



# Sun Fire™ 4810/4800/3800 Systems Cabinet Mounting Guide

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650-960-1300

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# Contents

---

Preface ix

- 1. Installing the Sun Fire 4810 System into a Sun Fire Cabinet 1-1**
  - 1.1 Tools 1-1
  - 1.2 Mounting the Brackets 1-2
  - 1.3 Mounting the Sun Fire 4810 System 1-4
  - 1.4 Connecting Power Cables to the Sun Fire 4810 System 1-6
  - 1.5 Attaching Cabinet Front Panels 1-8
  - 1.6 Attaching Cabinet Guards 1-10
  - 1.7 Connecting the System Controller to the FrameManager 1-11
  
- 2. Installing the Sun Fire 4800 System into a Sun Fire Cabinet 2-1**
  - 2.1 Tools 2-1
  - 2.2 Mounting the Rails 2-2
  - 2.3 Removing the Bumper 2-4
  - 2.4 Removing the Side Panels 2-5
  - 2.5 Removing the Casters 2-6
  - 2.6 Mounting the Sun Fire 4800 System 2-6
  - 2.7 Connecting Power Cables to the Sun Fire 4800 System 2-8
  - 2.8 Attaching Cabinet Front Panels 2-10
  - 2.9 Attaching Cabinet Guards 2-12

2.10 Connecting the System Controller to the FrameManager 2-13

**3. Installing the Sun Fire 3800 System into a Sun Fire Cabinet 3-1**

3.1 Tools 3-1

3.2 Mounting the Rails 3-2

3.3 Installing the Cable Raceways 3-4

3.4 Mounting the Sun Fire 3800 System 3-6

3.5 Installing the Sun Fire Cabinet Extension Brackets 3-8

3.6 Connecting Power Cables to the Sun Fire 3800 System 3-10

3.7 Attaching Cabinet Front Panels 3-12

3.8 Attaching Cabinet Guards 3-14

3.9 Connecting the System Controller to the FrameManager 3-15

**A. Regulatory Compliance Statements A-1**

**B. Compliance Statements 1**

# Figures

---

- FIGURE 1-1 Mounting System Brackets to the Sun Fire 4810 System 1-2
- FIGURE 1-2 Lettered Holes on the Cabinet Bracket 1-3
- FIGURE 1-3 Adding Cabinet Brackets and Rails to the Sun Fire Cabinet 1-4
- FIGURE 1-4 Mounting the Sun Fire 4810 System into a Sun Fire Cabinet 1-5
- FIGURE 1-5 Power Switch Locations on the Cabinet Mounted Sun Fire 4810 System 1-7
- FIGURE 1-6 Cabinet Front Panel Locations 1-9
- FIGURE 1-7 Cabinet Guard Installation 1-10
- FIGURE 2-1 Rail Installation in Sun Fire Cabinet 2-3
- FIGURE 2-2 Bumper location on Sun Fire 4800 system 2-4
- FIGURE 2-3 Removing Side Panels from the Sun Fire 4800 system 2-5
- FIGURE 2-4 Mounting the Sun Fire 4800 System into the Sun Fire Cabinet 2-7
- FIGURE 2-5 Power Switch Locations on the Cabinet Mounted Sun Fire 4800 System 2-9
- FIGURE 2-6 Cabinet Front Panel Locations 2-11
- FIGURE 2-7 Cabinet Guard Installation 2-12
- FIGURE 3-1 Rail Hole Identification 3-2
- FIGURE 3-2 Mounting Bracket Installation in Sun Fire Cabinet 3-3
- FIGURE 3-3 Cable Raceway Installation 3-5
- FIGURE 3-4 Securing the Sun Fire 3800 System in the Sun Fire Cabinet 3-7
- FIGURE 3-5 Installing Sun Fire Cabinet Extension Brackets 3-9

- FIGURE 3-6 Power Switch Locations on the Cabinet Mounted Sun Fire 3800 System 3-11
- FIGURE 3-7 Cabinet Front Panel Locations 3-13
- FIGURE 3-8 Cabinet Guard Installation 3-14

# Tables

---

TABLE 1-1	Sun Fire 4810 Cabinet Guard Locations	1-10
TABLE 2-1	Sun Fire 4800 Cabinet Guard Locations	2-12
TABLE 3-1	Sun Fire 3800 System Rackmounting Order	3-2
TABLE 3-2	Sun Fire 3800 System Cable Raceway Locations	3-4
TABLE 3-3	Sun Fire 3800 Cabinet Guard Locations	3-14





# Preface

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The *Sun Fire™ 4810/4800/3800 Systems Cabinet Mounting Guide* provides installation instructions for mounting the Sun Fire 4810, Sun Fire 4800, and Sun Fire 3800 systems into a Sun Fire cabinet. These instructions are not for mounting these systems in industry standard 19-inch racks.

These instructions are for an experienced systems or field engineer with networking knowledge.

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## Typographic Conventions

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Typeface or Symbol	Meaning	Examples
AaBbCc123	The names of commands, files, and directories; on-screen computer output.	Edit your <code>.login</code> file. Use <code>ls -a</code> to list all files.
<b>AaBbCc123</b>	What you type, when contrasted with on-screen computer output.	<code>% su</code> Password:
<i>AaBbCc123</i>	Book titles, new words or terms, words to be emphasized. Command-line variable; replace with a real name or value.	Read Chapter 6 in the <i>User's Guide</i> . These are called <i>class</i> options. You <i>must</i> be superuser to do this. To delete a file, type <code>rm filename</code> .

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## Related Documentation

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<b>Application</b>	<b>Title</b>	<b>Part Number</b>
	<i>Sun Fire 4810/4800/3800 System Getting Started</i>	805-7374
	<i>Sun Fire 6800/4810/4800/3800 Systems Overview Manual</i>	805-7362
Hardware	<i>Sun Fire 4810/4800/3800 System Installation Guide</i>	805-7375
	<i>Sun Fire Cabinet Installation and Reference Manual</i>	806-2942
	<i>Sun Fire 6800/4810/4800/3800 Systems Service Manual</i>	805-7363
Software	<i>Sun Fire 6800/4810/4800/3800 System Controller Command Reference Manual</i>	805-7372
	<i>Sun Fire 6800/4810/4800/3800 Systems Platform Administration Manual</i>	805-7373

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## Cautions and Notes



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**Caution** – This equipment contains lethal voltage. Accidental contact with centerplane, card cage, and drive areas can result in serious injury or death.

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**Caution** – Improper handling by unqualified personnel can cause serious damage to this equipment. Unqualified personnel who tamper with this equipment may be held liable for any resultant damage to the equipment.

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Individuals who remove any outer panels or open covers to access this equipment must observe all safety precautions and ensure compliance with skill level requirements, certification, and all applicable local and national laws.

Procedures contained in this document must be performed by qualified service-trained maintenance providers.

---

**Note** – Before you begin, carefully read each of the procedures in this manual. If you have not performed similar operations on comparable equipment, *do not attempt* to perform these procedures.

---



# Installing the Sun Fire 4810 System into a Sun Fire Cabinet

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The Sun Fire 4810 system is designed to be mounted in a rack. All the hardware necessary to mount the system in a Sun Fire cabinet enclosure is included in the shipping carton.

- Tools—page 1-1
- Mounting the Brackets—page 1-2
- Mounting the Sun Fire 4810 System—page 1-4
- Connecting Power Cables to the Sun Fire 4810 System—page 1-6
- Attaching Cabinet Front Panels—page 1-8
- Attaching Cabinet Guards—page 1-10
- Connecting the System Controller to the FrameManager—page 1-11

---

## 1.1 Tools

You need the following tools:

- Screwdriver, Phillips No. 2



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**Caution** – The Sun Fire 4810 system weighs approximately 305 lbs (138.3 kg). To prevent personal injury, two people are needed to move the system safely into the cabinet using a computer equipment lift rated for 300 lbs or greater.

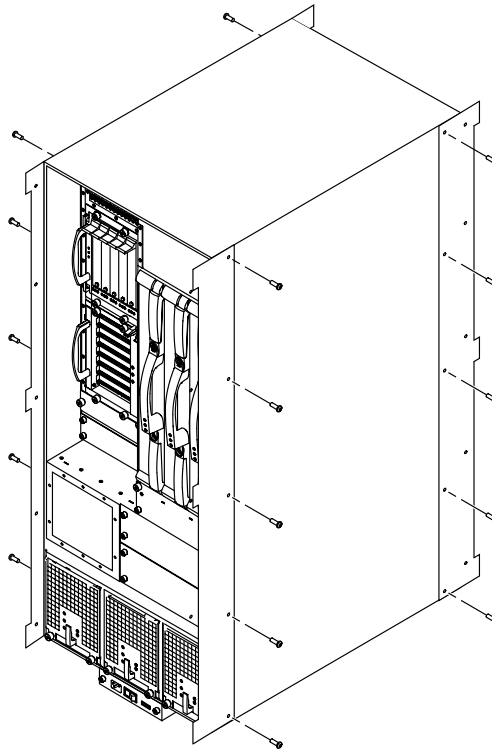
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## 1.2 Mounting the Brackets

1. **Mount the four system brackets vertically onto the Sun Fire 4810 system using five screws each. Mount the brackets so that they extend beyond the front and rear of the system.**

the system brackets are identical so they can be mounted on either side of the Sun Fire 4810 system (FIGURE 1-1).



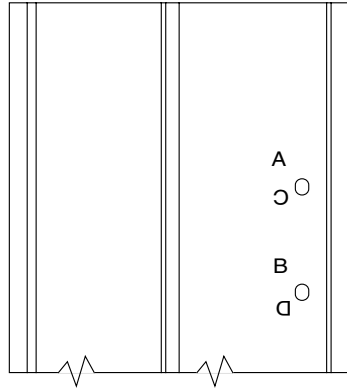
**FIGURE 1-1** Mounting System Brackets to the Sun Fire 4810 System

2. **Mount the two rails horizontally into the Sun Fire cabinet using four screws per rail. Screw each hanger hole into cabinet hole #22 and the bottom slots into cabinet hole #20.**

The rails are identical so they can be mounted on either side of the system. They are shown in FIGURE 1-3.

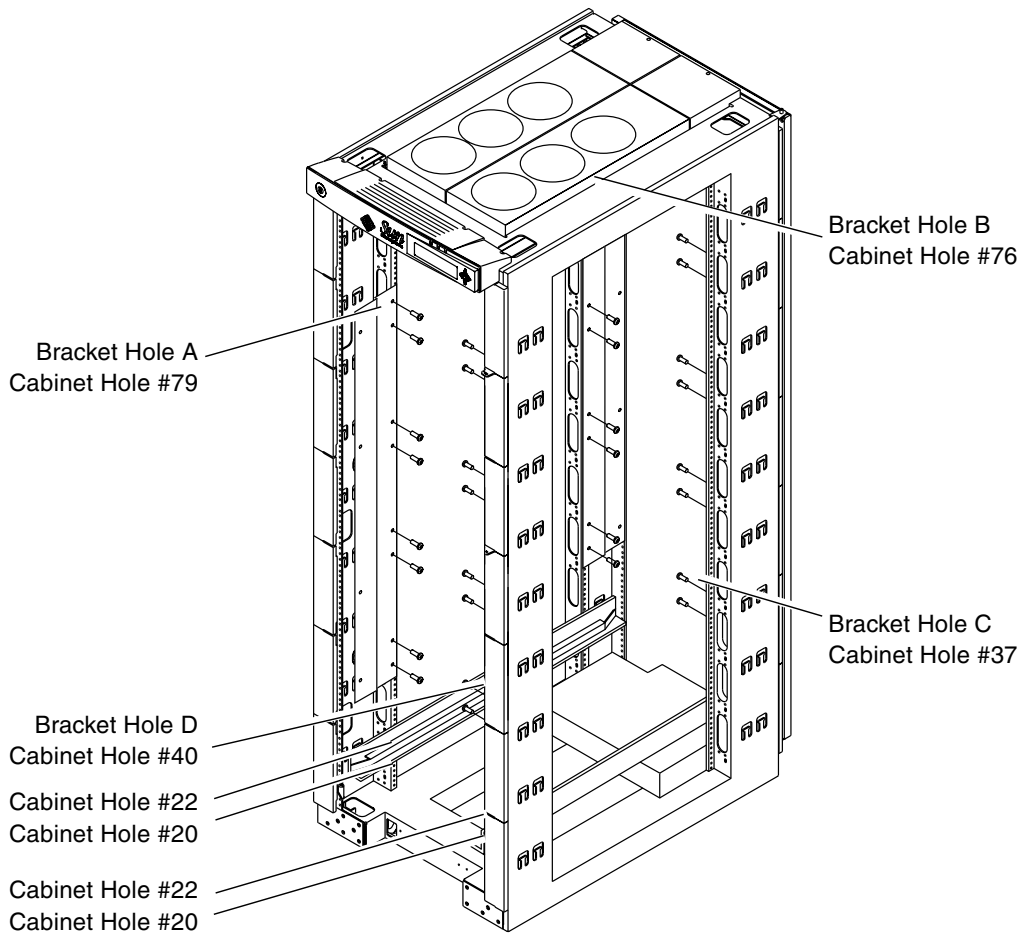
**3. Mount the four cabinet brackets vertically into the Sun Fire cabinet using eight screws for each bracket.**

The holes near the ends of the bracket are marked with letters (FIGURE 1-2). Ignore letters that appear upside-down, they will be correctly oriented on the other end.



