HP 260 Computer Systems

INSTALLING YOUR HP 260 SERIES 30 AND SERIES 40

User's Manual

HEWLETT PACKARD

HERRENBERGER STRASSE 130, D-7030 BOEBLINGEN

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HP Computer Museum
www.hpmuseum.net

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FEDERAL COMMUNICATION COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

(for U.S.A. only)

This equipment generates and radiates radio frequency energy. If not installed and used as directed in the system's documentation, the system may cause interference to radio communications.

The system has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference. Should this occur, the user must at his own expense take whatever measures may be required to correct the interference.

PRINTING HISTORY

New editions are complete revisions of the manual. Update packages, which are issued between editions, contain additional and replacement pages to be merged into the manual by the customer. The dates on the title page change only when a new edition or a new update is published. No information is incorporated into a reprinting unless it appears as a prior update; the edition does not change when an update is incorporated.

The software code printed alongside the date indicates the version level of the software product at the time the manual or update was issued. Many product updates and fixes do not require manual changes and, conversely, manual corrections may be done without accompanying product changes. Therefore, do not expect a one to one correspondence between product updates and manual updates.

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LIST OF EFFECTIVE PAGES

The List of Effective Pages gives the date of the most recent version of each page in the manual. To verify that your manual contains the most current information, check the dates printed at the bottom of each page with those listed below. The date on the bottom of each page reflects the edition or subsequent update in which that page was printed.

Effective Pages	Date
Title	May 1988
i to vii	May 1988
3-1	May 1988
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4-2	May 1988
5-11 to 5-13	May 1988
5-17 to 5-21	May 1988
6-3 and 6-4	May 1988
6-10 to 6-15	May 1988
A-1 to A-2	May 1988
D-8	May 1988
E-3	May 1988

CONVENTIONS

WARNING

The WARNING sign denotes a hazard. It calls attention to a procedure or instruction which, if not correctly performed or adhered to, could result in injury or loss of life. Do not proceed beyond a WARNING sign until the indicated procedures are fully understood and met.

CAUTION

The CAUTION sign denotes a hazard. It calls attention to a procedure or instruction which, if not correctly performed or adhered to, could result in damage to part or all of the equipment. Do not proceed beyond a CAUTION sign until the indicated procedures are fully understood and met.

NOTE

The NOTE sign calls attention to an important item or items of information.

TERMS USED IN THIS MANUAL

A complete list of terms is supplied in the appendix titled "Glossary".

Abbreviations are occasionally used to refer to groups of peripherals. For example, if you see the term "HP 9133/4L", it refers to both the HP 9133L and the HP 9134L discs. Similarly, the term "HP 794xA" refers to every product with a product number prefix "HP 794" and a suffix of "A". (These are the fast mass storage devices HP 7941A, HP 7942A, HP 7945A, and HP 7946A).

THE HP 260 SERIES 30 AND SERIES 40

Throughout this manual reference is made to the HP 260. This name represents both the HP 260 Series 30 (product number HP 45070A), and the HP 260 Series 40 (product number HP 45072A), and no other products.

Section 1
INTRODUCTION

Section 2
INSTALLING THE SPU AND MASS STORAGE DEVICES

Section 3
INSTALLING WORKSTATIONS AND TERMINALS

INTRODUCTION

SECTION 1

INTRODUCTION

This manual describes how to install your HP 260. Once you have installed your system, you can use this manual to add extra equipment.

You need no experience of computers or electronics to use this manual. All computing terms are explained in the appendix titled "Glossary".

WARNING

Before installing your HP 260 system, you must have read and complied with the instructions contained in the Site Preparation manual. ("Preparing for your HP 260", part number HP 45070-90003). Failure to comply with site preparation requirements invalidates all Hewlett-Packard warranties, and could result in injury to the operator or damage to the system.

WILL HEWLETT-PACKARD INSTALL YOUR SYSTEM?

The standard price of every HP 260 includes installation by Hewlett-Packard. **If you did not specify self-installation when ordering your SPU then your HP 260 system will be installed by a Hewlett-Packard Customer Engineer.**

If your order includes installation by Hewlett-Packard, then preserve this manual as your Hewlett-Packard Customer Engineer will need it.

SELF-INSTALLATION

If you specified self-installation when ordering your SPU, you are responsible for installing your HP 260.

Tools and Equipment

No special equipment is required to install your HP 260. You will need one small flat-blade screwdriver, (with a blade approximately 4-mm wide), as well as a clear work surface and floor area.

Operations That You Can Perform

This manual describes the following tasks.

- Building the Mini-Rack Cabinet.
- Installing the HP 260 SPU (System Processor Unit), and mass storage devices.
- Attaching workstations and terminals to the SPU.
- Attaching printers, plotters, and other peripherals.
- Switching on the system.
- Loading and copying the operating system.
- Choosing your desired language for the QUERY database program
- Choosing the correct keyboard
- Configuring the HP 260
- Attaching further peripherals to the system after installation.
- Adding extra I/O and memory printed circuit boards.

Operations That Hewlett-Packard Will Perform

You should ask Hewlett-Packard to perform the following operations.

- Attaching printers which communicate using the Hewlett-Packard Interface Bus (HP-IB).
- Attaching the I/O Extender to the SPU.
- Attaching the HP 7912P disc.
- Configuring the HP 2334A Multimux.

Information helpful to the Hewlett-Packard Customer Engineer is supplied in the appendices titled "Attaching HP-IB Printers and the HP 7912P Disc" and "HP 2334A Multimux Configuration".

HOW TO USE THIS MANUAL

When First Installing the System

Start at the section titled, "Installing the SPU and Mass Storage Devices". Then work through each section in order. If directed to an appendix (for example, to assemble the Mini-Rack Cabinet) complete the instructions in the appendix and then return to the original reference.

When Adding Extra Items to Your System

Consult the relevant appendix or section directly.

INSTALLATION MANUAL OVERVIEW

- Section 2. "Installing the SPU and Mass Storage Devices". This describes how to install the SPU and all discs and tape drives.

