

# **Installation Guide**

## **K Class**

**HP 9000 Enterprise Servers**



**Part No. A2375-90006**

**Edition 7  
June 1998**

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## Printing History

New editions of this manual incorporate all material updated since the previous edition. The manual printing date and part number indicate its current edition. The printing date changes when a new edition is printed. (Minor corrections and updates which are incorporated at reprint do not cause the date to change.) The manual part number changes when extensive technical changes are incorporated.

February 1995.....	Edition 1
September 1995 .....	Edition 2
January 1996 .....	Edition 3
June 1996 .....	Edition 4
July 1997 .....	Edition 5
January 1998 .....	Edition 6
June 1998 .....	Edition 7

### Change Narrative

- Edition 7 technical changes include:
  - a. The addition of HP9000/K360 information throughout the manual
  - b. Minor changes and updates as required.
- Edition 6 technical changes include:
  - a. The addition of HP9000/K380/K580 information throughout the manual.
  - b. Minor changes and updates throughout the manual.

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## Preface

This edition of the HP 9000/Kxx0 Installation Guide contains technical information about HP 9000 Computers. The HP 9000/Kxx0 family of computers includes the following models:

<b>HP9000/Kxx0 Servers</b>	<b>HP9000 Workstations</b>
K100	HP VISUALIZE K260-EG
K200	
K210	HP VISUALIZE K460-XP
K220	
K250	
K260	
K270	
K360	
K370	
K380	
K400	
K410	
K450	
K460	
K470	
K570	
K580	

# Introduction

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This Installation Guide illustrates the procedures for installing the HP 9000 K Class computers. The contents of this guide include:

1. Overview of System Installation - a brief description of the installation procedure.
2. Overview of System Power/Data Cabling - A reference figure showing the basic power and data connections for the core system (Computer and Console).
3. Installation Steps - A series of figures showing each step in the installation process. Brief explanations below each figure provide additional information.

## **Overview of System Installation**

1. Standard Console, Keyboard, and Optional Uninterruptible Power System (UPS):
  - a. Connect the console data cable to the "Console" port on the core I/O card of the computer.
  - b. Plug the standard console power cable into a UPS power receptacle.
  - c. Connect the keyboard cable to the keyboard connector on the console.
  - d. Connect the UPS data cable between the "UPS" connector on the core I/O and the appropriate data connector on the UPS.
2. Local Area Network (LAN), Fast/Wide Differential SCSI, and Parallel Device Cabling:
  - a. Connect the LAN to either the "10BASE-T" or "AUI" connector on the core I/O card.
  - b. Connect a Fast/Wide Differential SCSI cable or terminator to the "F/W DIFF. SCSI" connector on the core I/O card.
  - c. Connect a Fast/Wide Differential SCSI cable or terminator to the "F/W DIFF. SCSI" connector on the core I/O card.
  - d. Connect an optional parallel device (such as a printer) to the connector labeled "PARALLEL" on the core I/O card.
3. Internal or External Modem, and MDP:
  - a. Connect a line access module (LAM) to the "INTERNAL MODEM" connector on the core I/O card. If using the internal modem, do not connect an external modem. Skip to Step C below.
  - b. If not using the internal modem, connect the external modem to the "EXTERNAL MODEM" connector on the core I/O card.
  - c. Connect the Modem Distribution Panel (MDP) to the "MDP" connector on the core I/O card.
4. Power Connections:
  - a. If you are using an Uninterruptible Power System (UPS), plug the computer power cable into the receptacle at the upper-left corner of the UPS, then plug the UPS power cable into wall power.
  - b. If not using the UPS, connect the computer power cable directly to wall power.
5. Stabilizer Block (Chock Block):
  - a. Roll the computer cabinet onto the stabilizer block in the desired location to prevent the cabinet from being inadvertently moved around.
6. Power On:
  - a. Turn on the UPS
  - b. Turn on all peripherals
  - c. Turn on the computer by setting the key switch to the "ON" position.
  - d. Refer to the Owner's Guide that came with your computer for operator information.

## Optional Graphics Console

If desired, a graphics console and mouse can be connected to the SPU instead of the standard console. To install the graphics console, substitute the following Step 1 for the standard Step 1 in the installation procedure listed above:

### **Optional Graphics Console: A4032A/A4033A/A4331A Graphics Display with Keyboard and Mouse:**

1. Connect the graphics console data cable to the "OPTIONAL I/O" port on the system core I/O card.
2. Plug the graphics console power cable into a UPS power receptacle.
3. Plug the graphics console power cable into a UPS power receptacle.
4. Connect the keyboard cable to the keyboard connector on the core I/O card.
5. Connect the mouse cable to the connector labeled "MOUSE" on the system core I/O card.
6. Connect the UPS data cable between the "UPS" connector on the system and the appropriate data connector on the UPS.

## Overview of System Power/Data Cabling

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### **CAUTION**    **UPS Requirements**

**The 1.8kVA (A2997A), 3kVA (A2998A), and 5.5kVA (A3589A) Power Trust UPSs are the only UPSs supported on PA8000-based systems: HP9000 K250/K260/K370/K380 and HP9000 K450/K460/K570/K580. The 1.3kVA and 1.6kVA Power Trust UPSs do not have a 20amp receptacle and cannot provide sufficient current.**