**FIGURE 1-2** Lettered Holes on the Cabinet Bracket

See FIGURE 1-3 for hole designations. Once the lettered holes are aligned, the remaining holes in the bracket will line up with holes in the cabinet.



**FIGURE 1-3** Adding Cabinet Brackets and Rails to the Sun Fire Cabinet

## 1.3 Mounting the Sun Fire 4810 System

1. Locate three power cords close to where the system will be mounted and untie them from the cabinet so that they will be accessible after the system has been mounted.

The power cords are pre-installed in the Sun Fire cabinet with one end attached to the redundant transfer unit (RTU) assemblies.



---

**Note** – Refer to the *Rackmount Placement Matrix*, at <http://docs.sun.com> for power cord cabling information.

---



**Caution** – The Sun Fire 4810 system weighs approximately 305 lbs (138.3 kg). To prevent personal injury, two people are needed to move the system safely into the cabinet using a computer equipment lift.

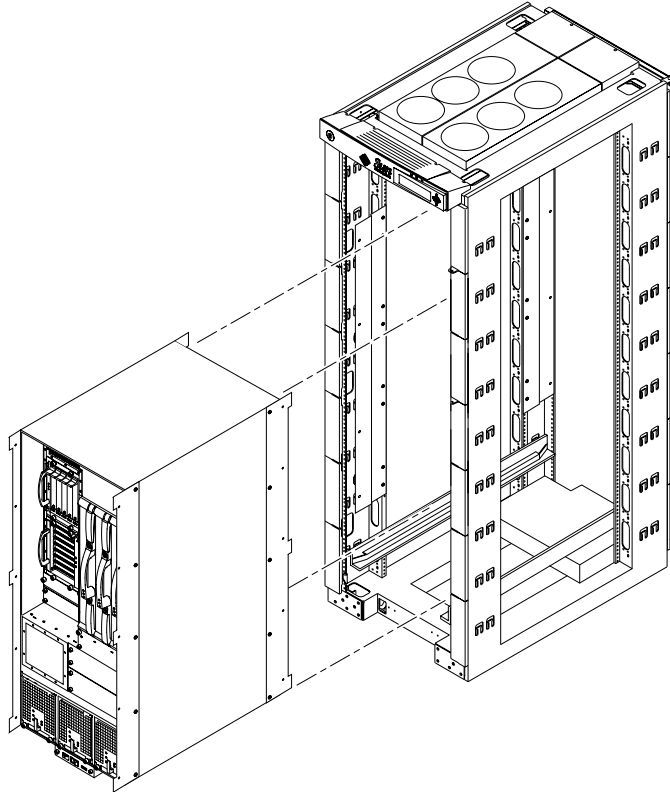
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**Caution** – Make sure the cabinet is stabilized before mounting the system and storage devices. The anti-tilt bar can be used to prevent the cabinet from tilting.

---

2. Insert the system onto the horizontal rails in the Sun Fire cabinet (FIGURE 1-4).



**FIGURE 1-4** Mounting the Sun Fire 4810 System into a Sun Fire Cabinet

3. Secure the system brackets to the cabinet brackets with four screws per bracket.

---

## 1.4 Connecting Power Cables to the Sun Fire 4810 System

1. **Ensure that each power switch on the Sun Fire cabinet is set to off** (FIGURE 1-5).

---

**Note** – In a dual RTU configuration, there will be power switches in both the front and rear of the cabinet. All power switches must be turned off.

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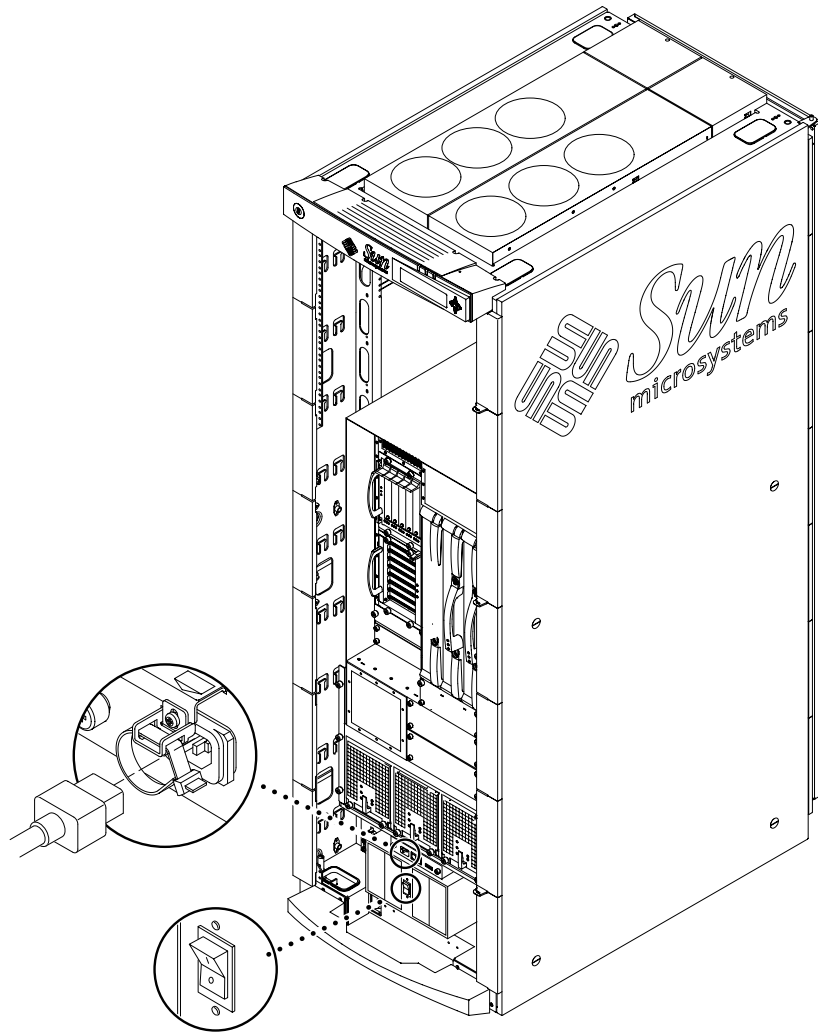
2. **Ensure that each power switch on the Sun Fire 4810 system is set to off** (FIGURE 1-5).
3. **Connect the power cord to the power cord sockets on system.**  
Three power cords should have been untied from the cabinet and moved out of the way during Step 1 of Section 1.3.
4. **Loosen the screw above the power cord socket.**  
This will loosen the bracket that holds the tie wrap.
5. **Position the bracket tightly against the power cord.**
6. **Tighten the tie wrap around the power cord to keep it from being dislodged.**  
Make sure the tie wrap is tight. Do not trim excess tie wrap.
7. **Tighten the screw above the power cord.**
8. **Repeat Step 3 through Step 7 for each of the three power cords.**



---

**Caution** – Risk of electric shock. Do NOT turn on AC power to the unit yet.

---



**FIGURE 1-5** Power Switch Locations on the Cabinet Mounted Sun Fire 4810 System

---

## 1.5 Attaching Cabinet Front Panels

1. Place the first cabinet front panel as close as possible to the top of the system, and secure the panel to the Sun Fire cabinet by tightening the screws through the left and right sides of the panel.
2. Secure subsequent panels by tightening the screws through the left and right front of each panel (FIGURE 1-6).

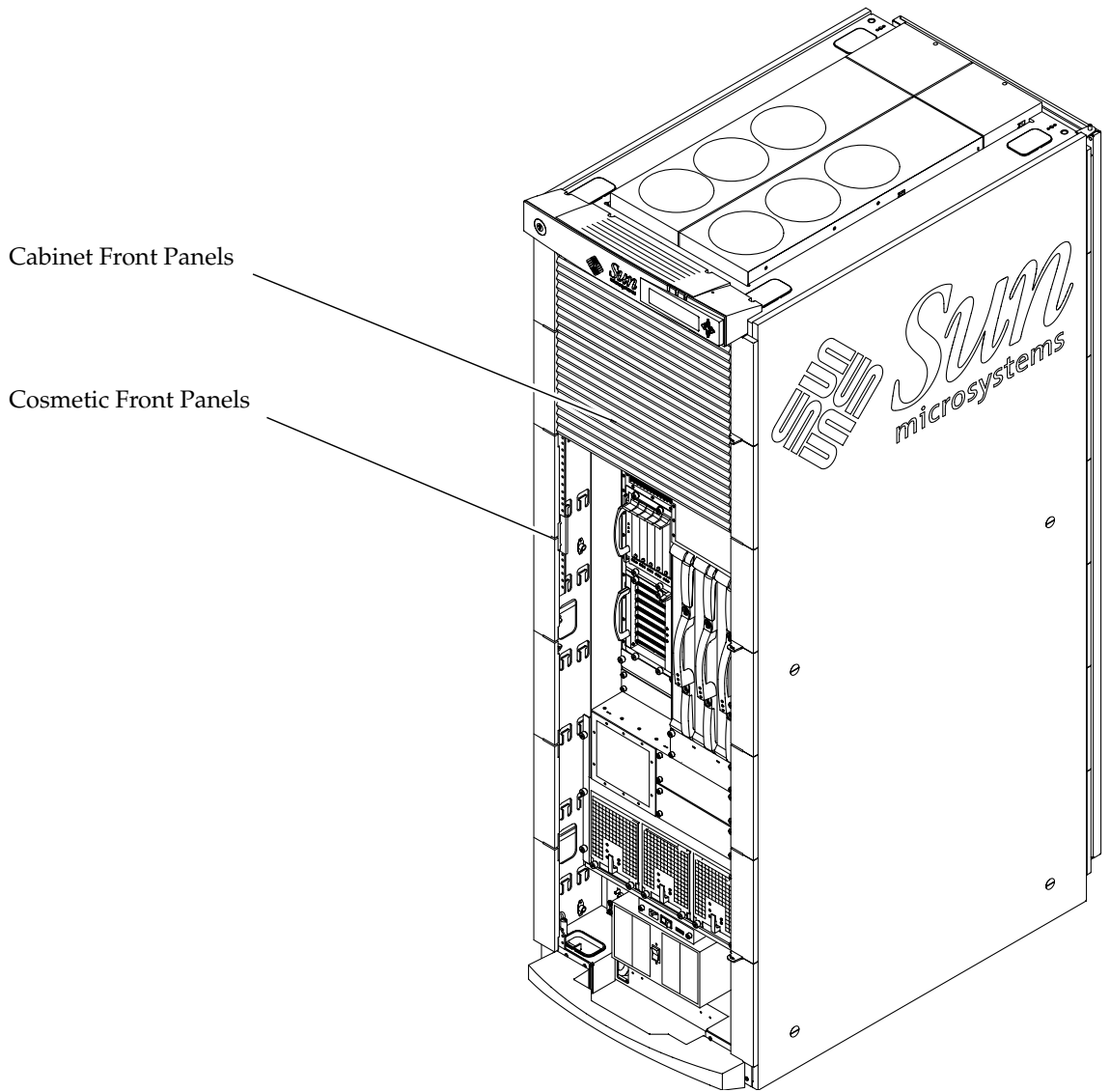
Place each front panel as close to the one below as possible. Use different sized front panels as necessary to completely fill in the gap above the system. If unable to fill in the entire gap leave the smallest possible gap at the top of the cabinet.

---

**Note** – The large cabinet front panels are not simply cosmetic, they prevent hot air expelled from the rear of the cabinet from reentering the system from the front.

---

3. Secure small cosmetic panels on the cabinet adjacent to the system.



**FIGURE 1-6** Cabinet Front Panel Locations

## 1.6 Attaching Cabinet Guards

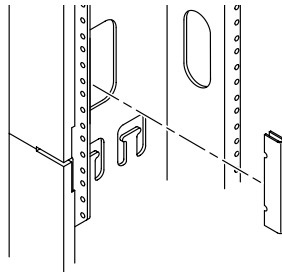
The cabinet guards are designed to protect against injuries that may occur when boards are removed from the system.

1. **Locate the cabinet guard hole locations on the rear of the Sun Fire cabinet using TABLE 1-1.**

**TABLE 1-1** Sun Fire 4810 Cabinet Guard Locations

Left Side of Cabinet	Right Side of Cabinet
Top notch in rear cabinet hole #74	Top notch in rear cabinet hole #70
Top notch in rear cabinet hole #60	Top notch in rear cabinet hole #61

2. **Align the upper “v” notch on the cabinet guard with the appropriate numbered hole, and press firmly in the middle of the guard until it stops against the edge of the cabinet (FIGURE 1-7).**



**FIGURE 1-7** Cabinet Guard Installation

---

## 1.7 Connecting the System Controller to the FrameManager

The Y-serial cable allows the primary System Controller board to be accessed by the Sun Fire cabinet FrameManager and a serial cable terminal connection simultaneously.