- Section 3. "Installing the Workstations and Terminals". This section describes the installation and configuration of workstations, and workstations operating as terminals, that are supported by your HP 260.

- Section 4. "Installing Serial Peripherals". This section describes how to connect and configure all serial peripherals not covered in Section 3.

- Section 5. "Starting Up Your HP 260". This section describes how to start your HP 260 for the first time and how to load the operating system. It also describes how to initialize a fixed disc, copy the operating system to it, and choose the language for your **QUERY** program.

- Section 6. "Configuring Your HP 260". This section describes how to select the keyboard recognized by your HP 260, configure your HP 260 for all its peripherals, and select any necessary operating system enhancements.

- Appendices. These contain instructions to build the Mini-Rack Cabinet, add extra memory or I/O boards, and attach extra mass storage devices and extra peripherals. (The appendices also contain information needed by your Hewlett-Packard Customer Engineer when installing HP-IB printers, the HP 7912P disc, and the HP 2334A Multimux).

This Installation manual ends with your HP 260 installed, running and ready for work. Further information can be found in the the manual entitled "Operating and Managing Your HP 260". Once you are familiar with your HP 260, turn to your application-software manuals, or if you are programming the HP 260 yourself, your programming manuals.

INSTALLING THE SPU AND MASS STORAGE DEVICES

SECTION 2

INTRODUCTION

This section describes how to attach mass storage devices to your SPU. You can install all supported mass storage devices except the HP 7912P disc. The HP 7912P disc must be installed by a Hewlett-Packard Customer Engineer. The Hewlett-Packard Customer Engineer will find useful information in the appendix titled "Installing the HP-IB Printers and the HP 7912P Disc".

The System Disc

The first time that you switch on your HP 260, the operating system is loaded into memory from a removable medium (a 3.5" microfloppy disc or a tape cartridge) supplied by Hewlett-Packard.

After installation you must copy the operating system from the removable medium to a fixed disc. This fixed disc is known as **the system disc**. Whenever the computer is subsequently switched on, the operating system is loaded into memory from the system disc.

Hewlett-Packard recommends that if one of your discs has an integral 3.5" microfloppy disc drive or a tape cartridge drive, then that disc be your system disc. If you load your operating system from an HP 9144A tape, then you can choose any fixed disc to be the system disc.

GETTING STARTED

CAUTION

Take great care when handling computer system equipment, especially mass storage devices. Although built to high standards, the components of your HP 260 are delicate electrical devices that can be damaged by bumps or other rough handling.

NOTE

If your system is supplied in the United States of America, some memory or I/O printed circuit boards can be shipped apart from the SPU. In this case, consult the appendix titled "Attaching Extra I/O and Memory Boards" to install these printed circuit boards. When you have installed all the printed circuit boards, return to this section to install your SPU.

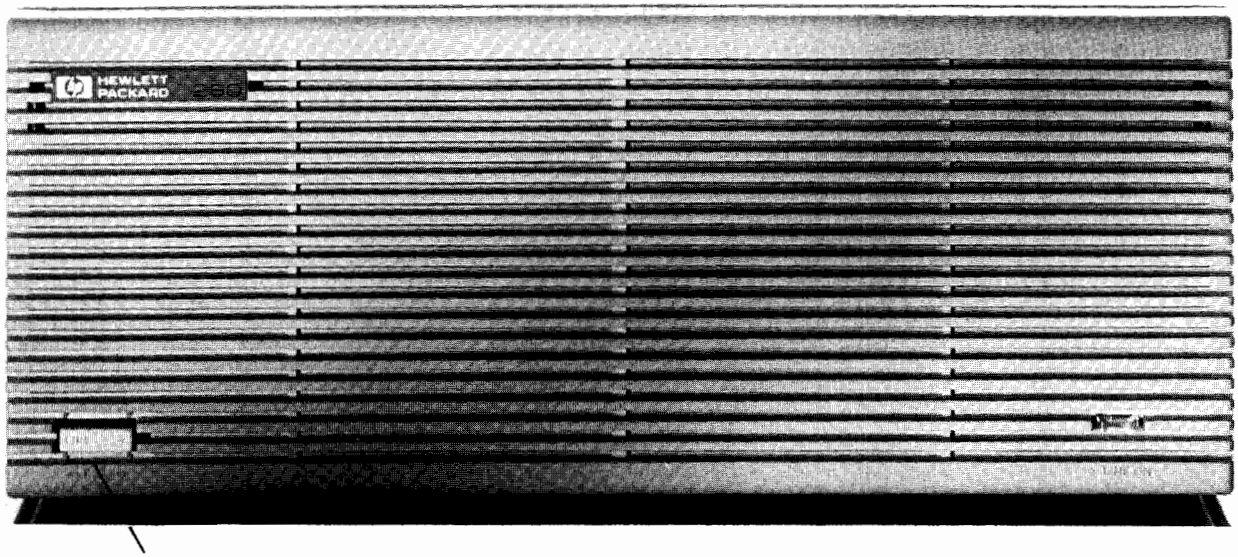
1. Place the SPU and mass storage devices where they are to be used. Make sure that you have plenty of space for assembly.

2. Make sure that the operating voltage indicator on the rear of the SPU matches the power available at your site. If the operating voltage is not correct, then slide the voltage indicator until it is set to the correct voltage for your site.

CAUTION

If the computer's operating voltage does not match the site voltage the computer can be damaged.

3. Make sure every component is switched off. The On/Off switches for the SPU and the I/O Extender, (as well as for most mass storage devices), are at the bottom left of the front of each component.