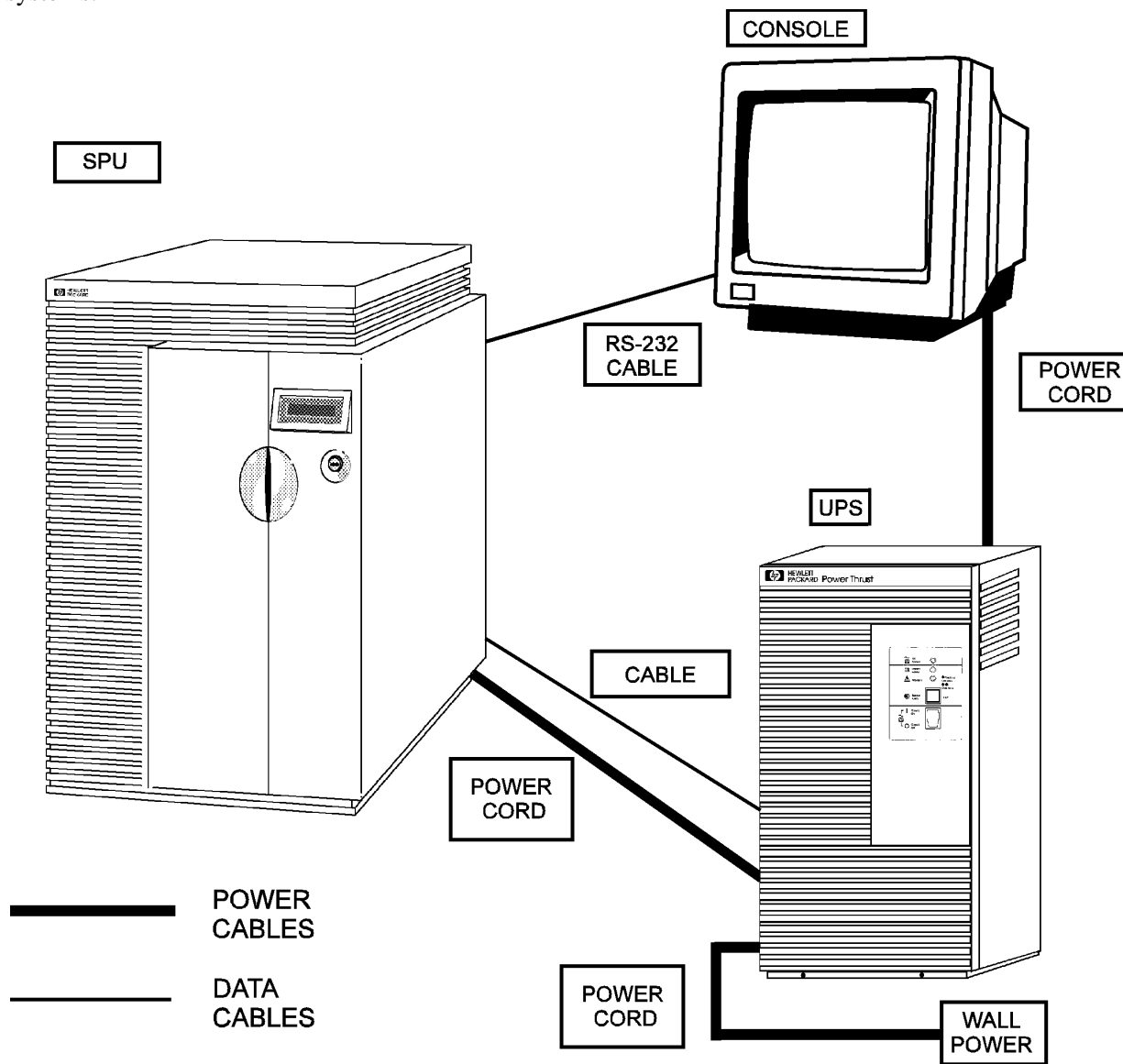
### **Rackmount Requirements**

Ensure that the PDU (cabinet power strip) has a 20 amp receptacle. Upgrade kits for the PDU strip are available if required.

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Introduction  
Overview of System Installation

The figure below shows an overview of the power and data cabling for the system, console, and the optional UPS, and is intended for reference only. Cable part numbers may not be the same for all systems.



