by the manufacturer.

- Dispose of used batteries according to the manufacturer's instructions.

- Do not damage the battery in any way, a damaged battery may release hazardous materials into the environment.

- Do not discard a used battery in the garbage or a public landfill.

- Please comply with the regulations set up by your local hazardous waste management agency to dispose of your used battery properly.

Rack Mounting Considerations

Ambient Operating Temperature

If installed in a closed or multi-unit rack assembly, the ambient operating temperature of the rack environment may be greater than the ambient temperature of the room. Therefore, consideration should be given to installing the equipment in an environment compatible with the manufacturer's maximum rated ambient temperature (Tmra).

Reduced Airflow

Equipment should be mounted into a rack so that a hazardous condition does not arise due to uneven mechanical loading.

Mechanical Loading

Equipment should be mounted into a rack so that a hazardous condition does not arise due to uneven mechanical loading.

Circuit Overloading

Consideration should be given to the connection of the equipment to the power supply circuitry and the effect that any possible overloading of circuits might have on overcurrent protection and power supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Reliable Ground

A reliable ground (earth) must be maintained at all times. To ensure this, the rack itself should be grounded. Particular attention should be given to power supply connections other than the direct connections to the branch circuit (i.e. the use of power strips, etc.).

Chapter 2

Rack Installation

2-1 Rack Mounting Instructions

This chapter provides information on installing the switch into a rack unit with the CSE-PT52L rail kit. There are a variety of rack units on the market, which may mean the assembly procedure will differ slightly. You should also refer to the installation instructions that came with the rack unit you are using.

NOTE: This rail will fit a rack between 26" and 33.5" deep.

Identifying the Sections of the Rack Rails

The CSE-PT52L rail kit package includes two rack rail assemblies in the rack mounting kit. Each assembly consists of two sections: a fixed inner rail that secures directly to the side of the switch, and a fixed outer rail that secures directly to the rack itself.
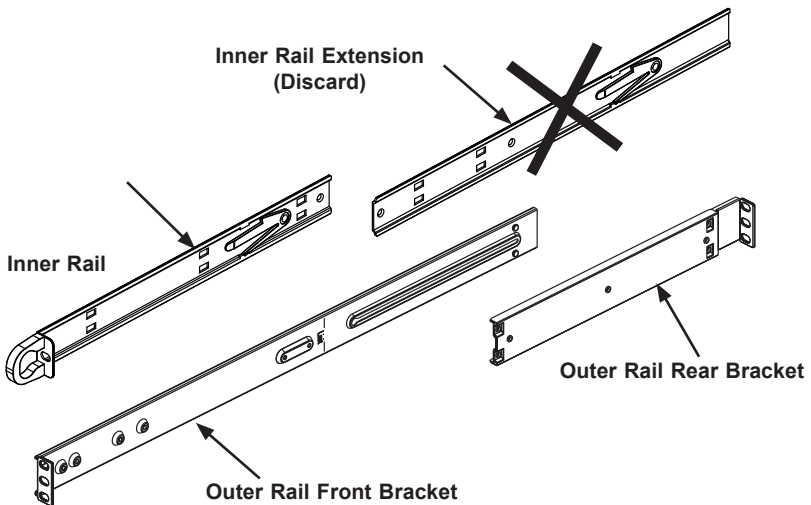
Figure 2-1: Identifying the Sections of the Rack Rails

Separating the Sections of the Rails

The CSE-PT52L rail kit ships with the front inner rail attached to the front outer rail. These must be separated prior to installation in the rack.

Separating the Rails

1. Separate the inner rail from the outer rail by depressing the black plastic flange inside the inner rail. This will release the outer rail.