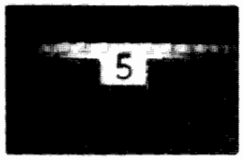
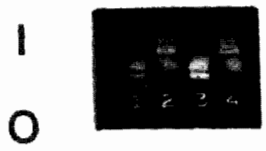
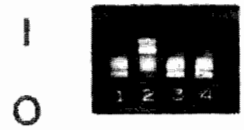
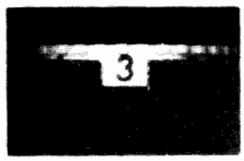
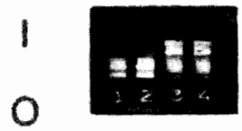
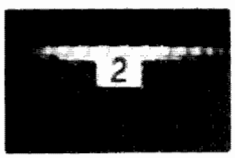
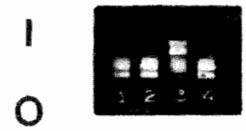
HP 260 SPU Front View

HP-IB ADDRESSES

Mass storage devices communicate with the SPU using the Hewlett-Packard Interface Bus (HP-IB). Mass storage devices are connected in a chain, headed by the SPU. This chain is shown in a diagram at the end of this section. Each mass storage device is identified by a unique HP-IB address number. The HP-IB address number depends upon the position of the mass storage device in the chain.

The "HP-IB Address Table" shows the relationship between the position of an HP-IB device and its HP-IB address number. The entries in the column labeled **Position in the HP-IB Chain** are the positions of each mass storage device in relation to the SPU.

HP-IB Address Table

Position in the HP-IB Chain	HP-IB Address Number	Address Wheel Setting	Binary Switch Setting
First (System Disc)	5		
Second	4		
Third	3		
Fourth	2		

NOTE

The HP 260 supports up to four mass storage devices

The system disc, or the HP 9144A Tape if you have purchased one, should be in the first position in the chain. There are no restrictions as to the position of the other mass storage devices.

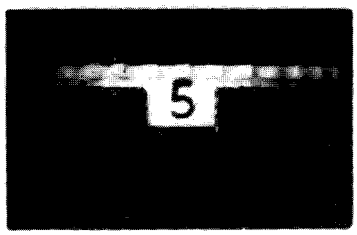
All HP-IB devices must be connected to the same dedicated electrical circuit. (This is fully explained in the manual titled "Preparing for Your HP 260", part number HP 45070-90003.)

Setting the HP-IB Addresses

Set the HP-IB address of each mass storage device in accordance with the "HP-IB Address Table". There are two ways to set the HP-IB addresses.

HP-IB Address Wheel

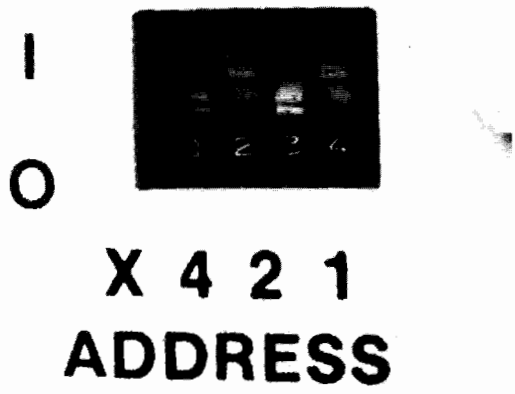
- If your disc is an HP 9133H, HP 9133L, HP 9134H, HP 9134L, HP 9153B, or HP 9154B, then set its HP-IB address by rotating the address wheel with a forefinger until the correct number is clearly visible. The address wheel is at the rear of the disc.



HP-IB Address Wheel set to *5*

HP-IB Binary Address Switch

- On all other discs (and the HP 9144A tape), set the HP-IB addresses by using a ball-point pen to slide the binary address switches. The binary address switch is at the rear of the mass storage device.



HP-IB Binary Address Switch set to 5

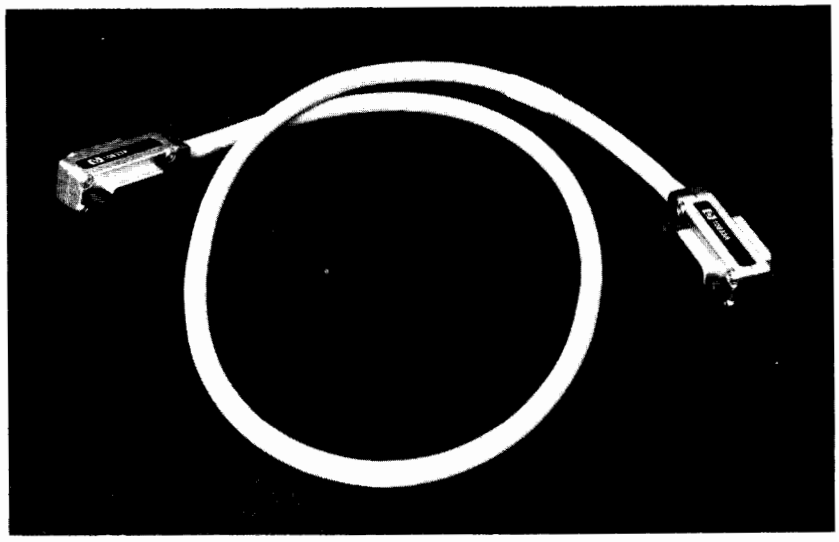
Each switch, when in the high position, adds the value printed below it to the HP-IB address. For example, in the illustration above the switches labeled **4** and **1** are in the high position. Therefore the HP-IB address is set to 5. **The switch labeled X must always be in the low position.**

If You Have Ordered a Mini-Rack Cabinet

If you have ordered the Mini-Rack Cabinet, then turn to the appendix titled "Building The Mini-Rack Cabinet". When the cabinet is complete, continue at the section titled "Installing Workstations and Terminals".