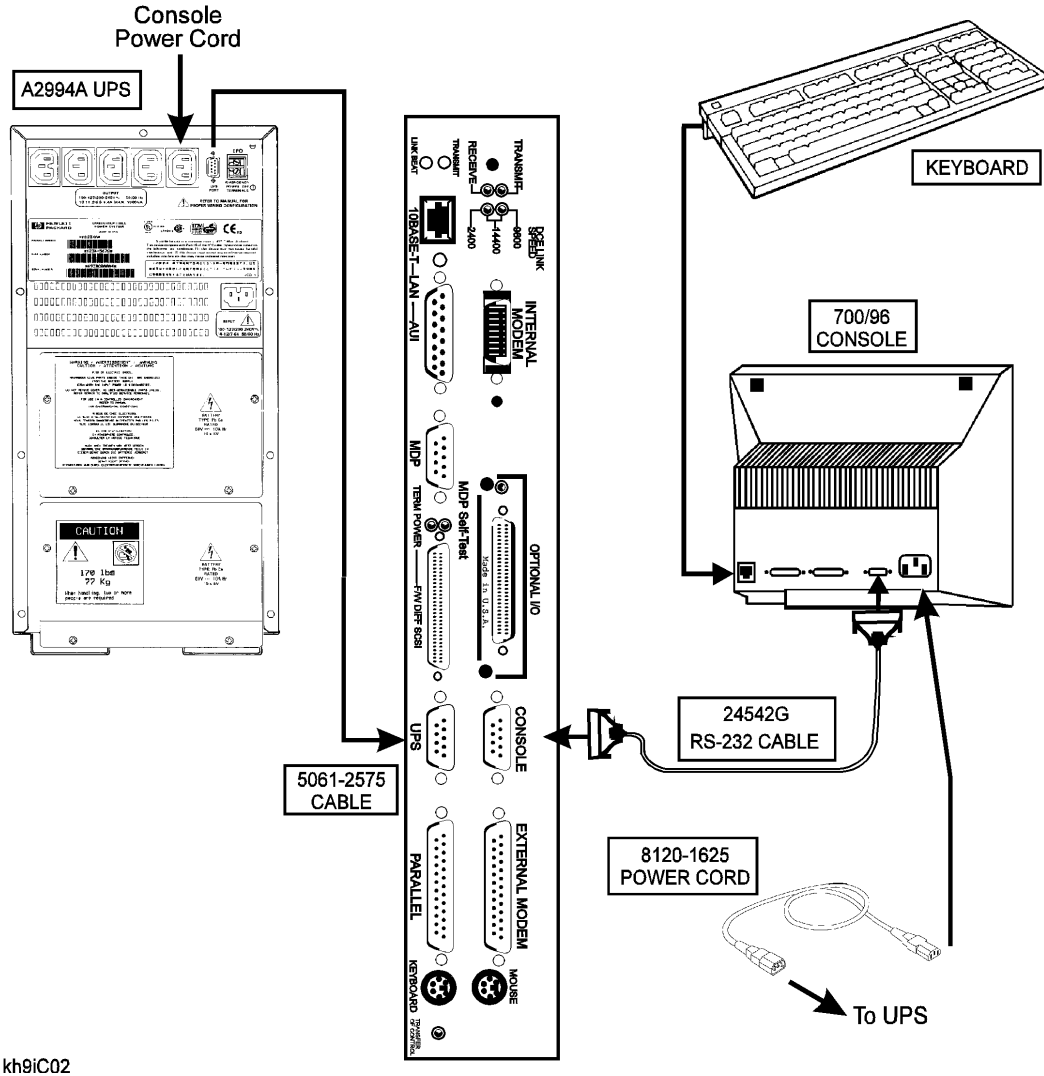
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To proceed with actual installation of the system, start at the page titled "Standard Console, Keyboard, and Optional UPS".



## Standard Console, Keyboard, and Optional UPS

### A. (K100/K200/K210/K220/K400/K410/K420)

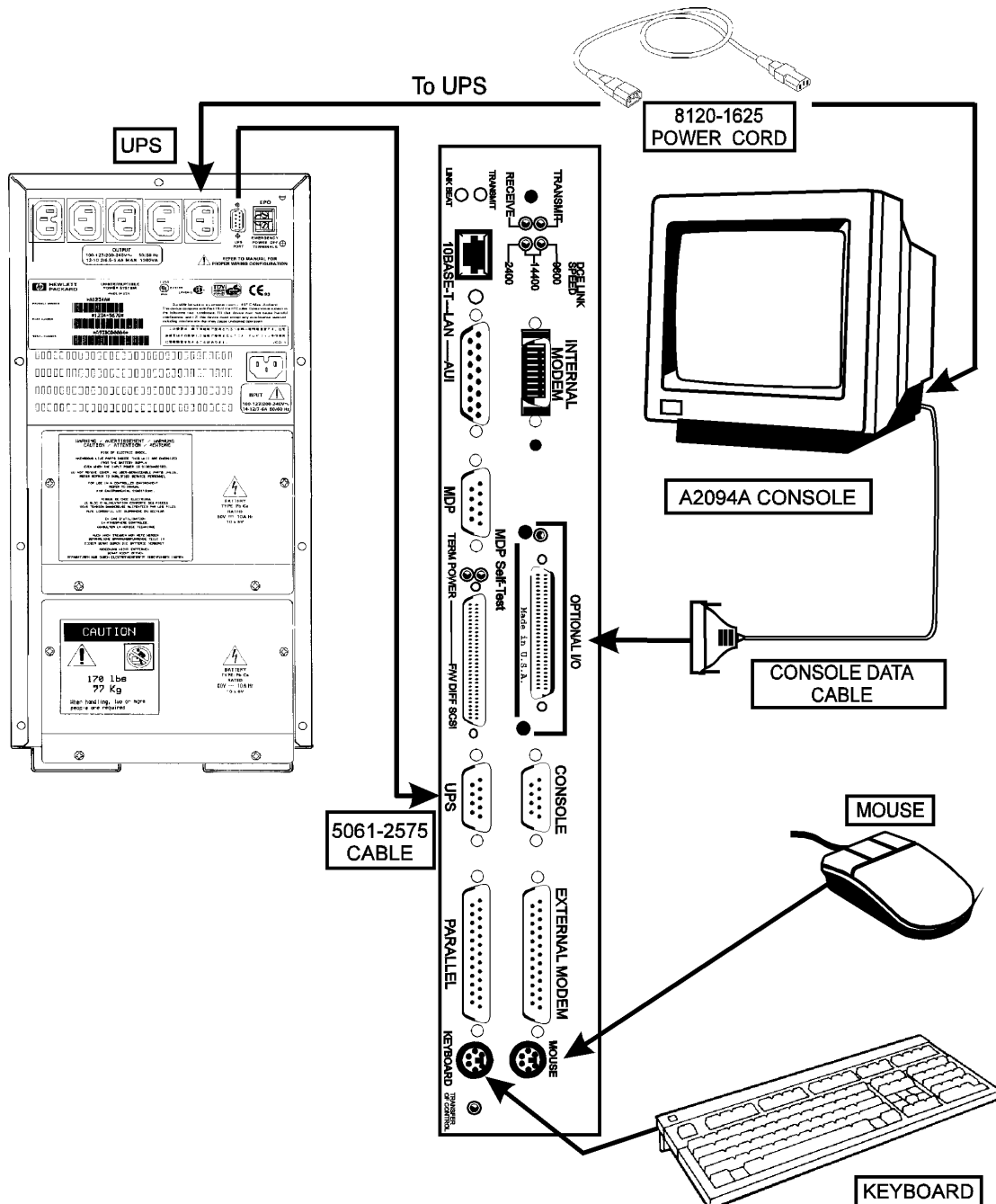


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1. Connect the standard console data cable to the "Console" port on the core I/O board of the system.
2. Plug the standard console power cable into a UPS power receptacle.
3. Connect the keyboard cable to the keyboard connector on the console.
4. Connect the UPS data cable between the "UPS" connector on the system and the appropriate data connector on the UPS.