1. **Connect the single end of the Y-serial cable** (located in the shipping kit that came with the system) **to the serial port on the primary system controller.**
2. **Connect the 'A' end of the Y-serial cable to the serial cable terminal connection (if any).**
3. **Connect the 'B' end of the Y-serial cable to the P2 Cable.**

The P2 cable is pre-connected to the FrameManager and secured among the power cables on the right side of the Sun Fire cabinet.

4. **To continue with the installation, refer to the *Sun Fire 4810/4800/3800 Systems Installation Guide* Section 2.3.**





# Installing the Sun Fire 4800 System into a Sun Fire Cabinet

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The Sun Fire 4800 system is designed to be either a standalone unit or mounted in a rack. All the necessary hardware to mount the system in a Sun Fire cabinet is included in the shipping carton.

The Sun Fire cabinet can house a single Sun Fire 4800 system.

- Tools—page 2-1
- Mounting the Rails—page 2-2
- Removing the Bumper—page 2-4
- Removing the Side Panels—page 2-5
- Removing the Casters—page 2-6
- Mounting the Sun Fire 4800 System—page 2-6
- Connecting Power Cables to the Sun Fire 4800 System—page 2-8
- Attaching Cabinet Front Panels—page 2-10
- Attaching Cabinet Guards—page 2-12
- Connecting the System Controller to the FrameManager—page 2-13

---

## 2.1 Tools

You need the following tools:

- Screwdriver, Phillips No. 2



---

**Caution** – The Sun Fire 4800 system weighs approximately 289 lbs (131.1 kg). To prevent personal injury, two people are needed to move the system safely into the cabinet using a computer equipment lift rated for 300 lbs or greater.

---

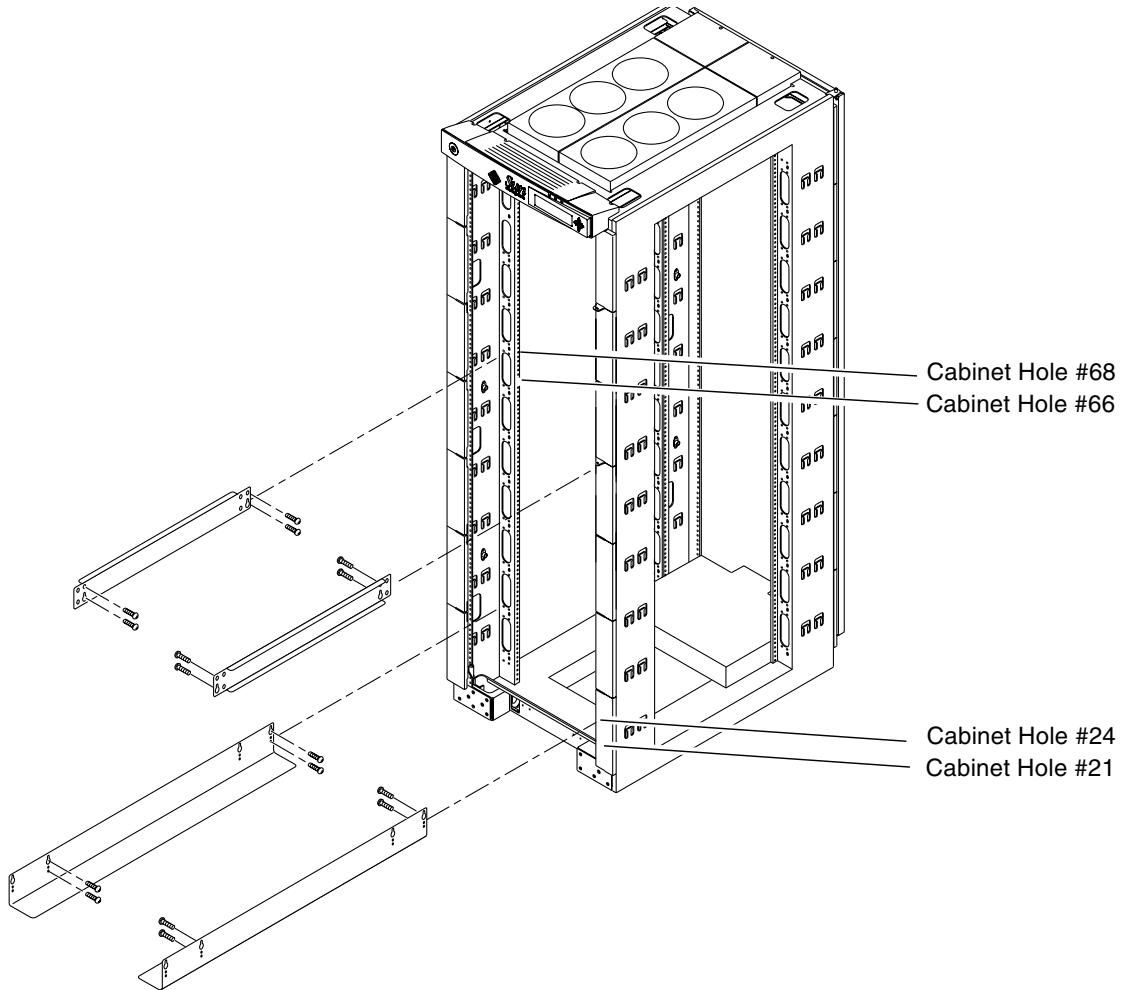
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## 2.2 Mounting the Rails

1. **Attach the rails to the Sun Fire cabinet using four screws for each rail (two screws through the hanger holes and two screws through the slots above the hanger holes). Cabinet holes numbers are shown in FIGURE 2-1.**

The upper rails are identical. Arrows are embossed near the hanger holes. When installed the arrows should point up, this will force the upper rails into the correct orientation.

The holes on the bottom rail are identical on the left inside and right inside so that the rail can be mounted on either side of the cabinet. Use the rear set of hanger holes on the bottom rail to cause the bottom rail to sit forward in the cabinet.

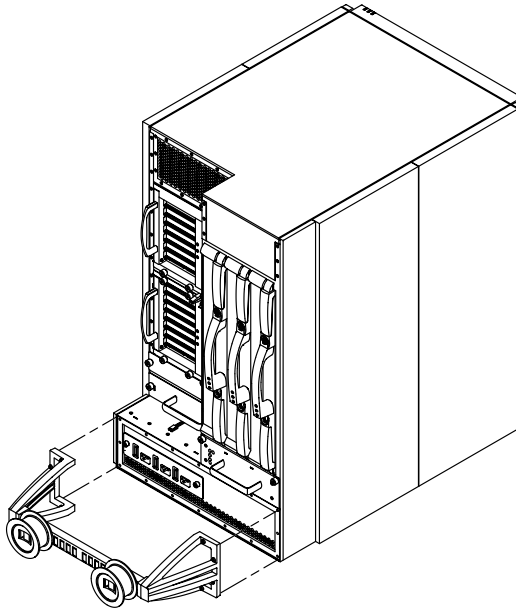


**FIGURE 2-1** Rail Installation in Sun Fire Cabinet

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## 2.3 Removing the Bumper

1. Remove the four M5 screws that hold the bumper to the Sun Fire 4800 system.

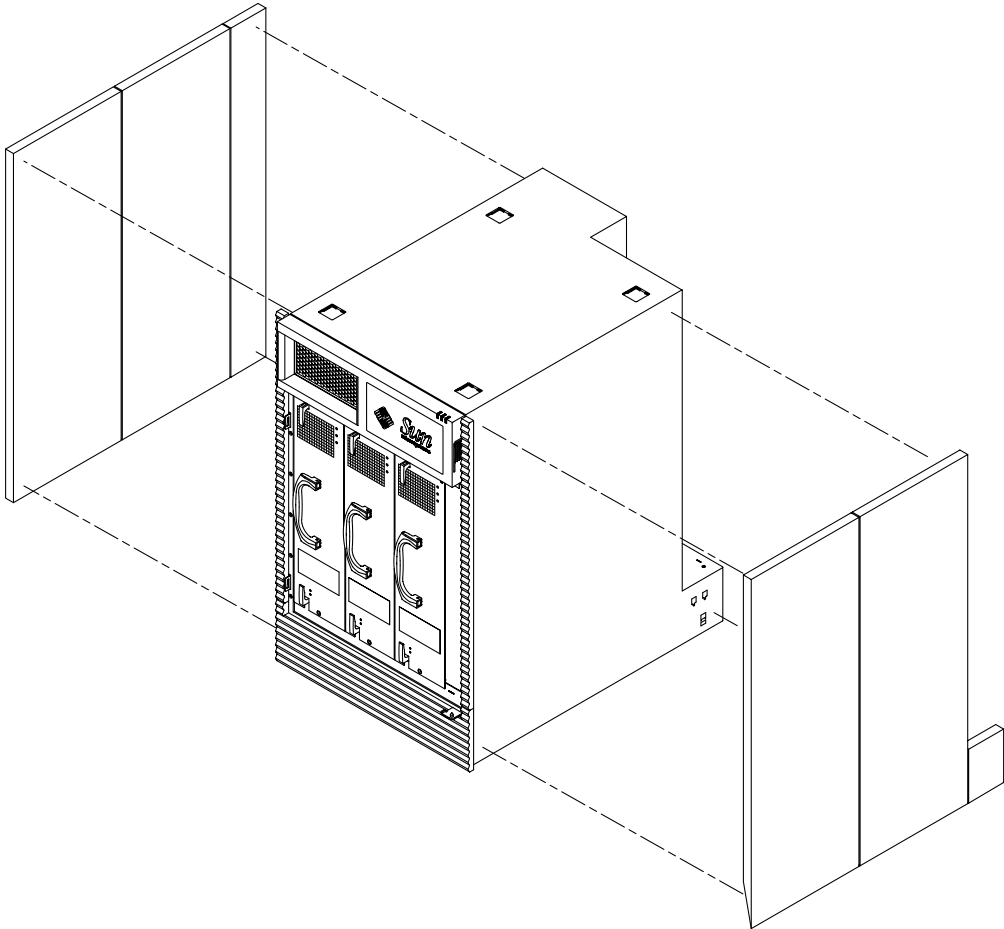


**FIGURE 2-2** Bumper location on Sun Fire 4800 system

---

## 2.4 Removing the Side Panels

1. Pull out on the bottom of the panel while sliding the panel upwards until the panel snaps out of its locked position.
2. Repeat Step 1 for all six panels.



**FIGURE 2-3** Removing Side Panels from the Sun Fire 4800 system

---

## 2.5 Removing the Casters

The Sun Fire 4800 system must be elevated above the floor with a computer equipment lift so the bottom of the system can be accessed.

1. Remove the four M6 screws that hold the caster to the bottom of the system.
2. Repeat Step 1 for all four casters.

---

## 2.6 Mounting the Sun Fire 4800 System

1. Locate three power cords close to where the system will be mounted and untie them from the cabinet so that they will be accessible after the system has been mounted.

The power cords are pre-installed in the Sun Fire cabinet with one end attached to the redundant transfer unit (RTU) assemblies.

---

**Note** – Refer to the *Rackmount Placement Matrix*, at <http://docs.sun.com> for power cord cabling information.

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**Caution** – The Sun Fire 4800 system weighs approximately 289 lbs (131.1 kg). To prevent personal injury, two people are needed to move the system safely into the cabinet using a computer equipment lift.

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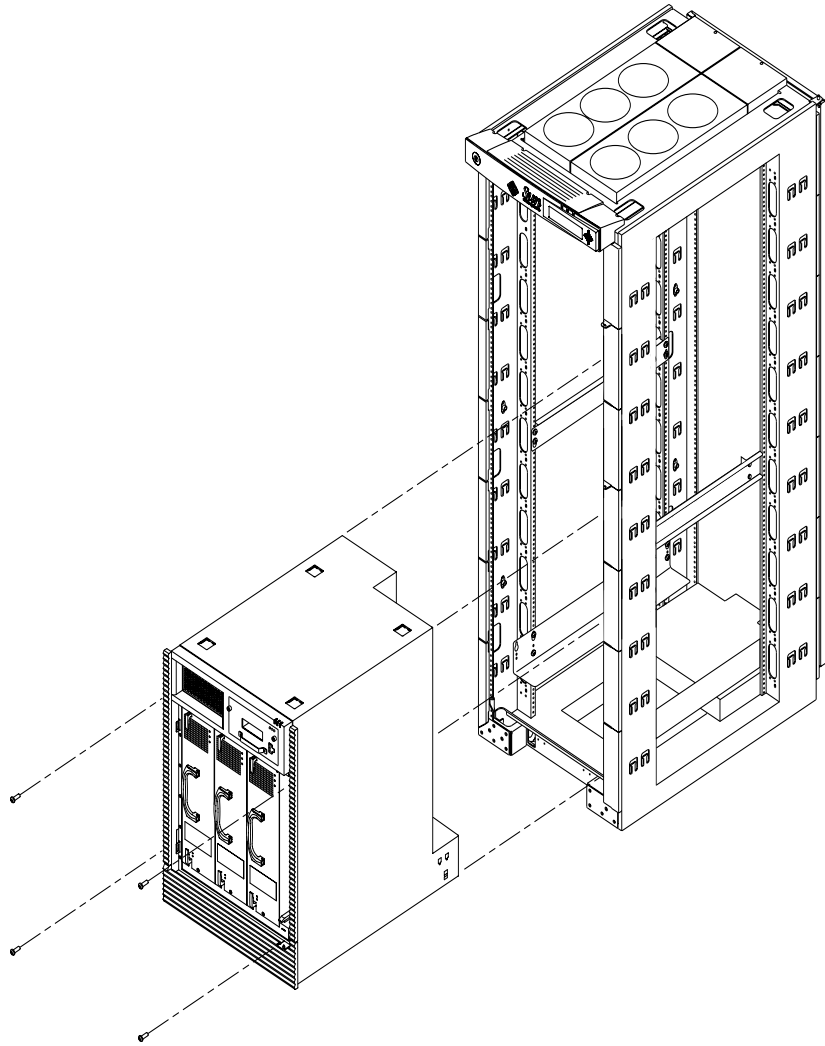
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**Caution** – Make sure the cabinet is stabilized before mounting the system and storage devices. The anti-tilt bar can be used to prevent the cabinet from tilting.