2. Silde the inner rail forward and out of the outer rail.

3. The CSE-PT52L rail kit also includes a set of inner rail extensions. Only the inner rails are required and you may discard the inner rail extensions.
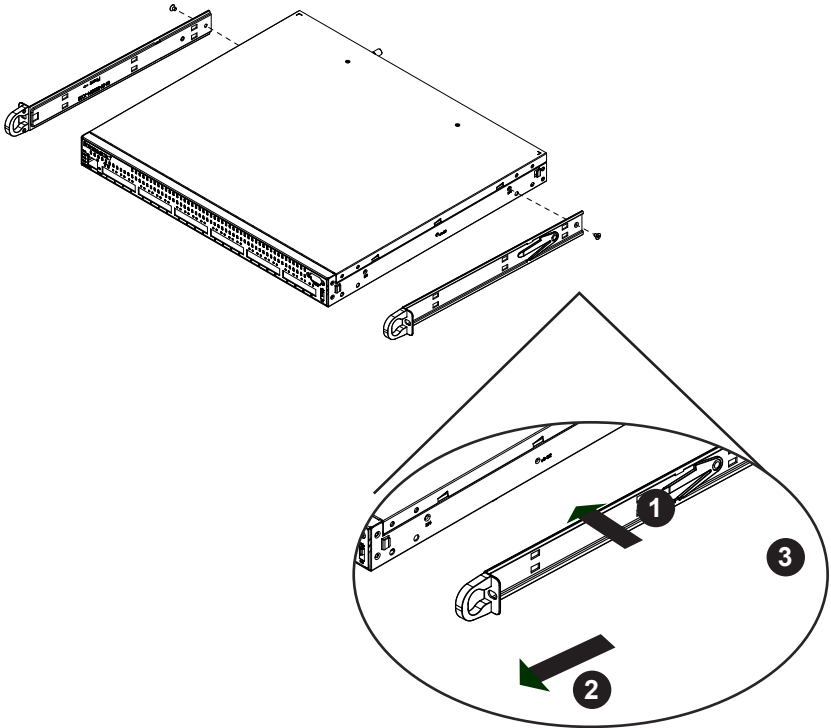
Figure 2-2: Installing the Inner Rail
Note: Your switch may differ from the illustrations in this manual

2-2   Inner Rails

Installing the Inner Rails

Installing the Inner Rails on the Switch

1. Place one of the inner rails on one side of the switch aligning the hook on the side of the switch with the mounting hole in the rail. Make sure the inner rail faces outward, as illustrated above.

2. Slide the inner rail forward so that the rail fits securely into the hook on the side of the switch.

3. Secure the inner rail to the switch with one screw as illustrated above.
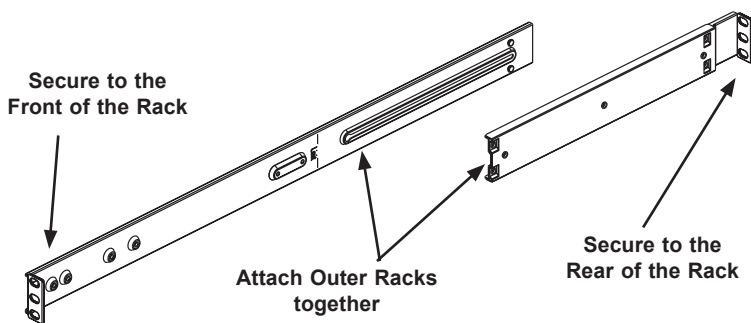
4. Repeat steps 1-2 for the remaining inner rail.

Figure 2-3: Assembling the Outer Rails

2-3   Outer Rails

Installing the Outer Rails

Installing the Outer Rails on the Rack

1. Attach the shorter outer rail to the outside of the longer outer rail. You must
    align the pins with the slides. Also, both bracket ends must face the same
    direction.