**NOTE** Do not plug the UPS into a power receptacle at this time.

# Optional Graphics Console: A4032A/A4033A/A4331A Graphics Display with Keyboard and Mouse



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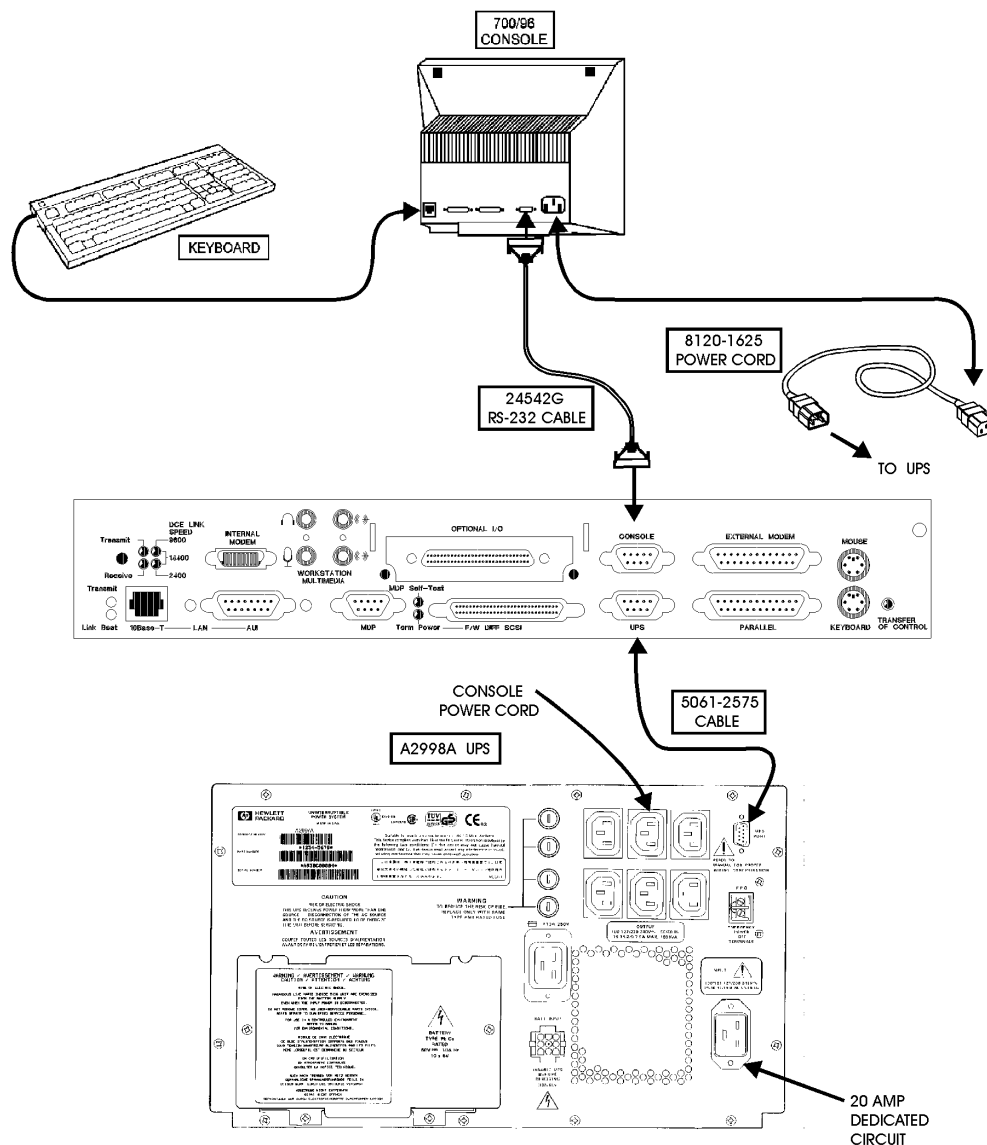
**NOTE** An A4032A or A4033A Graphics Console may be connected to the system instead of the standard console.

**Optional Graphics Console: A4032A/A4033A/A4331A Graphics Display with Keyboard and Mouse**

1. Connect the graphics console data cable to the "OPTIONAL I/O" port on the system core I/O card.
2. Plug the graphics console power cable into a UPS power receptacle.
3. Connect the keyboard cable to the keyboard connector on the system core I/O card.
4. Connect the mouse cable to the connector labeled "MOUSE" on the system core I/O card.
5. Connect the UPS data cable between the "UPS" connector on the system core I/O card and the appropriate data connector on the UPS.