---

2. Insert the system, from the front, onto the bottom mounting rails in the cabinet (FIGURE 2-4).
3. Secure the front of the system to the cabinet using four screws.
4. Attach L-brackets to the upper rails using two screws to attach each bracket to the rails and two screws to attach each bracket to the system.

Facing the rear of the cabinet, the larger L-bracket should be attached to the left side and the smaller L-bracket to the right side.



**FIGURE 2-4** Mounting the Sun Fire 4800 System into the Sun Fire Cabinet

---

## 2.7 Connecting Power Cables to the Sun Fire 4800 System

1. Ensure that each power switch on the Sun Fire cabinet is set to off (FIGURE 2-5).

---

**Note** – In a dual RTU configuration, there will be power switches in both the front and rear of the cabinet. All power switches must be turned off.

---

2. Ensure that each power switch on the Sun Fire 4800 system is set to off.
3. Connect the previously selected power cord to a power cord socket on the system.  
Three power cords should have been untied from the cabinet and moved out of the way during Step 1 of Section 2.6.
4. Loosen the screw above the power cord socket.  
This will loosen the bracket that holds the tie wrap.
5. Position the bracket tightly against the power cord.
6. Tighten the tie wrap around the power cord to keep it from being dislodged.  
Make sure the tie wrap is tight. Do not trim excess tie wrap.
7. Tighten the screw above the power cord socket.
8. Repeat Step 3 through Step 7 for each of the three power cords.

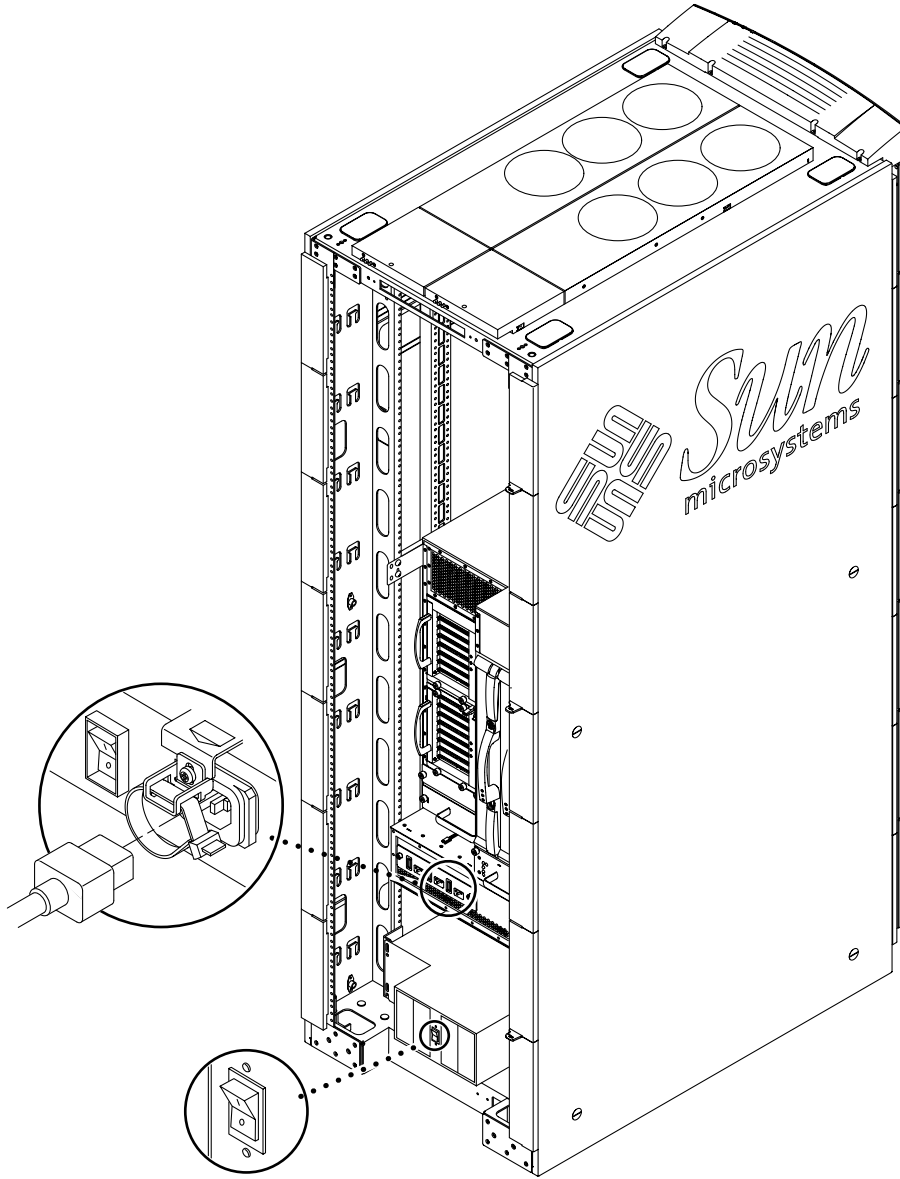


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**Caution** – Risk of electric shock. Do NOT turn on AC power to the unit yet.

---





**FIGURE 2-5** Power Switch Locations on the Cabinet Mounted Sun Fire 4800 System

---

## 2.8 Attaching Cabinet Front Panels

1. Place the first cabinet front panel as close as possible to the top of the system, and secure the panel to the Sun Fire cabinet by tightening the screws through the left and right sides of the panel.
2. Secure subsequent panels by tightening the screws through the left and right front of each panel (FIGURE 2-6).

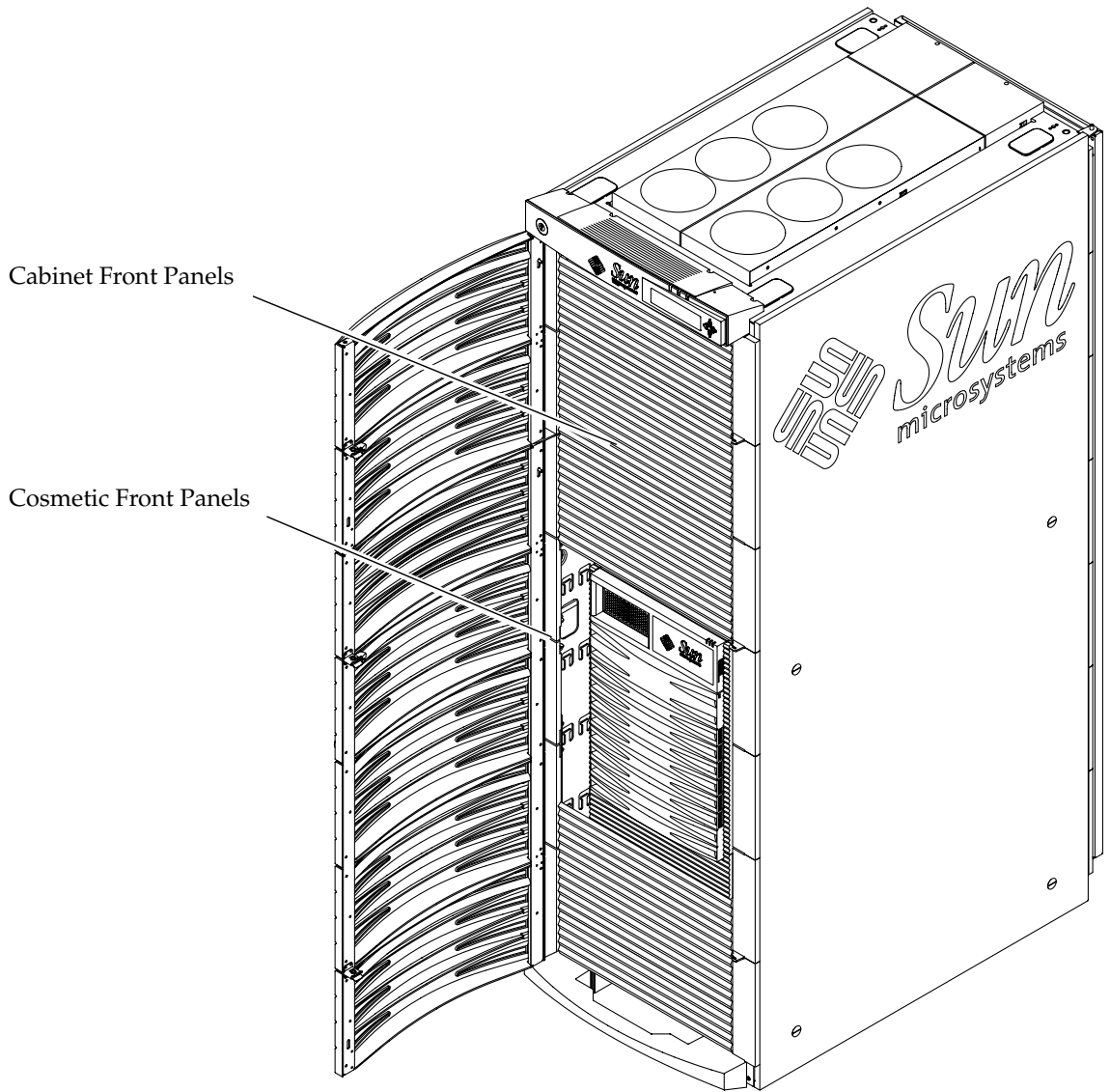
Place each front panel as close to the one below as possible. Use different sized front panels as necessary to completely fill in the gap above the system. If unable to fill in the entire gap leave the smallest possible gap at the top of the cabinet.

---

**Note** – The large cabinet front panels are not simply cosmetic, they prevent hot air expelled from the rear of the cabinet from reentering the system from the front.

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3. Secure small cosmetic panels on the cabinet adjacent to the system.



**FIGURE 2-6** Cabinet Front Panel Locations

## 2.9 Attaching Cabinet Guards

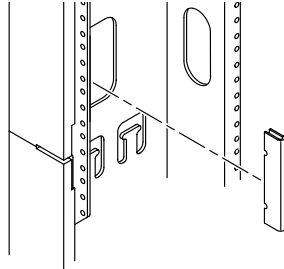
The cabinet guards are designed to protect against injuries that may occur when boards are removed from the system.

1. **Locate the cabinet guard hole locations on the rear of the Sun Fire cabinet using TABLE 2-1.**

**TABLE 2-1** Sun Fire 4800 Cabinet Guard Locations

Left Side of Cabinet	Right Side of Cabinet
Top notch in cabinet hole #59	Top notch in cabinet hole #58
Top notch in cabinet hole #45	Top notch in cabinet hole #49
Top notch in cabinet hole #10	Top notch in cabinet hole #10

2. **Align the upper “v” notch on the cabinet guard with the appropriate numbered hole, and press firmly in the middle of the guard until it stops against the edge of the cabinet (FIGURE 2-7).**



**FIGURE 2-7** Cabinet Guard Installation

---

## 2.10 Connecting the System Controller to the FrameManager

The Y-serial cable allows the primary System Controller board to be accessed by the Sun Fire cabinet FrameManager and a serial cable terminal connection simultaneously.

1. **Connect the single end of the Y-serial cable** (located in the shipping kit that came with the system) **to the serial port on the primary system controller.**
2. **Connect the 'A' end of the Y-serial cable to the serial cable terminal connection (if any).**
3. **Connect the 'B' end of the Y-serial cable to the P2 Cable.**

The P2 cable is pre connected to the FrameManager and secured among the power cables on the right side of the Sun Fire cabinet.

4. **To continue with the installation, refer to the *Sun Fire 4810/4800/3800 Systems Installation Guide* Section 3.3.**



## Installing the Sun Fire 3800 System into a Sun Fire Cabinet

---

The Sun Fire 3800 system is a standalone unit designed to be mounted in a rack. All the hardware necessary to mount the system in a Sun Fire cabinet is included in the shipping carton. The Sun Fire cabinet can house three Sun Fire 3800 systems.

- Tools—page 3-1
- Mounting the Rails—page 3-2
- Installing the Cable Raceways—page 3-4
- Mounting the Sun Fire 3800 System—page 3-6
- Installing the Sun Fire Cabinet Extension Brackets—page 3-8
- Connecting Power Cables to the Sun Fire 3800 System—page 3-10
- Attaching Cabinet Front Panels—page 3-12
- Attaching Cabinet Guards—page 3-14
- Connecting the System Controller to the FrameManager—page 3-15

---

### 3.1 Tools

You need the following tools:

- Screwdriver, Phillips No. 2.