2. Adjust both the shorter and longer brackets to the proper length so that the
    rail fits snugly into the rack.

3. Secure the long bracket to the front side of the rack with two M5 screws and
    the short bracket to the rear side of the rack with three M5 screws.
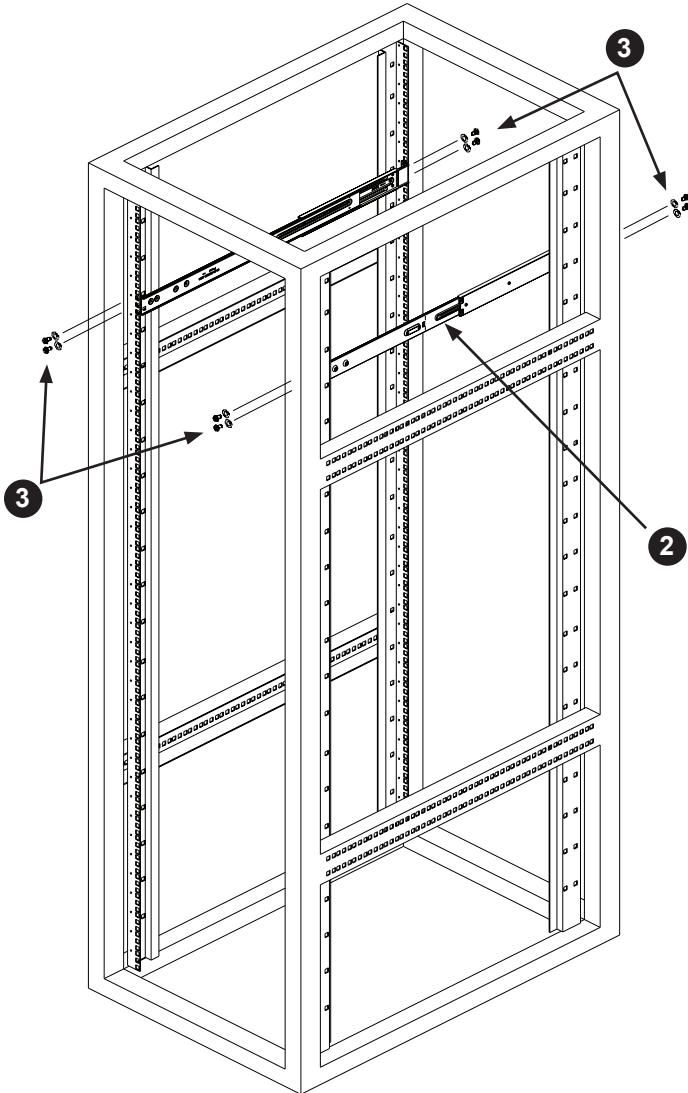
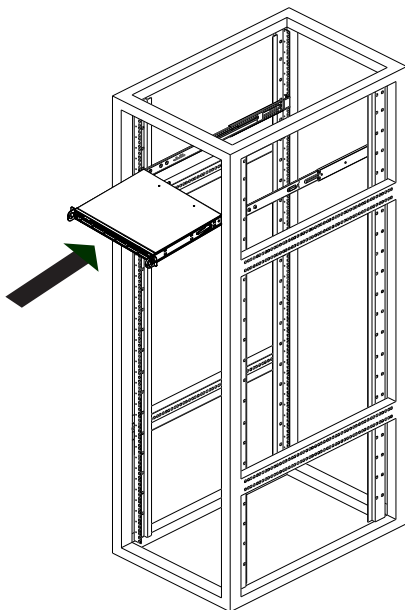4. Repeat steps 1-4 for the remaining outer rail.

Figure 2-4: Installing the Outer Rails onto the Rack

Figure 2-5: Installing the Switch into a Rack
Note: Your switch may differ from the illustrations in this manual

2-4   Installing the Switch
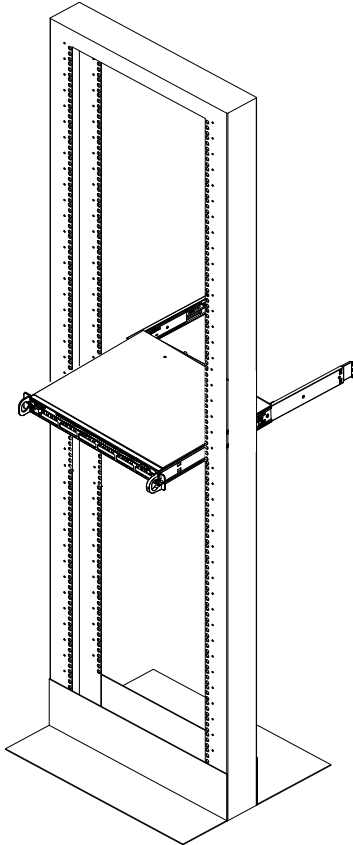
Installing the Switch into a Rack

Installing the Switch

1. Confirm that inner rails have been secured to the switch.

2. Confirm that the outer rails are installed on the rack.

3. Align the ends of the inner rails on the switch with the front of the outer rails on the rack.

4. Slide the inner rails into the outer rails, keeping the pressure even on both sides (you may have to depress the locking tabs when inserting). When the switch has been pushed completely into the rack, you should hear the locking tabs click into the locked position.

5. (Optional) Insert and tighten the thumbscrews which secure the front of the switch to the rack.

Installing the Switch into a Telco rack

To install the switch into a Telco (post style) rack, use two L-shaped brackets on either side of the switch (four total). First, determine how far the switch will extend out the front of the rack. Larger switches should be positioned to balance the weight between front and back. Attach the two front brackets to each side of the switch, then position the two rear brackets with just enough space to accommodate the width of the telco rack. Finish by sliding the switch into the rack and tightening the brackets to the rack.

Figure 2-6: Installing the Switch into a Telco Rack
Note: Your switch may differ from the illustrations in this manual

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