## Standard Console, Keyboard, and Optional UPS

(K250/K260/K360/K370/K380/K450/K460/K570/K580)

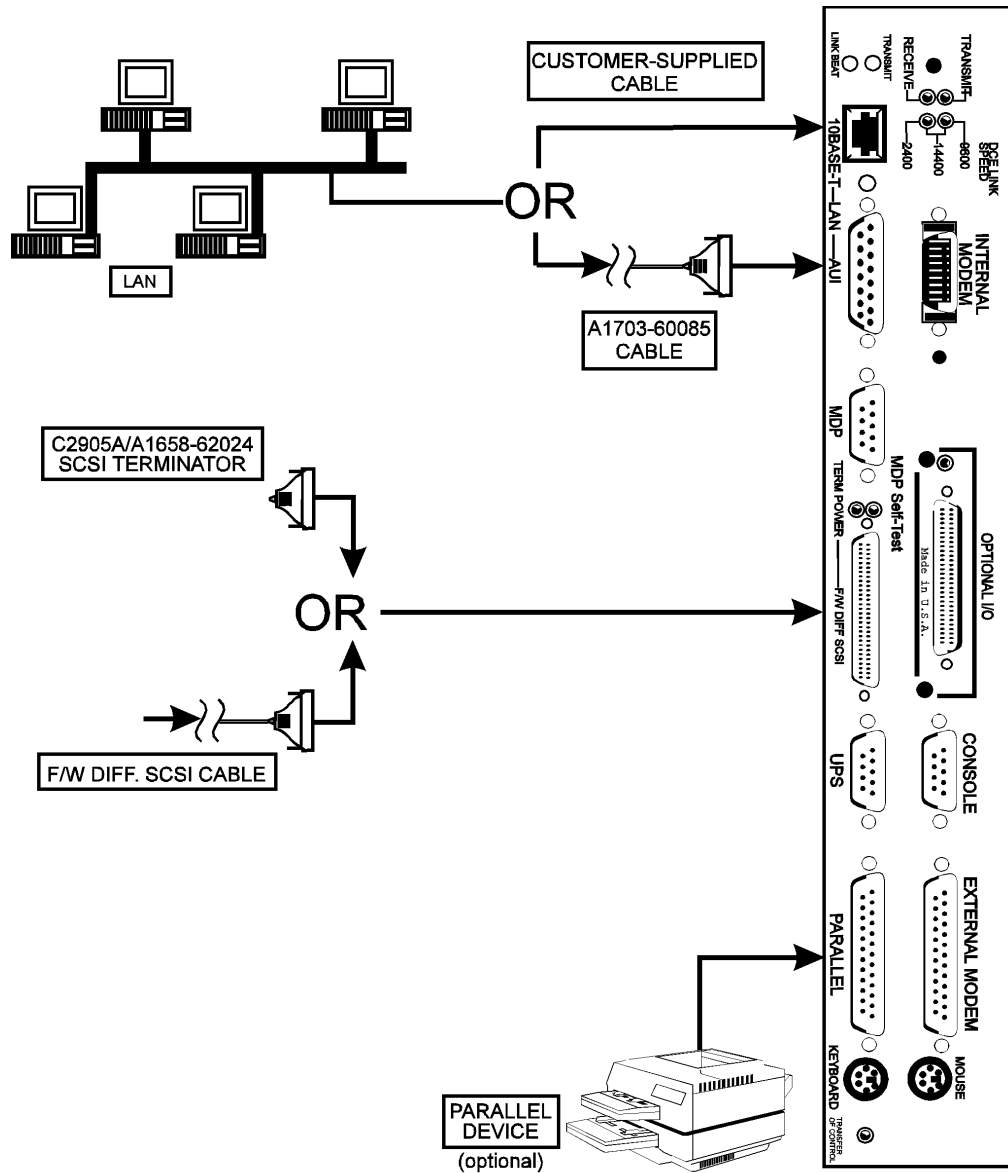


mhci102

1. Connect the standard console data cable to the "Console" port on the system core I/O card.
2. Plug the standard console power cable into a UPS power receptacle.
3. Connect the keyboard cable to the keyboard connector on the system core I/O board.
4. Connect the mouse cable to the connector labeled "MOUSE" on the system core I/O board.
5. Connect data cable between the system I/O board, UPS connector and the UPS data connector UPS.

**NOTE** Do not plug the UPS into a power receptacle at this time.

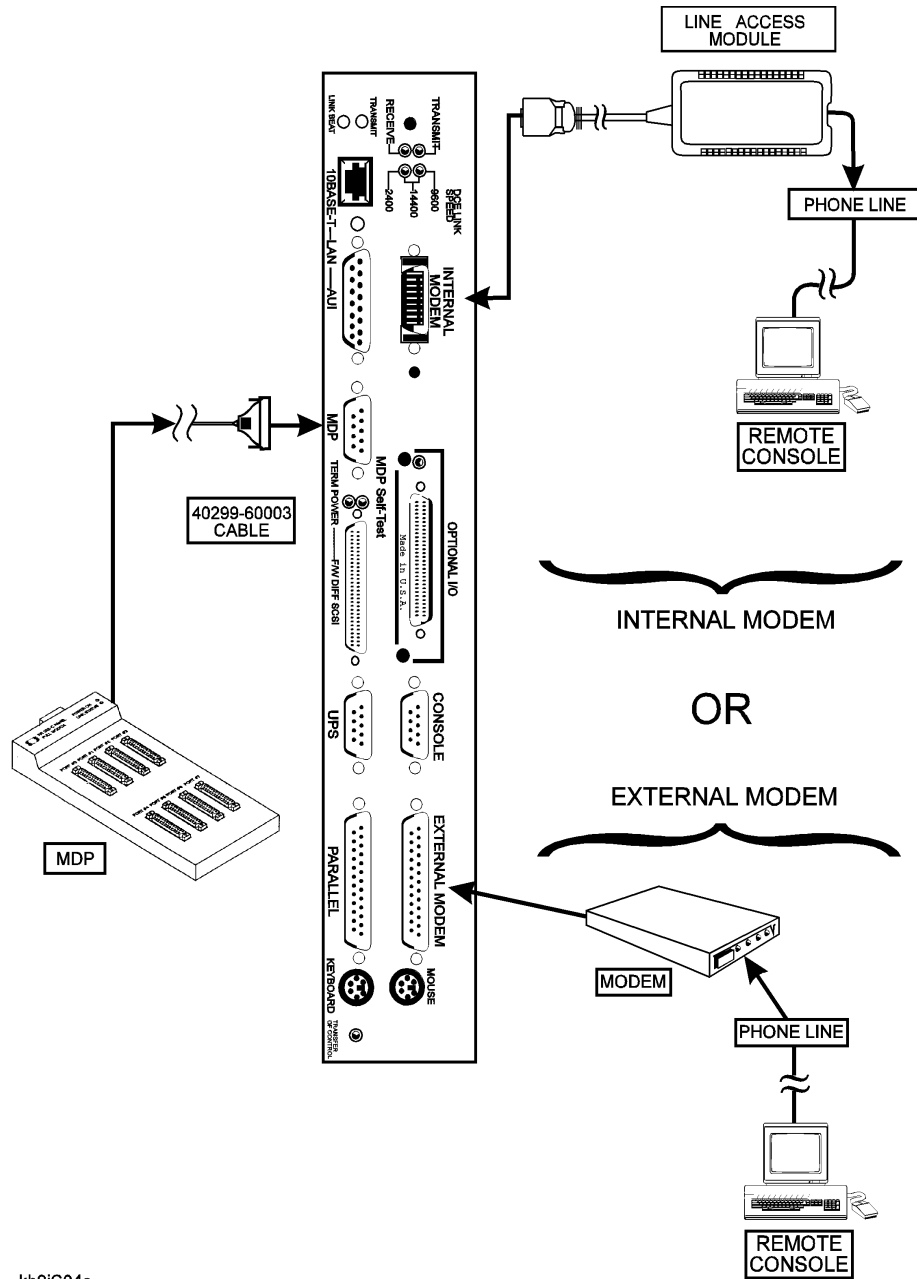
## Local Area Network (LAN), Fast/Wide Differential SCSI, and Parallel Device Cabling