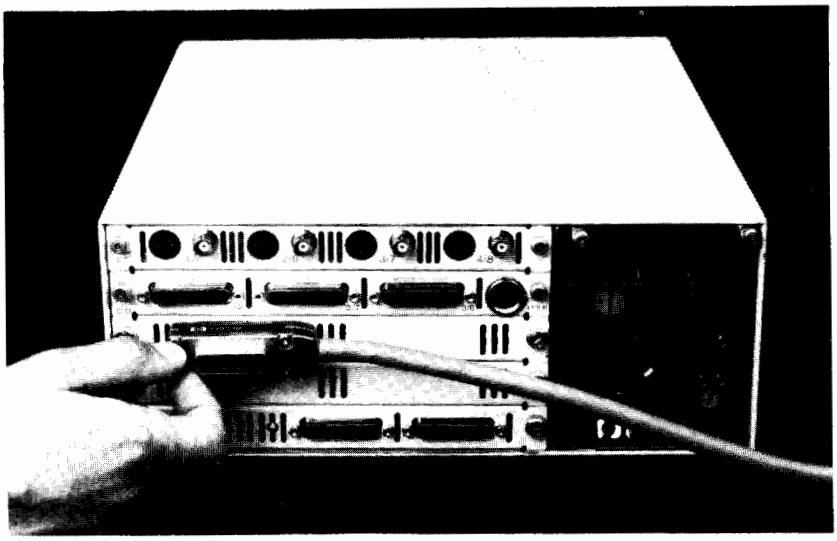
ATTACHING THE HP-IB CABLES

1. Locate your first HP-IB cable.



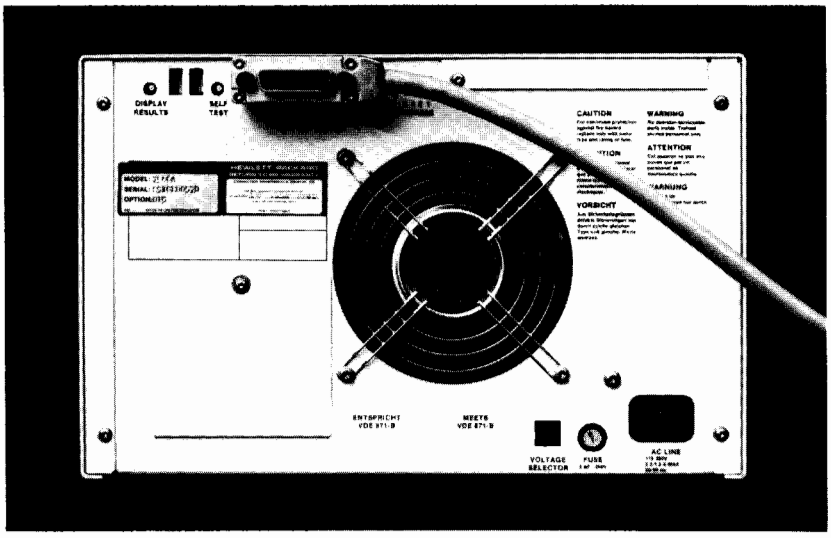
HP-IB Cable

2. Attach one end of the HP-IB cable to the HP-IB connector on the SPU. Using your fingers, tighten the screws at either end of the connector.



HP-IB Cable and SPU HP-IB Connector

3. Attach the free end of the HP-IB cable to the HP-IB connector on the system disc. In this illustration, the system disc is an HP 7946A. Using your fingers, tighten the screws at either end of the connector.

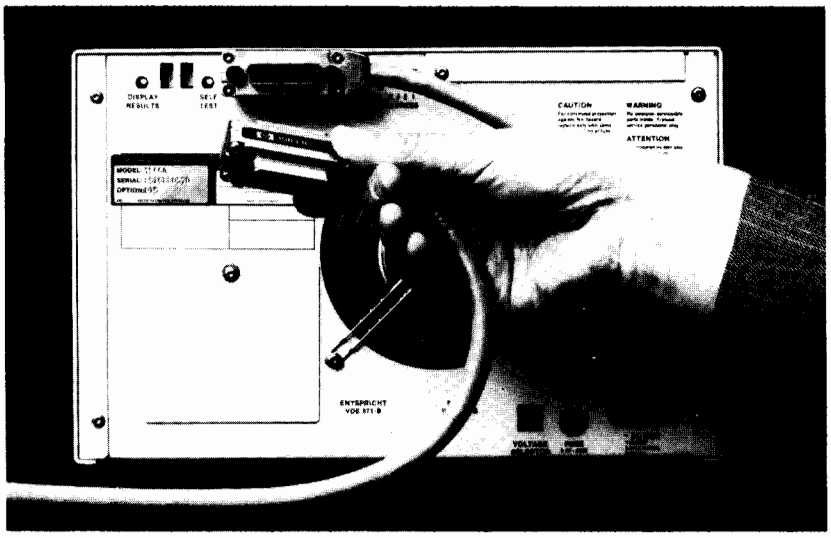


HP-IB Cable and System Disc HP-IB Connector

If you have no further mass storage devices, then go to "Attaching The Power Cables".

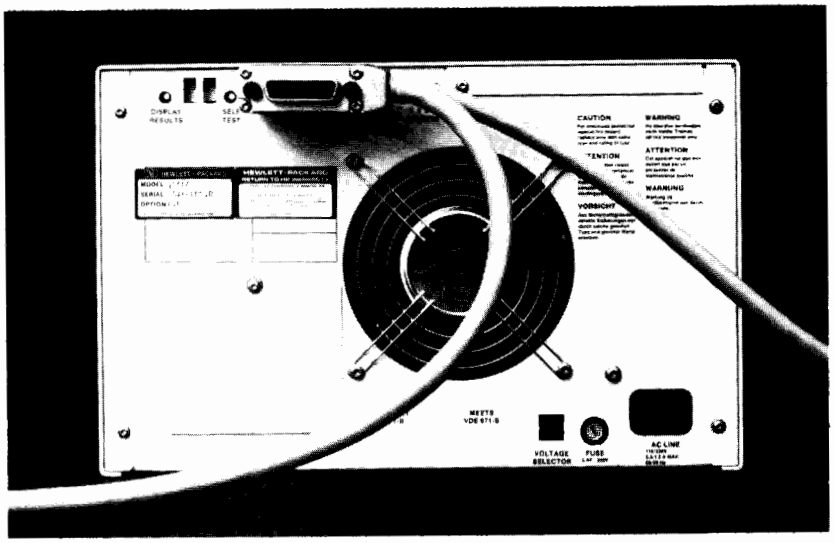
4. Locate your next HP-IB cable.