---

**Caution** – The Sun Fire 3800 system weighs approximately 200 lbs (90.7 kg). To prevent personal injury, two people are needed to move the system safely into the cabinet using a computer equipment lift rated for 200 lbs or greater.

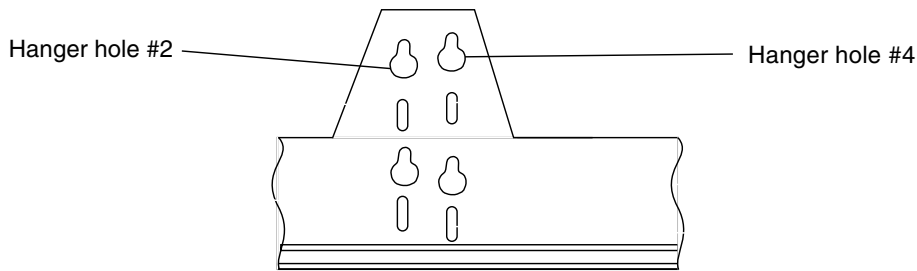
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## 3.2 Mounting the Rails

### 1. Locate the rails for the system.

With the orientation from the front of the system, each rail is labeled “RIGHT” or “LEFT”

Each rail has sixteen holes; eight are load-bearing hanger holes and eight are slots. The hanger holes used to mount a Sun Fire 3800 system are identified in FIGURE 3-1.



**FIGURE 3-1** Rail Hole Identification

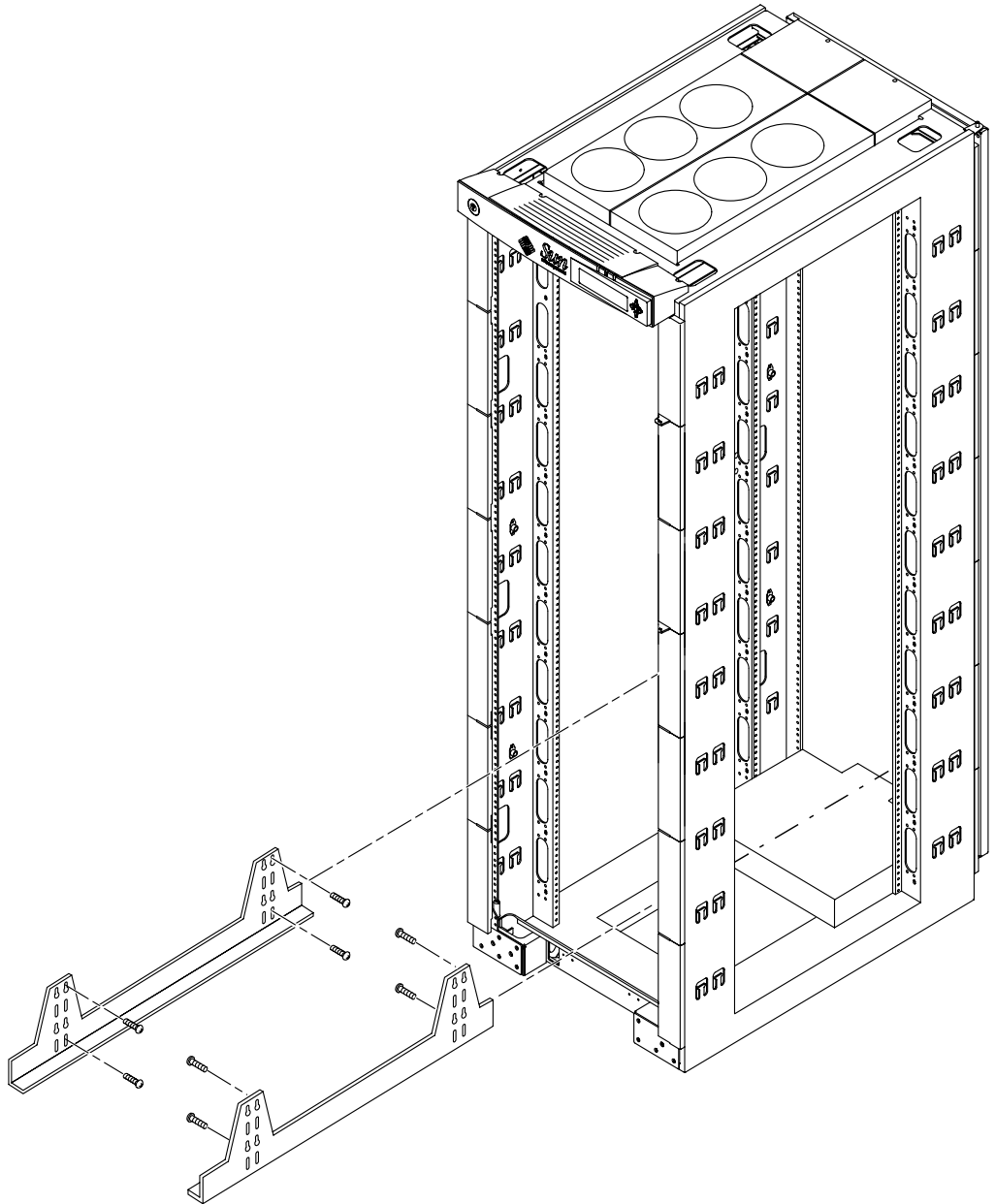
**TABLE 3-1** Sun Fire 3800 System Rackmounting Order

Sun Fire 3800 System Mounting Position	Hole Count From Bottom of Cabinet
System #3 (Top)	Top screw: rail hanger hole #4 at cabinet hole #78 Bottom screw: in slot at cabinet hole #72
System #2 (middle)	Top screw: rail hanger hole #2 at cabinet hole #52 Bottom screw: in slot at cabinet hole #47
System #1 (bottom)	Top screw: rail hanger hole #4 at cabinet hole #26 Bottom screw: in slot at cabinet hole #20



2. Mount the rails to the Sun Fire cabinet using four mounting screws for each rail (FIGURE 3-2).

Rail and cabinet hole information is listed in TABLE 3-1.



**FIGURE 3-2** Mounting Bracket Installation in Sun Fire Cabinet

---

## 3.3 Installing the Cable Raceways

1. Locate the cable raceway hole locations for the system.

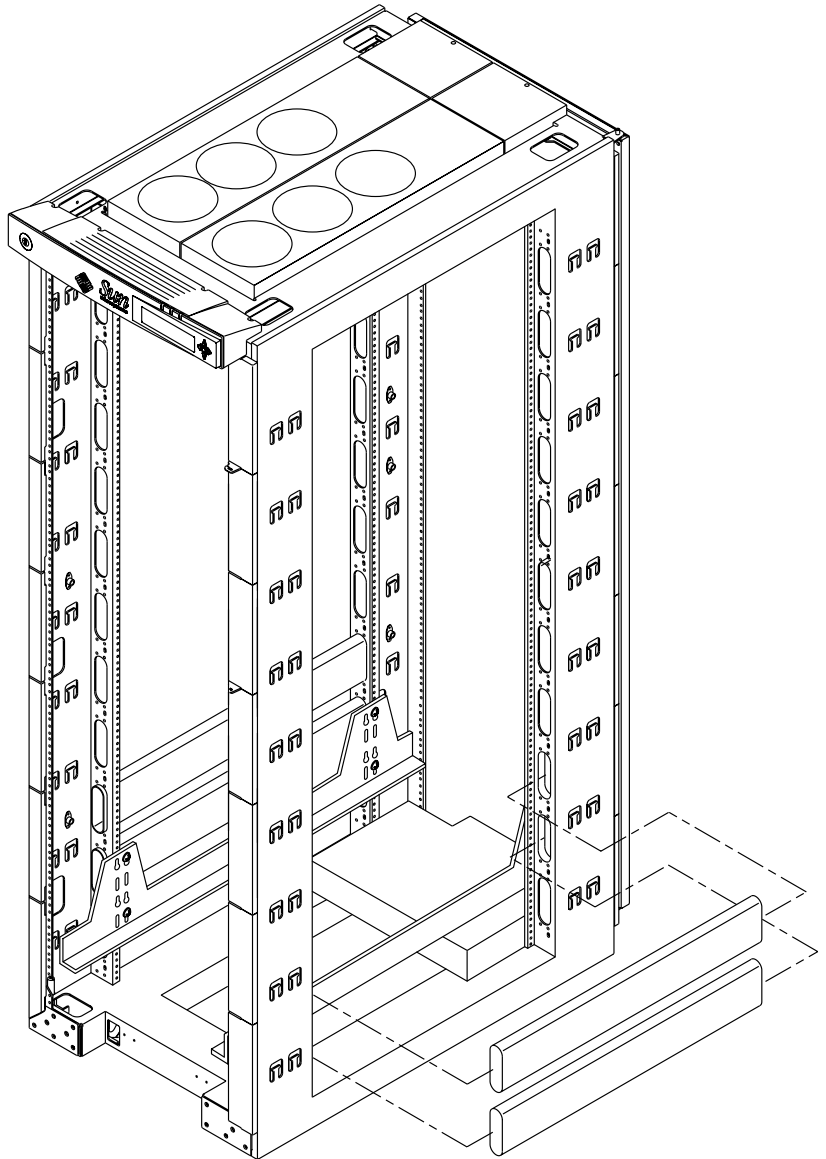
**TABLE 3-2** Sun Fire 3800 System Cable Raceway Locations

Sun Fire 3800 System Cable Raceway Positions	Grommet Hole Count From Bottom of Rack
System #3 (top)	8 and 9
System #2 (middle)	6 and 7
System #1 (bottom)	3 and 4

Start counting from the bottom of the cabinet for the cable raceway holes.

2. Insert the cable raceway at an angle and mate it to the appropriate grommet hole at the *rear* of the cabinet (FIGURE 3-3).
3. Mate the cable raceway to the appropriate grommet hole at the *front* of the cabinet.

4. Repeat Step 2 through Step 4 until you have installed two raceways on each side of the Sun Fire cabinet.



**FIGURE 3-3** Cable Raceway Installation

---

## 3.4 Mounting the Sun Fire 3800 System

1. **Locate three power cords close to where the system will be mounted and untie them from the cabinet so that they will be accessible after the system has been mounted.**

The power cords are pre-installed in the Sun Fire cabinet with one end already attached to the redundant transfer unit (RTU) assemblies.

---

**Note** – Refer to the *Rackmount Placement Matrix*, at <http://docs.sun.com> for power cord cabling information.

---



---

**Caution** – The Sun Fire 3800 system weighs approximately 200 lbs (90.7 kg). To prevent personal injury, two people are needed to move the system safely into the cabinet using a computer equipment lift.

---

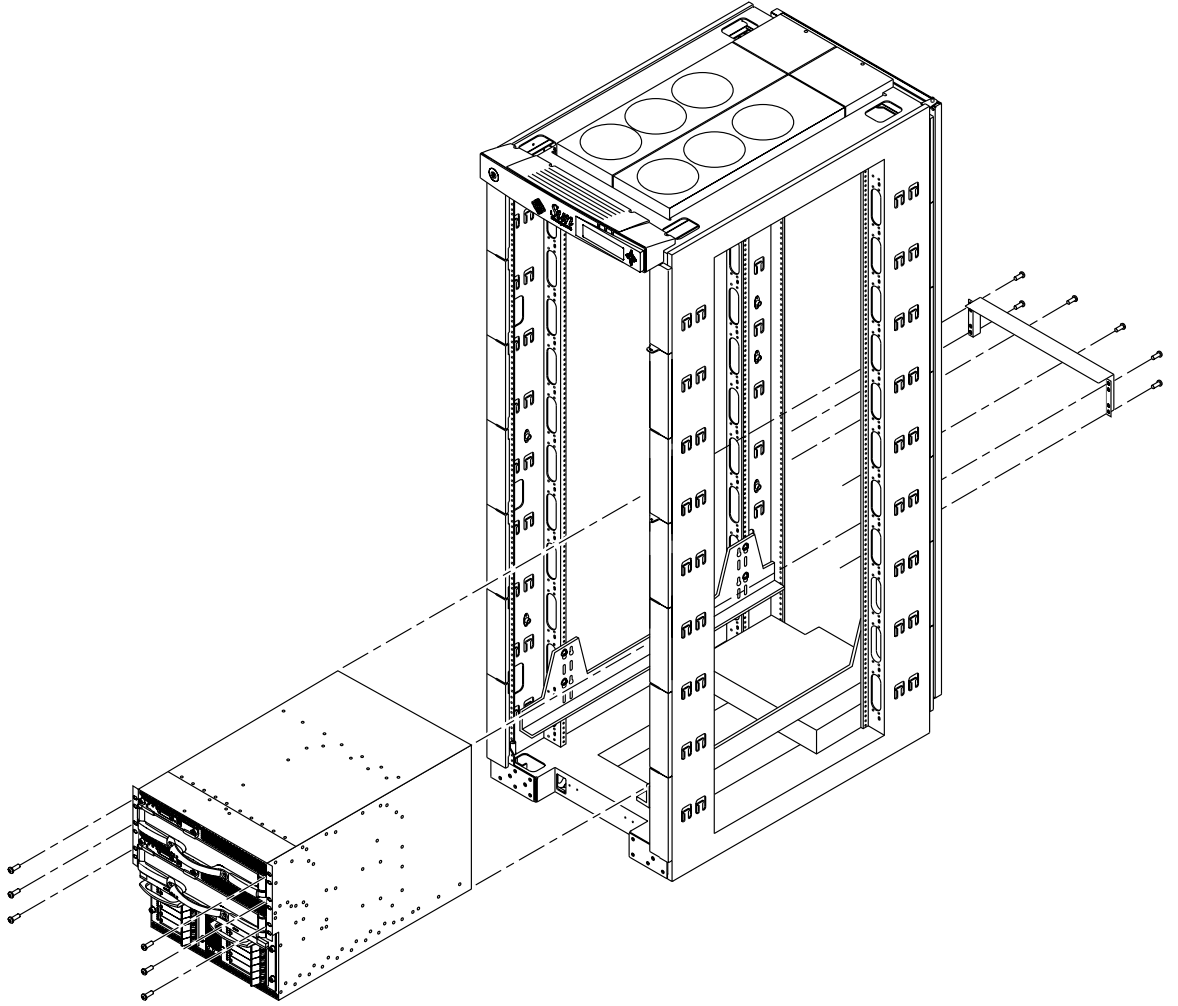


---

**Caution** – Make sure the cabinet is stabilized before mounting the system and storage devices. The anti-tilt bar can be used to prevent the cabinet from tilting.