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1. Connect the LAN to either the "10BASE-T" or "AUI" connector on the core I/O card.
2. Connect a Fast/Wide Differential SCSI cable or terminator to the "F/W DIFF. SCSI" connector on the core I/O card.
3. Connect an optional parallel device (such as a printer) to the connector labeled "PARALLEL" on the core I/O card.

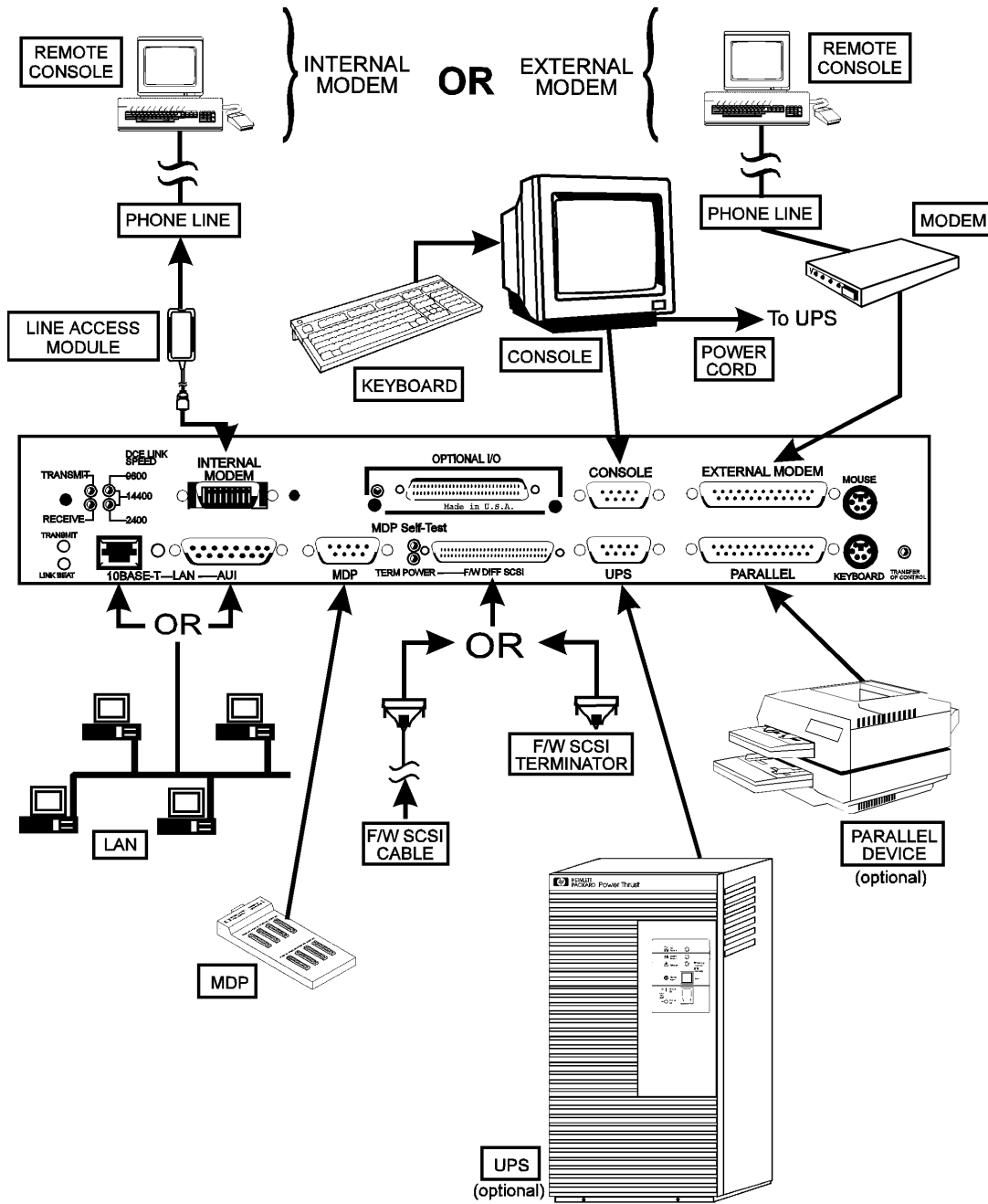
## Internal or External Modem, and MDP



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1. Connect a line access module to the "INTERNAL MODEM" connector on the core I/O card.
2. If not using the internal modem, connect the external modem to the "EXTERNAL MODEM" connector on the core I/O card.
3. Connect the Modem Distribution Panel (MDP) to the "MDP" connector on the core I/O card.