5. Attach the next HP-IB cable to the rear of the HP-IB connector on the last mass storage device in the chain. The illustration below shows how the cables link.



Second HP-IB Cable Connection

6. Using your fingers, tighten the screws at either end of the connector. The connection should resemble the illustration below.



Second HP-IB Cable Connection

7. Attach the free end of the HP-IB cable to the HP-IB connector of the next mass storage device. In this illustration the second disc is an HP 9133L. Using your fingers, tighten the screws at either end of the connector.

HP-IB Cable and Second Disc HP-IB Connector

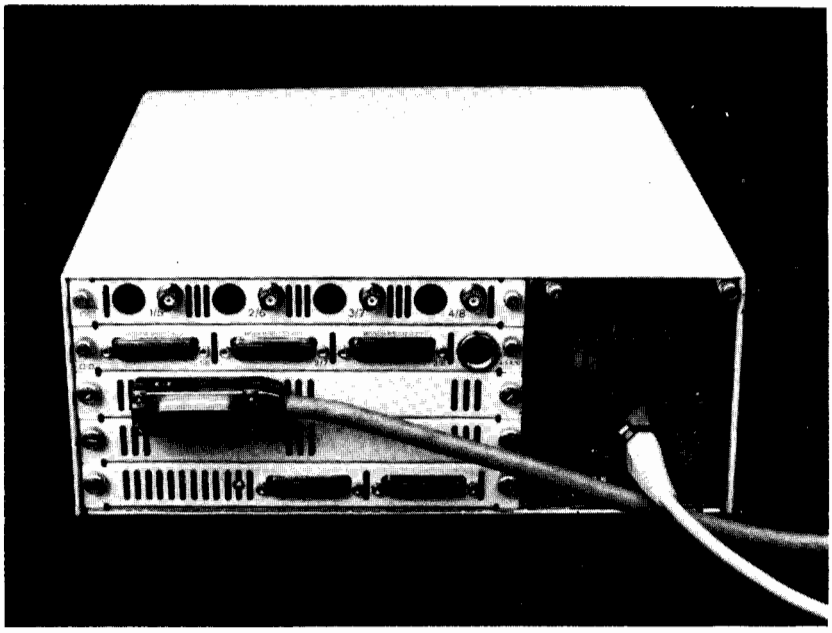
8. Repeat Steps 4 to 7 for each mass storage device.

ATTACHING THE POWER CABLES

NOTE

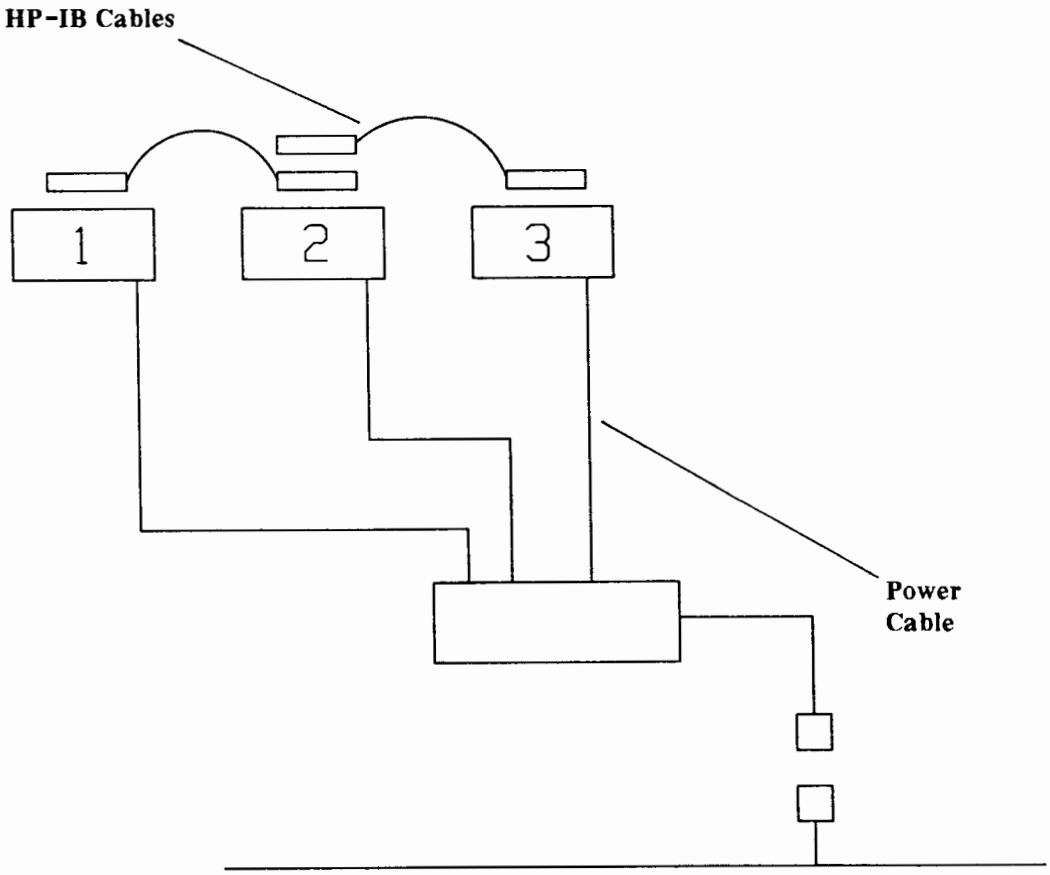
It is important that all HP-IB devices are powered from the same dedicated electrical circuit. The full requirements for this dedicated electrical circuit are supplied in the manual "Preparing for Your HP 260", part number HP 45070-90003.

1. Plug the power cable supplied with your SPU into the SPU power socket. Do not plug the free end into the mains power outlet.