---

2. **Insert the Sun Fire 3800 system onto the brackets in the Sun Fire cabinet.**
3. **Secure the front of the system to the cabinet with six screws (three on each side) (FIGURE 3-4).**
4. **Secure the back-stop bracket to the rear of the system with two screws.**  
Make sure that the bracket is flush with the top of the system.
5. **Secure the back-stop bracket to the cabinet with four screws (two on each side).**



**FIGURE 3-4** Securing the Sun Fire 3800 System in the Sun Fire Cabinet

---

## 3.5 Installing the Sun Fire Cabinet Extension Brackets

The cabinet extension brackets add an additional 32 pounds (14.5 kilo) to the weight of the cabinet and they extend the cabinet depth by 4 in. (10.16 cm).

**1. Remove the top trim panel from the rear of the Sun Fire cabinet.**

The top trim is attached with two M4 screws. Set these screws aside to avoid confusion with the similar sized 10-32 screws.

**2. Release the catches and remove the kick-panel.**

**3. Remove the kick-panel brackets.**

The kick-panel brackets are attached with two screws each.

**4. Remove the rear door hinge bolts and remove the door.**

Set all four 10-32 screws aside.

**5. Remove the door catch.**

Set the two 10-32 screws aside.

**6. Lightly tighten the side extender screws (eight per side) and hang the extender brackets on the screws.**

The screws should extend out of the cabinet so that the door can hang easily on them.

**7. Install the top extender bracket.**

The top extender bracket attaches down from the top of the cabinet with two screws. Use the two M4 screws saved from Step 1.

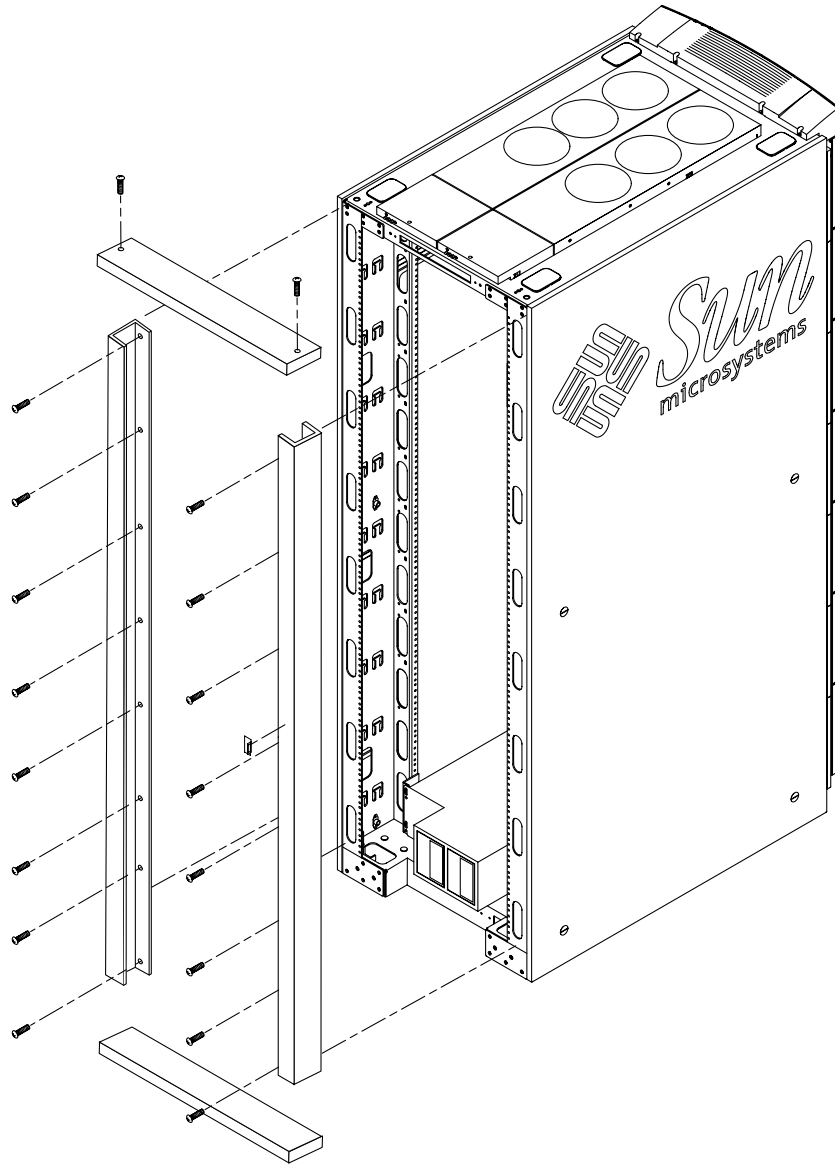
**8. Secure the side extender screws (eight per side) and install cosmetic plugs.**

The cosmetic plugs are cosmetic and optional.

**9. Secure the rear door hinge bolts to the side extender brackets using four 10-32 screws.**

**10. Reinstall the door catch to the side extender brackets using the two 10-32 screws.**

**11. Snap the bottom bracket into place.**



**FIGURE 3-5** Installing Sun Fire Cabinet Extension Brackets

---

## 3.6 Connecting Power Cables to the Sun Fire 3800 System

1. Ensure that each power switch on the Sun Fire cabinet is set to off (FIGURE 3-6).

---

**Note** – In a dual RTU configuration, there will be power switches in both the front and rear of the cabinet. All power switches must be turned off.

---

2. Ensure that each power supply switch on the system is set to off.
3. Connect the previously selected power cords to the power cord sockets on system.  
The power cords should have been untied from the cabinet and moved out of the way during Step 1 in Section 3.4.
4. Tighten the tie wrap around each power cord and power supply handle to keep them from being dislodged.

Make sure the tie wrap is tight. Do not trim excess tie wrap.

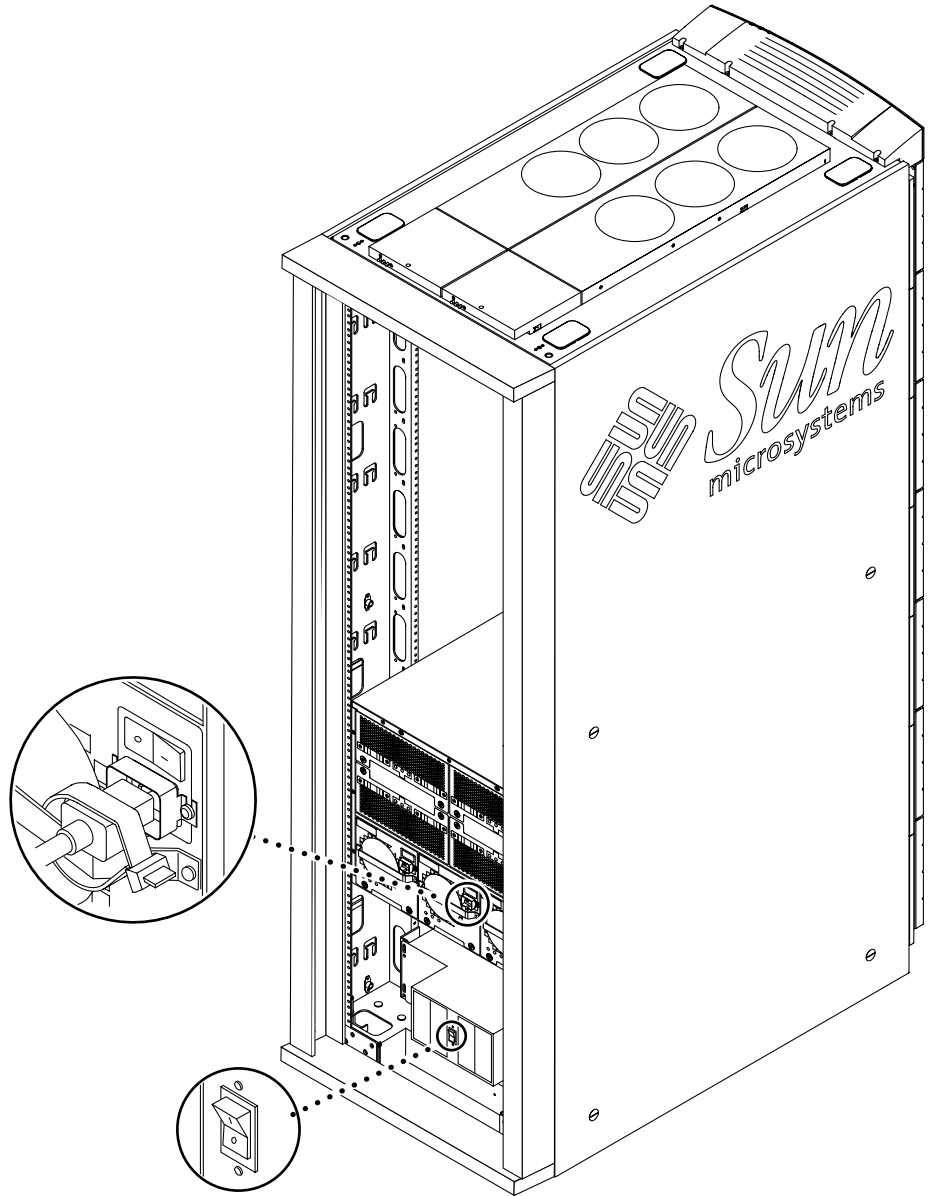


---

**Caution** – Risk of electric shock. Do NOT turn on AC power to the unit yet.

---





**FIGURE 3-6** Power Switch Locations on the Cabinet Mounted Sun Fire 3800 System

---

## 3.7 Attaching Cabinet Front Panels

1. Place the first cabinet front panel as close as possible to the top of the system, and secure the panel to the Sun Fire cabinet by tightening the screws through the left and right sides of the panel.
2. Secure subsequent panels by tightening the screws through the left and right front of each panel (FIGURE 3-7).