## Summary of System Connections

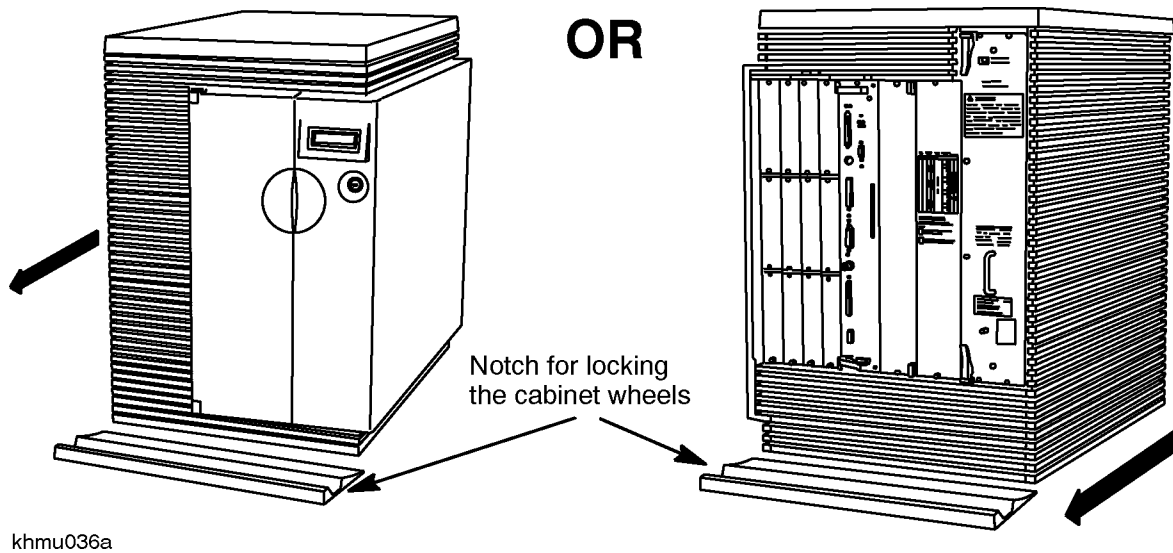


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The figure above is a summary of all the system connections previously described. You should use this figure to make a quick check of all connections you have made to ensure that they are correct before connecting power cabling.

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## Stabilizer Block (Chock Block)