HP 260 SPU with Power Cable

2. Plug the power cable supplied with each mass storage device into the mass storage device's power socket. Do not plug the free ends into the mains power outlet. The diagram below shows two mass storage devices connected to the SPU. Note the dedicated electrical circuit.



Dedicated Electrical Circuit

HP-IB Connnection and System Dedicated Circuit

Label	HP-IB Device
1	HP 260 SPU
2	First mass storage device
3	Second mass storage device

INSTALLING WORKSTATIONS AND TERMINALS

SECTION 3

INTRODUCTION

This section describes how to install the workstations and terminals supported by your HP 260. Workstations communicate with the HP 260 using either the serial or the video interface. Installation of the following workstations is described.

Workstation	Interface	Additional Software *
HP 2392A	Serial	None
HP 700/92	Serial	None
HP 150	Serial	None (See note)
HP Vectra Family	Serial	HPTerminal/AdvanceLink
HP 110 Portable Plus	Serial	REFLECTION 1
IBM PC, PC AT, PC XT	Serial	HPTerminal/AdvanceLink
HP 45263D	Video	None

* Additional software that must be ordered and loaded by certain personal computers before they can operate as workstations or terminals.

NOTE

The AdvanceLink program must be revision B.01.00 or later, and the HPTerminal program must be revision A.00.01 or later. The HPTerminal program allows you to use your HP Vectra as a terminal or workstation. File transfers and certain other functions can only be performed if the AdvanceLink program is installed.

This section does not describe how to load the additional software. Refer to the software's documentation for such information.

The HP 150 needs no additional software to operate as a terminal or workstation. File transfer and other advanced capabilities need the AdvanceLink program.

The IBM PC, PC AT, and PC XT operate as workstations on your HP 260. However, Hewlett-Packard cannot support or guarantee equipment not manufactured by Hewlett-Packard.

This section should be used in conjunction with the Serial Configuration Table and the Serial Configuration Worksheet, which are supplied in the appendix entitled "Serial Configuration Table and Worksheet". The worksheet is used to record each workstation or terminal as it is attached, and the table supplies the configuration values for RS-232-C and RS-422 data transfer.

Three Stages of Installation

Installation of a workstation has three stages.

- Physical, or hardware, attachment of the workstation. This includes assembling the workstation and attaching the cable connecting the HP 260 to the workstation.
- Workstation Configuration. Each workstation is configured to make sure that its data communication speed and communication parameters match those of the HP 260.
- HP 260 Configuration. The HP 260 must be configured for all workstations and terminals. Configuration includes setting the data communication method and assigning memory space. Configuration of your HP 260 is described in the section titled "Configuring Your HP 260". You will use this section to configure your HP 260 after **all** your workstations have been installed and configured.

There are two methods of serial communication: direct communication (RS-232-C or RS-422) and modem communication. Configuration information supplied in the Serial Configuration Table applies to direct communication only. The configuration needed by a modem depends upon the modem itself. Consult the modem's documentation for such information.

Ports and Channels

A "port" is an outlet through which serial communication is made. An "ASI Port" is a serial communication port on an ASI board. The ASI Ports are labeled from 1 to 10. An "Integrated Serial Port" is a serial communication port on the SPU board. The Integrated Serial Ports are labeled -1 and -2. A "Video Channel" is an outlet through which video communication is made. All Video Channels are on the rear of a video board (also called a Video MUX Interface). The Video Channels are labeled from 1 to 8.

A summary of your HP 260's data communication ports and channels is supplied in the appendix titled "HP 260 Ports and Channels".

Workstations and Terminals

Any serial workstation can operate as a terminal. To install a serial workstations as a terminal, follow the instructions in this section, and then configure the peripheral as a terminal in the section titled "Configuring Your HP 260".

NOTE

Terminals cannot operate from the Integrated Serial Ports.

The HP 45263D Video Workstation can operate only as a workstation.

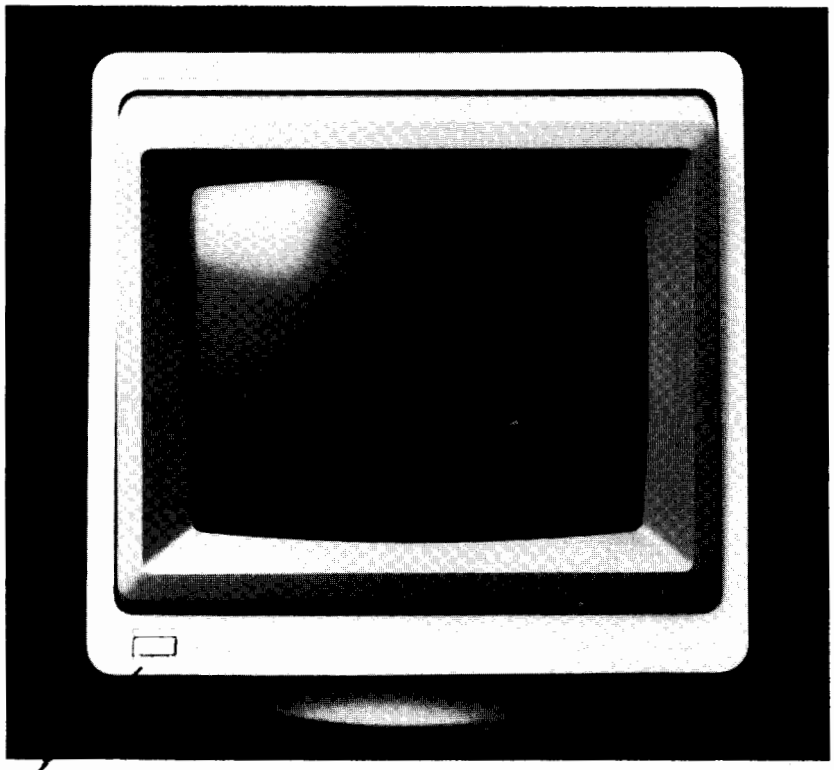
The Principal Workstation

The principal workstation is the workstation to which all system error messages, self-test messages, system start-up messages and loader information are sent. If a video board is installed, the principal workstation is the workstation attached to Video Channel 1. If a video board is not installed, the principal workstation is the workstation attached to Integrated Serial Port -1. The principal workstation cannot be connected via a modem.

