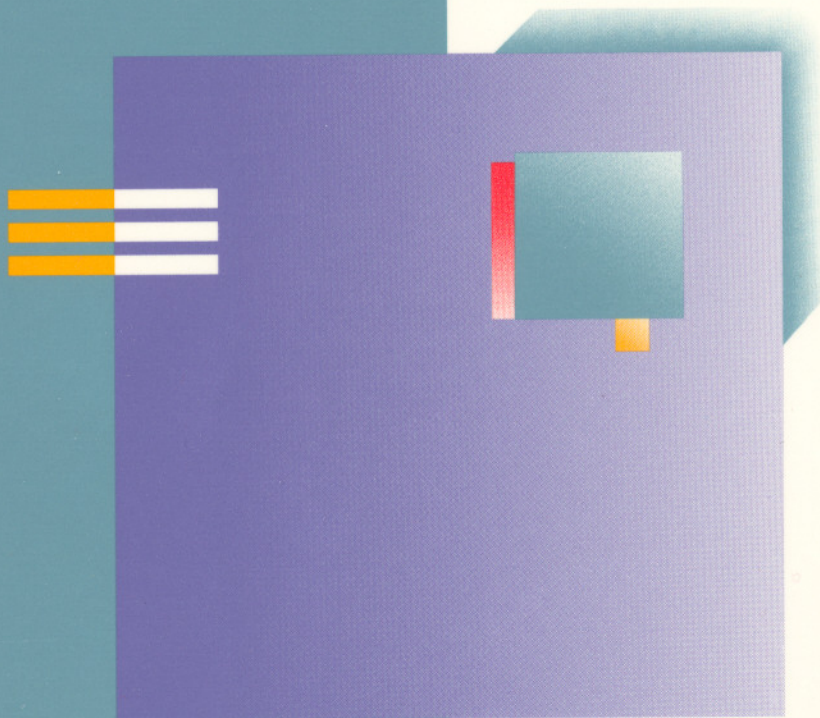


# *Desktop* SPARC

## *SPARCstation 1+ Installation Guide*



SPARC

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## *Introducing the SPARCstation 1+*

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The SPARCstation 1+ is a high-performance workstation designed to be used on its own or as part of a network. This chapter introduces you to the SPARCstation 1+, and covers the following topics:

- ❑ Selecting a work area
- ❑ Unpacking the shipping cartons
- ❑ Taking inventory
- ❑ Identifying internal parts
- ❑ Examining the system unit
- ❑ Identifying the audio input/output port

Complete information on safety information which must be adhered to are covered in Appendix E "Safety Agency Compliance." Be sure to read the entire appendix before installing and operating this equipment.

The information in Appendix E is also translated into French, German, and Spanish in Appendixes F-H respectively.

After you finish reading this chapter, you will be ready to take the first steps in connecting some of the basic system components and plugging in the power cords. These topics are covered in Chapter 2.

## Selecting a Work Area

Before unpacking your system, you should decide where you want to put it and how you want to use it.

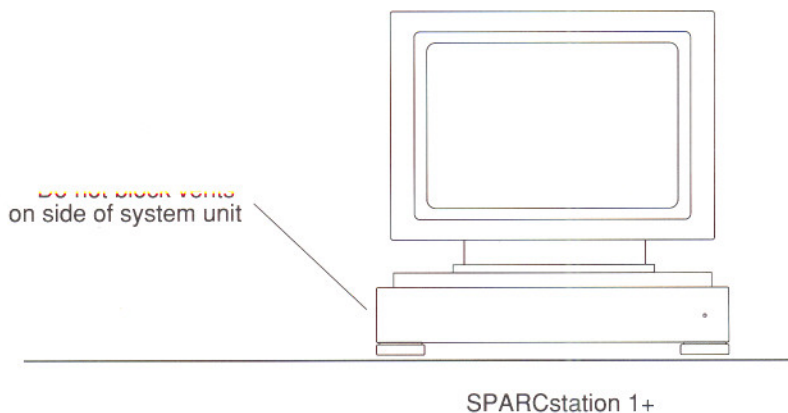
Select an appropriate work area. See the list of specifications on the next page.



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**Caution:** The SPARCstation 1+ system unit has vents on its left panel. When you place the unit on a desktop, make sure that no physical objects block the vents.

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The SPARCstation 1+ is a sturdy machine, but it is a piece of electronic equipment and must be treated properly. Extremes in temperature and other environmental hazards must be avoided.

Generally, if your working conditions are comfortable for you, then your environment is suitable for the SPARCstation 1+.