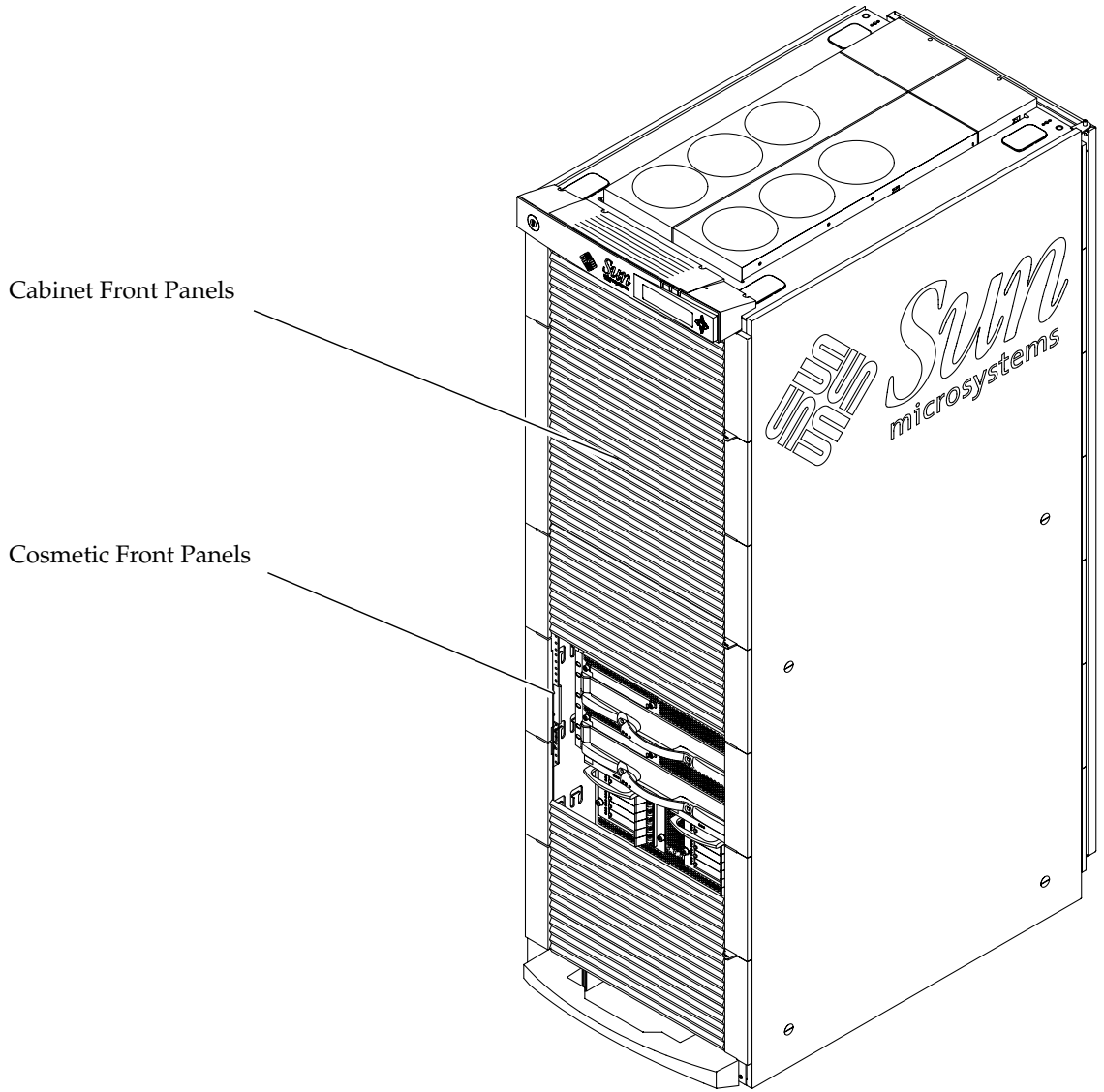
Place each front panel as close to the one below as possible. Use different sized front panels as necessary to completely fill in the gap above the system. If unable to fill in the entire gap leave the smallest possible gap at the top of the cabinet.

---

**Note** – The large cabinet front panels are not simply cosmetic, they prevent hot air expelled from the rear of the cabinet from reentering the system from the front.

---

3. Secure small cosmetic panels on the cabinet adjacent to the system.



**FIGURE 3-7** Cabinet Front Panel Locations

## 3.8 Attaching Cabinet Guards

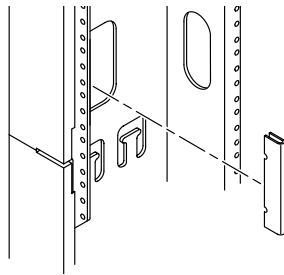
The cabinet guards are designed to protect against injuries that may occur when boards are removed from the system.

1. **Locate the cabinet guard hole locations on the rear of the Sun Fire cabinet using TABLE 3-3.**

**TABLE 3-3** Sun Fire 3800 Cabinet Guard Locations

Sun Fire 3800 System Mounting Position	Left Side of Cabinet	Right Side of Cabinet
System #3 (Top)	Top notch in cabinet hole #79	Top notch in cabinet hole #79
System #2 (middle)	Top notch in cabinet hole #53	Top notch in cabinet hole #53
System #1 (bottom)	Top notch in cabinet hole #27	Top notch in cabinet hole #27

2. **Align the upper “v” notch on the cabinet guard with the appropriate numbered hole, and press firmly in the middle of the guard until it stops against the edge of the cabinet (FIGURE 3-8).**



**FIGURE 3-8** Cabinet Guard Installation

---

## 3.9 Connecting the System Controller to the FrameManager

The Y-serial cable allows the primary System Controller board to be accessed by the Sun Fire cabinet FrameManager and a serial cable terminal connection simultaneously.

1. **Connect the single end of the Y-serial cable** (located in the shipping kit that came with the system) **to the serial port on the primary system controller.**
2. **Connect the 'A' end of the Y-serial cable to the serial cable terminal connection (if any).**
3. **Connect the 'B' end of the Y-serial cable to the P2 Cable.**

The P2 cable is pre connected to the FrameManager and secured among the power cables on the right side of the Sun Fire cabinet.

4. **To continue with the installation, refer to the *Sun Fire 4810/4800/3800 Systems Installation Guide Section 4.3.***



# Regulatory Compliance Statements

---

Your Sun product is marked to indicate its compliance class:

- Federal Communications Commission (FCC) — USA
- Industry Canada Equipment Standard for Digital Equipment (ICES-003) - Canada
- Voluntary Control Council for Interference (VCCI) — Japan
- Bureau of Standards Metrology and Inspection (BSMI) — Taiwan

Please read the appropriate section that corresponds to the marking on your Sun product before attempting to install the product.

---

## A.1 FCC Class A Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

---

**Note** – This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

---

**Shielded Cables:** Connections between the workstation and peripherals must be made using shielded cables to comply with FCC radio frequency emission limits. Networking connections can be made using unshielded twisted-pair (UTP) cables.

**Modifications:** Any modifications made to this device that are not approved by Sun Microsystems, Inc. may void the authority granted to the user by the FCC to operate this equipment.

---

## A.2 FCC Class B Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

---

**Note** – This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

---

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

**Shielded Cables:** Connections between the workstation and peripherals must be made using shielded cables in order to maintain compliance with FCC radio frequency emission limits. Networking connections can be made using unshielded twisted pair (UTP) cables.

**Modifications:** Any modifications made to this device that are not approved by Sun Microsystems, Inc. may void the authority granted to the user by the FCC to operate this equipment.



---

## A.3 ICES-003 Class A Notice - Avis NMB-003, Classe A

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

---

## A.4 ICES-003 Class B Notice - Avis NMB-003, Classe B

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.


### VCCI 基準について

#### クラス A VCCI 基準について

クラス A VCCI の表示があるワークステーションおよびオプション製品は、クラス A 情報技術装置です。これらの製品には、下記の項目が該当します。

この装置は、情報処理装置等電波障害自主規制協議会 (VCCI) の基準に基づくクラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

## クラス B VCCI 基準について

クラス B VCCI の表示  があるワークステーションおよびオプション製品は、クラス B 情報技術装置です。これらの製品には、下記の項目が該当します。

この装置は、情報処理装置等電波障害自主規制協議会 (VCCI) の基準に基づくクラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをしてください。

---

## A.5 BSMI Class A Notice

The following statement is applicable to products shipped to Taiwan and marked as Class A on the product compliance label.

警告使用者：  
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

# Compliance Statements

---

## Safety Agency Compliance Statements

Read this section before beginning any procedure. The following text provides safety precautions to follow when installing a Sun Microsystems product.

### Safety Precautions

For your protection, observe the following safety precautions when setting up your equipment:

- Follow all cautions and instructions marked on the equipment.
- Ensure that the voltage and frequency of your power source match the voltage and frequency inscribed on the equipment's electrical rating label.
- Never push objects of any kind through openings in the equipment. Dangerous voltages may be present. Conductive foreign objects could produce a short circuit that could cause fire, electric shock, or damage to your equipment.

### Symbols

The following symbols may appear in this book:



---

**Caution** – There is risk of personal injury and equipment damage. Follow the instructions.

---



---

**Caution** – Hot surface. Avoid contact. Surfaces are hot and may cause personal injury if touched.

---



---

**Caution** – Hazardous voltages are present. To reduce the risk of electric shock and danger to personal health, follow the instructions.

---

## Modifications to Equipment

Do not make mechanical or electrical modifications to the equipment. Sun Microsystems is not responsible for regulatory compliance of a modified Sun product.

## Placement of a Sun Product



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**Caution** – Do not block or cover the openings of your Sun product. Never place a Sun product near a radiator or heat register. Failure to follow these guidelines can cause overheating and affect the reliability of your Sun product.

---

## SELV Compliance

Safety status of I/O connections comply to SELV requirements.

## Power Cord Connection



---

**Caution** – Sun products are designed to work with single-phase power systems having a grounded neutral conductor. To reduce the risk of electric shock, do not plug Sun products into any other type of power system. Contact your facilities manager or a qualified electrician if you are not sure what type of power is supplied to your building.

---



---

**Caution** – Not all power cords have the same current ratings. Household extension cords do not have overload protection and are not meant for use with computer systems. Do not use household extension cords with your Sun product.

---



---

**Caution** – Your Sun product is shipped with a grounding type (three-wire) power cord. To reduce the risk of electric shock, always plug the cord into a grounded power outlet.

---



---

**Caution** – In order to remove all power from this unit, turn off all power switches

---

The following caution applies only to devices with a **Standby** power switch:



---

**Caution** – The power switch of this product functions as a standby type device only. The power cord serves as the primary disconnect device for the system. Be sure to plug the power cord into a grounded power outlet that is nearby the system and is readily accessible. Do not connect the power cord when the power supply has been removed from the system chassis.

---

## Lithium Battery



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**Caution** – On Sun CPU boards, there is a lithium battery molded into the real-time clock, SGS No. MK48T59Y, MK48T594-70PCIU, MK48TXXB-XX, MK48T18-XXXPCZ, M48T59W-XXXPCZ, or MK48T08. Batteries are not customer replaceable parts. They may explode if mishandled. Do not dispose of the battery in fire. Do not disassemble it or attempt to recharge it.

---

## System Unit Cover

If you must remove the cover of your Sun computer system unit in order to add cards, memory, or internal storage devices, be sure to replace the top cover before powering up your computer system.



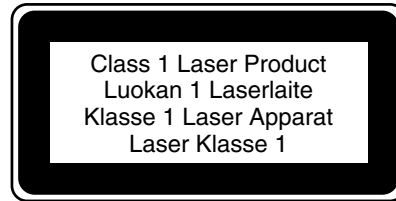
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**Caution** – Do not operate Sun products without the top cover in place. Failure to take this precaution may result in personal injury and system damage.

---

## Laser Compliance Notice

Sun products that use laser technology comply with Class 1 laser requirements.



## DVD-ROM



---

**Caution** – Use of controls, adjustments, or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

---

## Einhaltung sicherheitsbehördlicher Vorschriften

Auf dieser Seite werden Sicherheitsrichtlinien beschrieben, die bei der Installation von Sun-Produkten zu beachten sind.

### Sicherheitsvorkehrungen

Treffen Sie zu Ihrem eigenen Schutz die folgenden Sicherheitsvorkehrungen, wenn Sie Ihr Gerät installieren:

- Beachten Sie alle auf den Geräten angebrachten Warnhinweise und Anweisungen.
- Vergewissern Sie sich, daß Spannung und Frequenz Ihrer Stromquelle mit der Spannung und Frequenz übereinstimmen, die auf dem Etikett mit den elektrischen Nennwerten des Geräts angegeben sind.
- Stecken Sie auf keinen Fall irgendwelche Gegenstände in Öffnungen in den Geräten. Leitfähige Gegenstände könnten aufgrund der möglicherweise vorliegenden gefährlichen Spannungen einen Kurzschluß verursachen, der einen Brand, Stromschlag oder Geräteschaden herbeiführen kann.

### Symbole

Die Symbole in diesem Handbuch haben folgende Bedeutung:



---

**Achtung** – Gefahr von Verletzung und Geräteschaden. Befolgen Sie die Anweisungen.

---



---

**Achtung** – Hohe Temperatur. Nicht berühren, da Verletzungsgefahr durch heiße Oberfläche besteht.

---



---

**Achtung** – Gefährliche Spannungen. Anweisungen befolgen, um Stromschläge und Verletzungen zu vermeiden.

---

## Aufstellung von Sun-Geräten



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**Achtung** – Um den zuverlässigen Betrieb Ihres Sun-Geräts zu gewährleisten und es vor Überhitzung zu schützen, dürfen die Öffnungen im Gerät nicht blockiert oder verdeckt werden. Sun-Produkte sollten niemals in der Nähe von Heizkörpern oder Heizluftklappen aufgestellt werden.

---

## Einhaltung der SELV-Richtlinien

Die Sicherung der I/O-Verbindungen entspricht den Anforderungen der SELV-Spezifikation.

## Anschluß des Netzkabels



---

**Achtung** – Sun-Produkte sind für den Betrieb an Einphasen-Stromnetzen mit geerdetem Nulleiter vorgesehen. Um die Stromschlaggefahr zu reduzieren, schließen Sie Sun-Produkte nicht an andere Stromquellen an. Ihr Betriebsleiter oder ein qualifizierter Elektriker kann Ihnen die Daten zur Stromversorgung in Ihrem Gebäude geben.

---



---

**Achtung** – Nicht alle Netzkabel haben die gleichen Nennwerte. Herkömmliche, im Haushalt verwendete Verlängerungskabel besitzen keinen Überlastungsschutz und sind daher für Computersysteme nicht geeignet.