If a workstation is not present on either of these ports, you will not be able to start and operate your HP 260.

INSTALLING THE HP 45623D VIDEO WORKSTATION

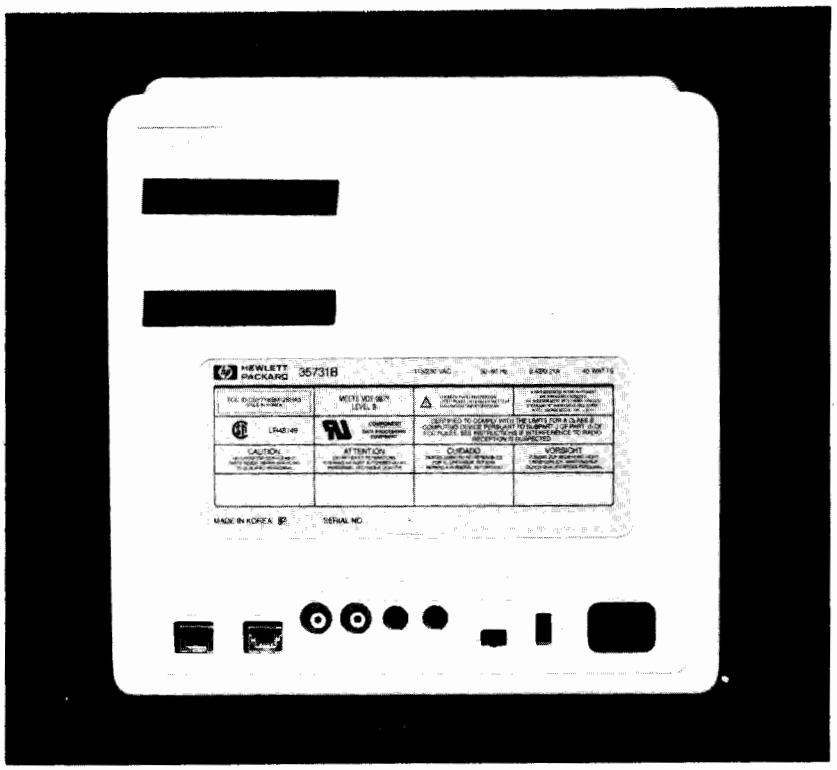
1. Unpack the HP 45263D Video Workstation where it is to operate.



HP 45263D Front View

2. Ensure that the workstation is switched off, (that is, the On/Off switch is extended), and the power cord is not plugged to a power outlet.

3. The operating voltage switch displays the workstation's operating voltage. Verify that the workstation's operating voltage matches the power available at your site. **If the operating voltage is not correct,** use a ball-point pen to move the operating voltage switch until the switch displays the correct voltage.