The acceptable environmental ranges are:

- ❑ Temperature: Between 32 and 104 degrees Fahrenheit (0 and 40 degrees Celsius)
- ❑ Humidity: Between 5% and 80% (relative noncondensing)
- ❑ Altitude: Between 0 and 10,000 feet (0 and 3,048 meters)
- ❑ Ventilation: Keep the work area well ventilated or air-conditioned to avoid overheating.
- ❑ Dust: Keep the work area as dust-free as possible.

## Power and Grounding Requirements

Your SPARCstation 1+ and associated equipment use nominal input voltages of 115 VAC or 230 VAC. Sun products are designed to work with single-phase power systems having a grounded neutral conductor. To reduce the risk of electrical 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.

In planning where to place your equipment, remember that each of the following items requires access (by way of a separate power cord) to a power outlet:

- ❑ SPARCstation 1+ system unit
- ❑ Monitor
- ❑ External peripherals (disks, tapes, printers)

**Note:** See Figure 1-1 for an illustration of these items.

## Cable Length

Cables supplied with Sun equipment are of sufficient length to meet the needs of most installations. If you find that the cables packed with your equipment are too short for your particular installation, ask your Sun sales representative about the availability of alternate cables.

Some of the cables supplied with your Sun equipment are of specific lengths in conformity with engineering and safety standards. Using other cables may be hazardous and may also degrade the performance of your equipment.



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**Warning:** 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 SPARCstation 1+ and associated equipment.

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## Unpacking the Shipping Cartons

### To unpack your SPARCstation 1+:

1. Inspect the shipping cartons before opening.

If there is evidence of damage to a carton, arrange for an agent of the carrier to be present when you remove the equipment.

2. Remove the contents of the shipping cartons.

The inside flaps of the shipping cartons for the monitor and system unit show you how to remove the contents.

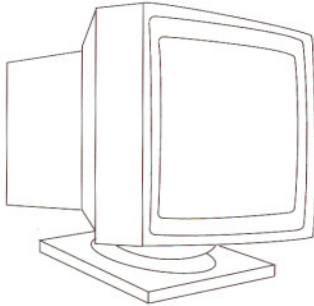
The system unit and monitor are heavy. They are packed tightly in protective foam molds. Carefully remove them from the cartons.

Save the cartons and the packing material. You will need them if you ever want to ship your system elsewhere.

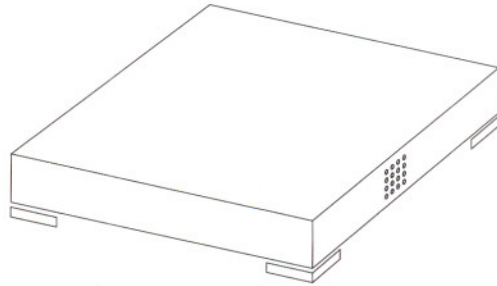
## Taking Inventory

Check the packing slip to make sure you have everything you ordered. Figure 1-1 shows the basic parts of the system. If you ordered optional parts, such as external drives, see the installation manuals that came with them.

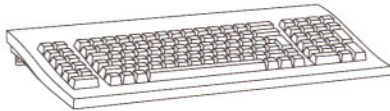
Figure 1-1. Basic System Parts



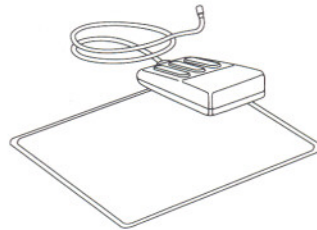
Monitor



System unit



Keyboard



Mouse and pad

Color/Monochrome  
video cable

System unit power cord



Audio input/output cable



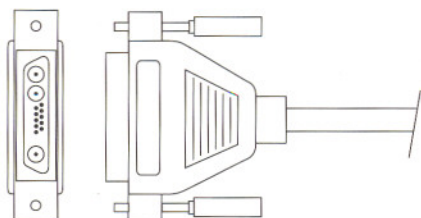
Monitor power cord

## Identifying Cables and Connectors

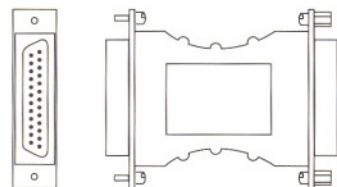
Use the following chart of cable connectors to identify cables as you unpack them. The cables you have will depend on the optional parts you ordered. As you follow procedures in Chapters 2 and 5, you may want to refer again to this chart.

**Note:** Early units of the SPARCstation 1+ may not include an audio input/output cable. You may order this cable from Sun Microsystems, Inc.