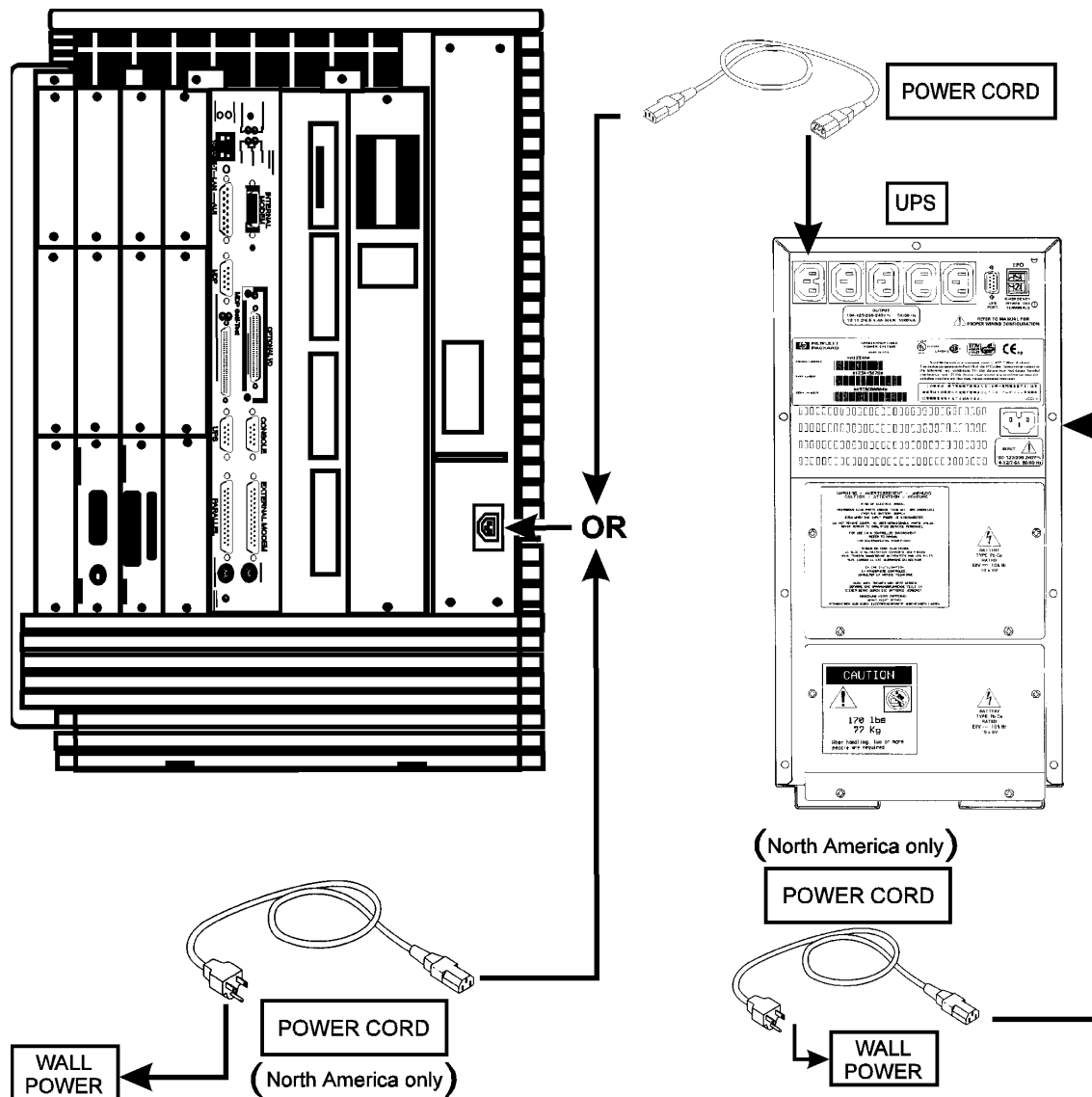
khmu036a

The stabilizer block (or chock block) is used to prevent the system cabinet from being inadvertently moved around. The block can be placed under either the front or rear wheels.

1. Position the stabilizer block at the desired location for the system cabinet.
2. Roll the system cabinet onto the stabilizer block until the front (or rear) wheels fall into the notch in the stabilizer block.



## Power Connections



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### If you are using an Uninterruptible Power System (UPS):

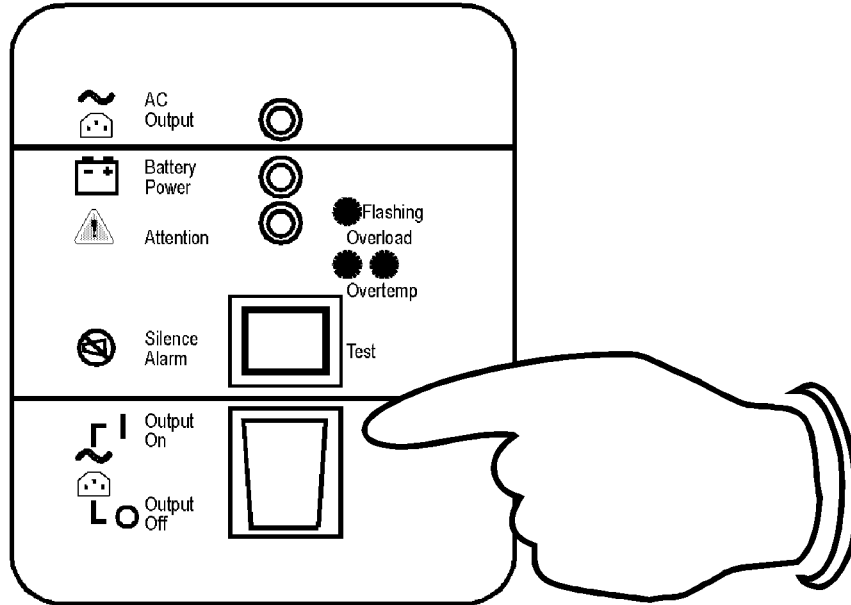
1. Plug the convenience power cable (8120-6371) into the power receptacle closest to the upper-left corner of the UPS.
2. Plug the UPS power cable into wall power.

### If you are NOT using a UPS:

Connect the system power cable (8120-5337) directly to wall power.

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## **POWER ON: First, Turn On the UPS and All Peripherals**

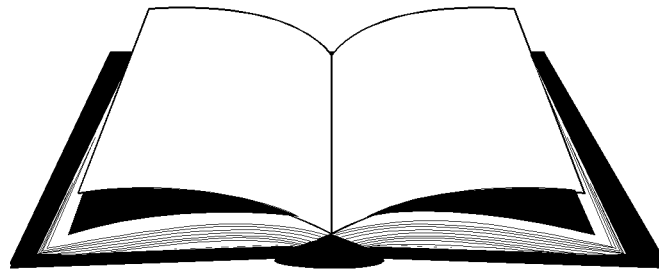
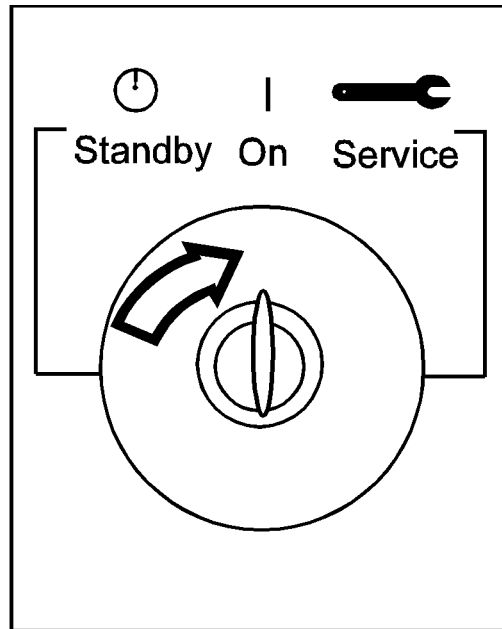


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1. Turn on the UPS.
2. Turn on all system peripherals. Be sure all system peripherals are on with no error indications.

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## Then, Turn On the System



## OWNER'S GUIDE

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1. Turn on the system by setting the key switch to the "ON" position.
2. Refer to the *Owner's Guide* for that came with your system for operator information.

Introduction  
**Then, Turn On the System**