---



---

**Achtung** – Ihr Sun-Gerät wird mit einem dreidradigen Netzkabel für geerdete Netzsteckdosen geliefert. Um die Gefahr eines Stromschlags zu reduzieren, schließen Sie das Kabel nur an eine fachgerecht verlegte, geerdete Steckdose an.

---



---

**Achtung** – Schalten Sie alle Stromschalter ab, damit die Stromversorgung für das Gerät völlig unterbrochen wird.

---

Die folgende Warnung gilt nur für Geräte mit Wartezustand-Netzschalter:



---

**Achtung** – Der Ein/Aus-Schalter dieses Geräts schaltet nur auf Wartezustand (Stand-By-Modus). Um die Stromzufuhr zum Gerät vollständig zu unterbrechen, müssen Sie das Netzkabel von der Steckdose abziehen. Schließen Sie den Stecker des Netzkabels an eine in der Nähe befindliche, frei zugängliche, geerdete Netzsteckdose an. Schließen Sie das Netzkabel nicht an, wenn das Netzteil aus der Systemeinheit entfernt wurde.

---

## Lithiumbatterie



---

**Achtung** – CPU-Karten von Sun verfügen über eine Echtzeituhr mit integrierter Lithiumbatterie (Teile-Nr. MK48T59Y, MK48T594-70PCIU, MK48TXXB-XX, MK48T18-XXXPCZ, M48T59W-XXXPCZ, oder MK48T08). Diese Batterie darf nur von einem qualifizierten Servicetechniker ausgewechselt werden, da sie bei falscher Handhabung explodieren kann. Werfen Sie die Batterie nicht ins Feuer. Versuchen Sie auf keinen Fall, die Batterie auszubauen oder wiederaufzuladen.

---

## Gehäuseabdeckung

Sie müssen die obere Abdeckung Ihres Sun-Systems entfernen, um interne Komponenten wie Karten, Speicherchips oder Massenspeicher hinzuzufügen. Bringen Sie die obere Gehäuseabdeckung wieder an, bevor Sie Ihr System einschalten.



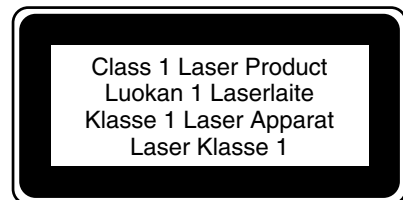
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**Achtung** – Bei Betrieb des Systems ohne obere Abdeckung besteht die Gefahr von Stromschlag und Systemschäden.

---

## Einhaltung der Richtlinien für Laser

Sun-Produkte, die mit Laser-Technologie arbeiten, entsprechen den Anforderungen der Laser Klasse 1.



## DVD-ROM



**Warnung** – Die Verwendung von anderen Steuerungen und Einstellungen oder die Durchführung von Prozeduren, die von den hier beschriebenen abweichen, können gefährliche Strahlungen zur Folge haben.

## Conformité aux normes de sécurité

Ce texte traite des mesures de sécurité qu'il convient de prendre pour l'installation d'un produit Sun Microsystems.

### Mesures de sécurité

Pour votre protection, veuillez prendre les précautions suivantes pendant l'installation du matériel :

- Suivre tous les avertissements et toutes les instructions inscrites sur le matériel.
- Vérifier que la tension et la fréquence de la source d'alimentation électrique correspondent à la tension et à la fréquence indiquées sur l'étiquette de classification de l'appareil.
- Ne jamais introduire d'objets quels qu'ils soient dans une des ouvertures de l'appareil. Vous pourriez vous trouver en présence de hautes tensions dangereuses. Tout objet conducteur introduit de la sorte pourrait produire un court-circuit qui entraînerait des flammes, des risques d'électrocution ou des dégâts matériels.

### Symboles

Vous trouverez ci-dessous la signification des différents symboles utilisés :



**Attention** : risques de blessures corporelles et de dégâts matériels. Veuillez suivre les instructions.



**Attention** : surface à température élevée. Evitez le contact. La température des surfaces est élevée et leur contact peut provoquer des blessures corporelles.



**Attention** : présence de tensions dangereuses. Pour éviter les risques d'électrocution et de danger pour la santé physique, veuillez suivre les instructions.

## Modification du matériel

Ne pas apporter de modification mécanique ou électrique au matériel. Sun Microsystems n'est pas responsable de la conformité réglementaire d'un produit Sun qui a été modifié.

## Positionnement d'un produit Sun



**Attention** : pour assurer le bon fonctionnement de votre produit Sun et pour l'empêcher de surchauffer, il convient de ne pas obstruer ni recouvrir les ouvertures prévues dans l'appareil. Un produit Sun ne doit jamais être placé à proximité d'un radiateur ou d'une source de chaleur.

## Conformité SELV

Sécurité : les raccordements E/S sont conformes aux normes SELV.

## Connexion du cordon d'alimentation



**Attention** : les produits Sun sont conçus pour fonctionner avec des alimentations monophasées munies d'un conducteur neutre mis à la terre. Pour écarter les risques d'électrocution, ne pas brancher de produit Sun dans un autre type d'alimentation secteur. En cas de doute quant au type d'alimentation électrique du local, veuillez vous adresser au directeur de l'exploitation ou à un électricien qualifié.



**Attention** : tous les cordons d'alimentation n'ont pas forcément la même puissance nominale en matière de courant. Les rallonges d'usage domestique n'offrent pas de protection contre les surcharges et ne sont pas prévues pour les systèmes d'ordinateurs. Ne pas utiliser de rallonge d'usage domestique avec votre produit Sun.



**Attention** : votre produit Sun a été livré équipé d'un cordon d'alimentation à trois fils (avec prise de terre). Pour écarter tout risque d'électrocution, branchez toujours ce cordon dans une prise mise à la terre.



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**Attention :** Pour mettre cette unité hors tension, il faut éteindre tous les interrupteurs d'alimentation.

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L'avertissement suivant s'applique uniquement aux systèmes équipés d'un interrupteur VEILLEUSE:



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**Attention :** le commutateur d'alimentation de ce produit fonctionne comme un dispositif de mise en veille uniquement. C'est la prise d'alimentation qui sert à mettre le produit hors tension. Veillez donc à installer le produit à proximité d'une prise murale facilement accessible. Ne connectez pas la prise d'alimentation lorsque le châssis du système n'est plus alimenté.

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### Batterie au lithium



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**Attention :** sur les cartes CPU Sun, une batterie au lithium (référence MK48T59Y, MK48T594-70PCIU, MK48TXXB-XX, MK48T18-XXXPCZ, M48T59W-XXXPCZ, ou MK48T08.) a été moulée dans l'horloge temps réel SGS. Les batteries ne sont pas des pièces remplaçables par le client. Elles risquent d'exploser en cas de mauvais traitement. Ne pas jeter la batterie au feu. Ne pas la démonter ni tenter de la recharger.

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### Couvercle

Pour ajouter des cartes, de la mémoire, ou des unités de stockage internes, vous devrez démonter le couvercle de l'unité système Sun. Ne pas oublier de remettre ce couvercle en place avant de mettre le système sous tension.



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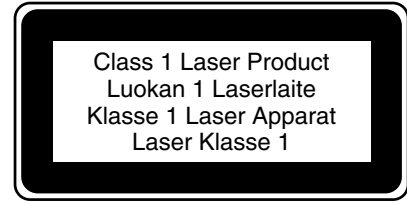
**Attention :** il est dangereux de faire fonctionner un produit Sun sans le couvercle en place. Si l'on néglige cette précaution, on encourt des risques de blessures corporelles et de dégâts matériels.

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### Conformité aux certifications Laser

Les produits Sun qui font appel aux technologies lasers

sont conformes aux normes de la classe 1 en la matière.



### DVD-ROM



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**Attention –** L'utilisation de contrôles, de réglages ou de performances de procédures autre que celle spécifiée dans le présent document peut provoquer une exposition à des radiations dangereuses.

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### Normativas de seguridad

El siguiente texto incluye las medidas de seguridad que se deben seguir cuando se instale algún producto de Sun Microsystems.

#### Precauciones de seguridad

Para su protección observe las siguientes medidas de seguridad cuando manipule su equipo:

- Siga todas las avisos e instrucciones marcados en el equipo.
- Asegúrese de que el voltaje y la frecuencia de la red eléctrica concuerdan con las descritas en las etiquetas de especificaciones eléctricas del equipo.
- No introduzca nunca objetos de ningún tipo a través de los orificios del equipo. Pueden haber voltajes peligrosos. Los objetos extraños conductores de la electricidad pueden producir cortocircuitos que provoquen un incendio, descargas eléctricas o daños en el equipo.

#### Símbolos

En este libro aparecen los siguientes símbolos:



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**Precaución –** Existe el riesgo de lesiones personales y daños al equipo. Siga las instrucciones.

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**Precaución –** Superficie caliente. Evite el contacto. Las superficies están calientes y pueden causar daños personales si se tocan.

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**Precaución** – Voltaje peligroso presente. Para reducir el riesgo de descarga y daños para la salud siga las instrucciones.

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## Modificaciones en el equipo

No realice modificaciones de tipo mecánico o eléctrico en el equipo. Sun Microsystems no se hace responsable del cumplimiento de las normativas de seguridad en los equipos Sun modificados.

## Ubicación de un producto Sun



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**Precaución** – Para asegurar la fiabilidad de funcionamiento de su producto Sun y para protegerlo de sobrecalentamientos no deben obstruirse o taparse las rejillas del equipo. Los productos Sun nunca deben situarse cerca de radiadores o de fuentes de calor.

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## Cumplimiento de la normativa SELV

El estado de la seguridad de las conexiones de entrada/salida cumple los requisitos de la normativa SELV.

## Conexión del cable de alimentación eléctrica



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**Precaución** – Los productos Sun están diseñados para trabajar en una red eléctrica monofásica con toma de tierra. Para reducir el riesgo de descarga eléctrica, no conecte los productos Sun a otro tipo de sistema de alimentación eléctrica. Póngase en contacto con el responsable de mantenimiento o con un electricista cualificado si no está seguro del sistema de alimentación eléctrica del que se dispone en su edificio.

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**Precaución** – No todos los cables de alimentación eléctrica tienen la misma capacidad. Los cables de tipo doméstico no están provistos de protecciones contra sobrecargas y por tanto no son apropiados para su uso con computadores. No utilice alargadores de tipo doméstico para conectar sus productos Sun.

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**Precaución** – Con el producto Sun se proporciona un cable de alimentación con toma de tierra. Para reducir el riesgo de descargas eléctricas conéctelo siempre a un enchufe con toma de tierra.

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**Precaución** – Para eliminar toda la alimentación de la unidad, apague todos los interruptores.

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La siguiente advertencia se aplica solamente a equipos con un interruptor de encendido que tenga una posición "En espera":



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**Precaución** – El interruptor de encendido de este producto funciona exclusivamente como un dispositivo de puesta en espera. El enchufe de la fuente de alimentación está diseñado para ser el elemento primario de desconexión del equipo. El equipo debe instalarse cerca del enchufe de forma que este último pueda ser fácil y rápidamente accesible. No conecte el cable de alimentación cuando se ha retirado la fuente de alimentación del chasis del sistema.

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## Batería de litio



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**Precaución** – En las placas de CPU Sun hay una batería de litio insertada en el reloj de tiempo real, tipo SGS Núm. MK48T59Y, MK48T594-70PCIU, MK48TXXB-XX, MK48T18-XXXPCZ, M48T59W-XXXPCZ, o MK48T08. Las baterías no son elementos reemplazables por el propio cliente. Pueden explotar si se manipulan de forma errónea. No arroje las baterías al fuego. No las abra o intente recargarlas.

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## Tapa de la unidad del sistema

Debe quitar la tapa del sistema cuando sea necesario añadir tarjetas, memoria o dispositivos de almacenamiento internos. Asegúrese de cerrar la tapa superior antes de volver a encender el equipo.



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**Precaución** – Es peligroso hacer funcionar los productos Sun sin la tapa superior colocada. El hecho de no tener en cuenta esta precaución puede ocasionar daños personales o perjudicar el funcionamiento del equipo.

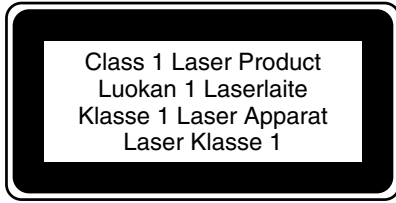
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## Aviso de cumplimiento con requisitos de láser

Los productos Sun que utilizan la tecnología de láser



cumplen con los requisitos de láser de Clase 1.



## DVD-ROM



**Precaución** – El manejo de los controles, los ajustes o la ejecución de procedimientos distintos a los aquí especificados pueden exponer al usuario a radiaciones peligrosas.

## Danmark



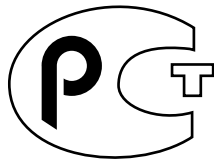
**ADVARSEL!** – Litiumbatteri — Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

## Suomi



**VAROITUS** – Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

## GOST-R Certification Mark



## Nordic Lithium Battery Cautions

### Norge



**A D V A R S E L** – Litiumbatteri — Eksplosjonsfare.  
Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten. Brukt batteri returneres apparatleverandøren.

### Sverige



**WARNING** – Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