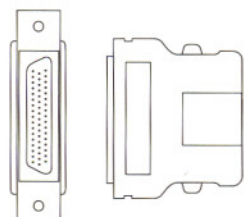
Figure 1-2. Identifying Cables and Connectors



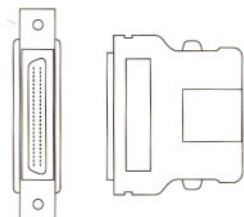
13W3 Plug



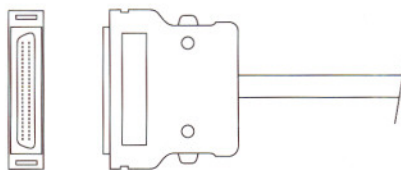
Null modem converter



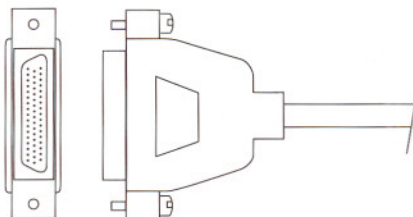
50 pin SCSI terminator



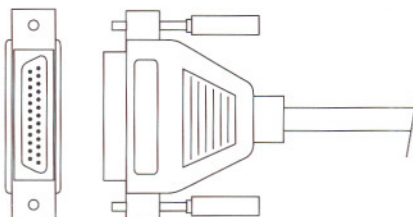
Micro-miniature SCSI terminator



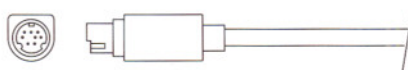
Micro-miniature SCSI connector



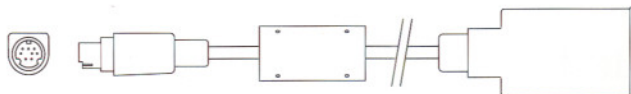
Sub-miniature D SCSI connector



Modem cable



Keyboard cable plug and mouse plug



Audio Input/Output cable

## Identifying Internal Parts

Some parts of your SPARCstation 1+ system need to be installed inside the system unit. Some of these items are packed in antistatic bags:

- ❑ Frame buffer board: sends a picture signal from the system to your monitor.

**Note:** A frame buffer board is an SBus board.

- ❑ SIMM (single inline memory module): provides additional memory for your system.
- ❑ Internal diskette drive unit: allows you to use diskettes in your system.
- ❑ Internal hard disk drive unit: provides internal storage for software and data files.

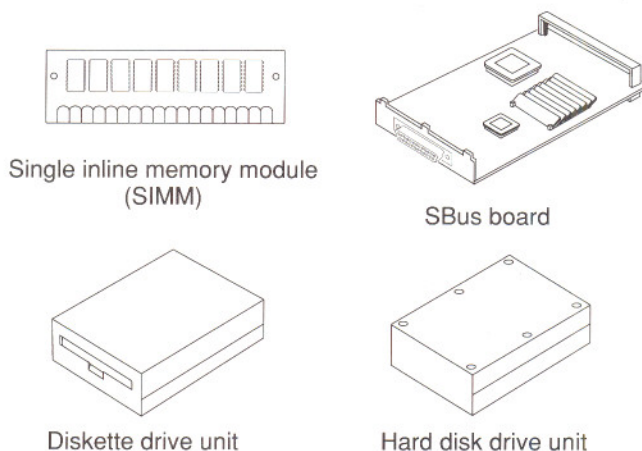


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**Caution:** Integrated circuit chips and boards can be damaged by static electricity from finger-touching. When you install these parts, never remove them from their antistatic bags until you have discharged yourself by touching a grounded object. Handle these parts only at the non-conducting edges. See Appendix A for complete precautions.

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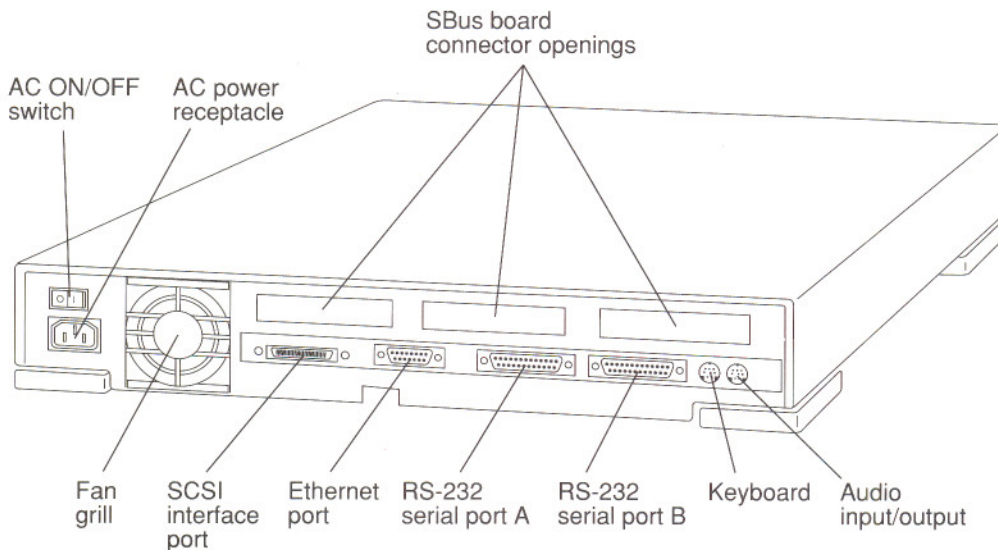
Figure 1-3. System Unit Installable Parts



## Examining the System Unit

Take a moment to examine the system unit so you can locate the parts on the back panel as you connect the rest of your system.

Figure 1-4. Back Panel of the System Unit



## Audio Input/ Output Port

The SPARCstation 1+ system unit has an audio input/output port on its back panel. (See Figure 1-4.)

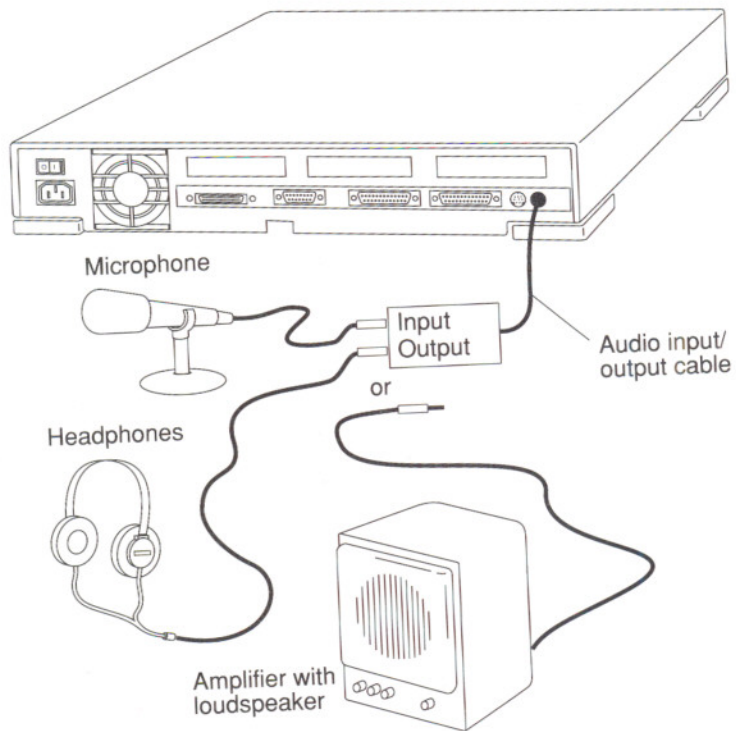
You can plug the following devices into the audio input/output port through the audio input/output port cable which is supplied with your system unit:

- ❑ Dynamic, high-impedance microphone (10,000 ohms to 50,000 ohms impedance)
- ❑ Audio tape player equipped with attenuating adapter
- ❑ Compact disk player equipped with attenuating adapter
- ❑ Headphones (30 ohms to 100 ohms impedance)
- ❑ External amplifier and loudspeaker

**Note:** Early units of the SPARCstation 1+ may not include an audio input/output cable. You may order this cable from Sun Microsystems, Inc.

The sound capabilities of your SPARCstation 1+ can be shown with Sound, an audio demonstration program included with SunOS. See Appendix C "About Sound" in the *Sun System User's Guide* for additional information.

Figure 1-5. Connecting Audio Equipment



## **Parts Needed to Connect an Audio Tape Player or a Compact Disk Player**

Before you connect an audio tape player or a compact disk player to the SPARCstation 1+ audio input/output port, you need the following items:

- ☐ Attenuating adapters
- ☐ Stereophonic Y-adaptor
- ☐ Stereophonic-monophonic adapter

These adapters may be obtained at many electronics parts stores.

## **What's Next**

You have finished Chapter 1, and have done the following:

- ☐ Selected a work area
- ☐ Unpacked the shipping cartons
- ☐ Taken inventory
- ☐ Identified internal parts
- ☐ Examined the system unit
- ☐ Identified the audio port

Now you are ready to take the first steps in connecting some of the basic system components and plugging in the power cords. These topics are covered in Chapter 2.