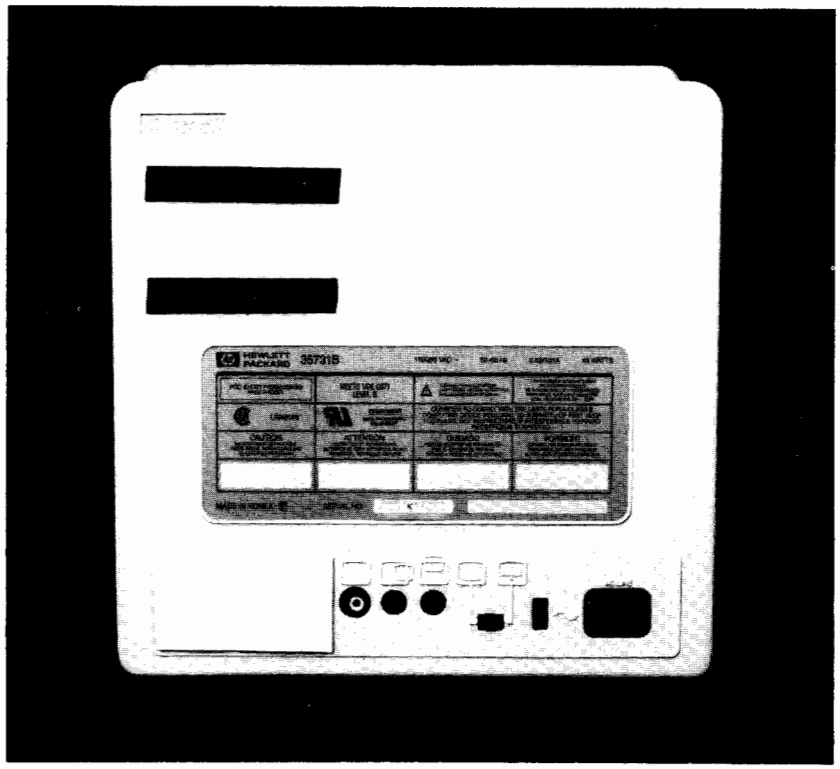


Operating Voltage Switch

HP 45263D Rear View

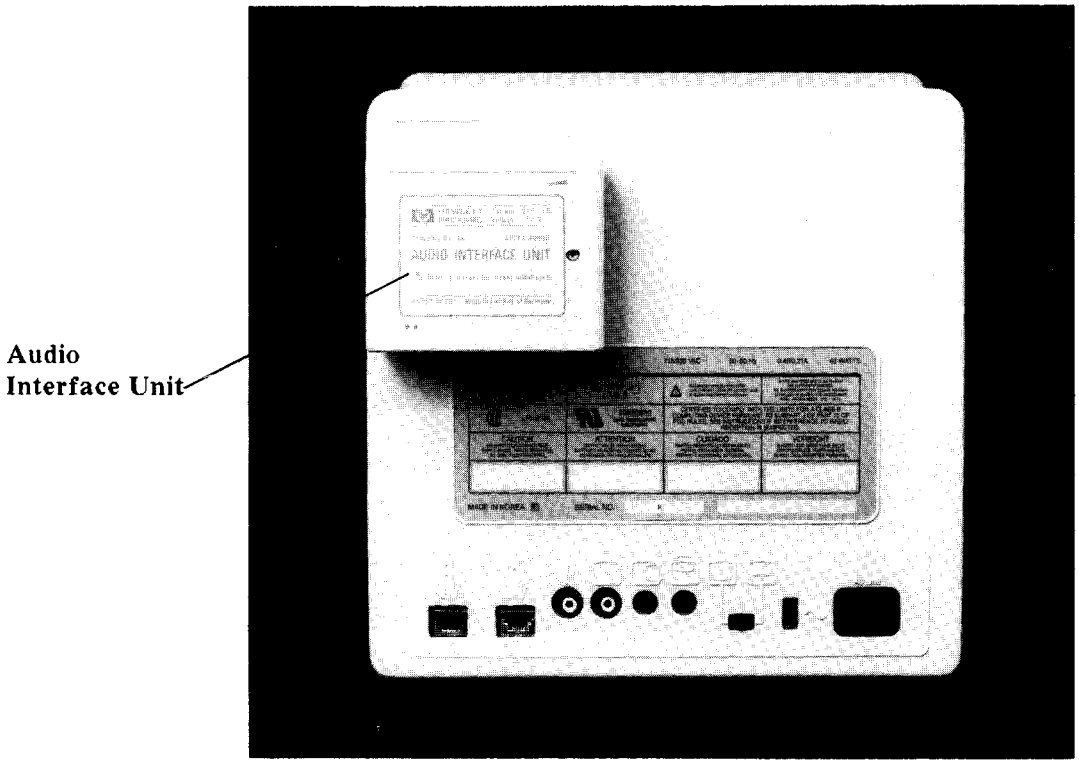
4. Locate the larger of the two adhesive labels supplied with your workstation. This label covers those ports not used when connecting the workstation to the HP 260. After removing its protective paper backing, affix the label to the rear panel of the workstation, as illustrated below.

Port Protection Label



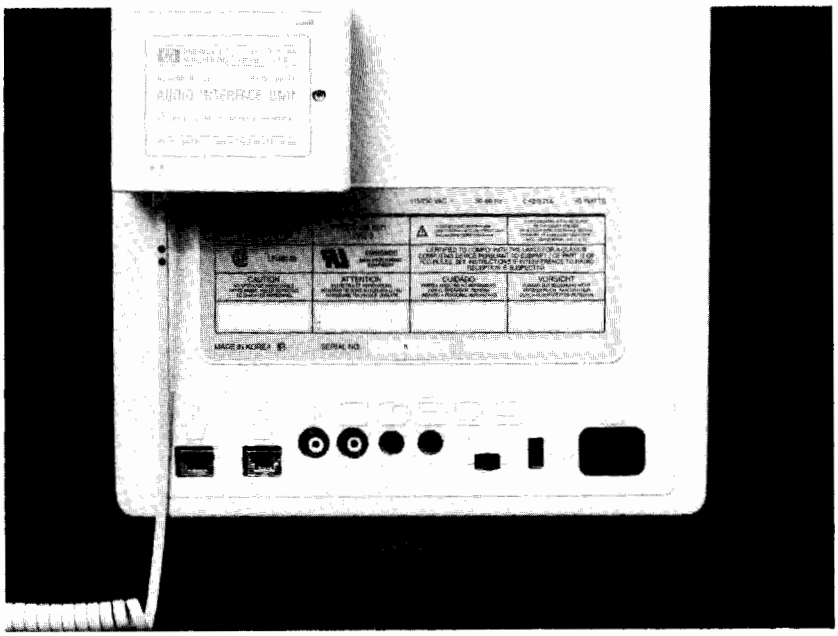
HP 45263D Rear View

5. Peel the paper off the back of the audio interface unit and press the audio interface unit against the rear panel of the workstation in the position shown below.



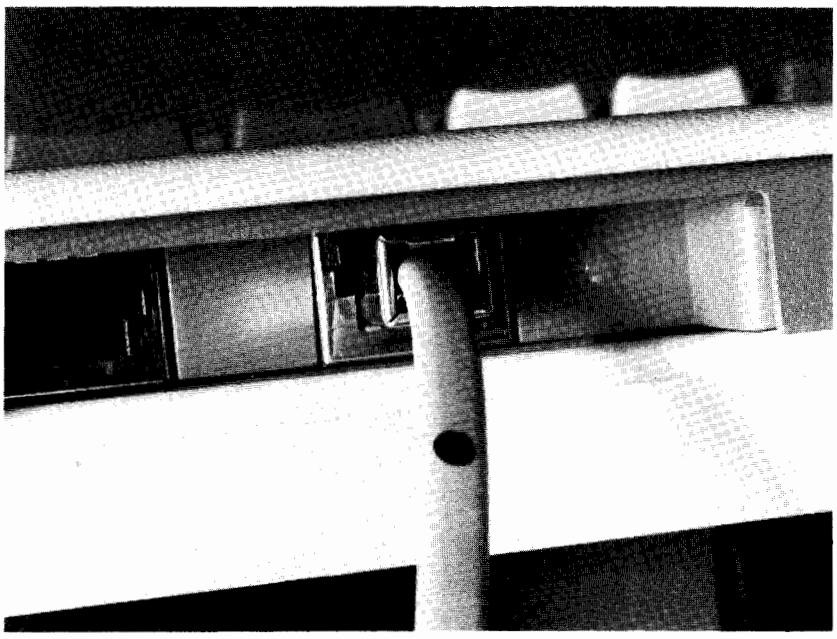
HP 45263D Rear View

6. Locate the keyboard cable which is marked ••. Plug the end of the keyboard cable that is marked •• into the audio interface unit connector marked ••.



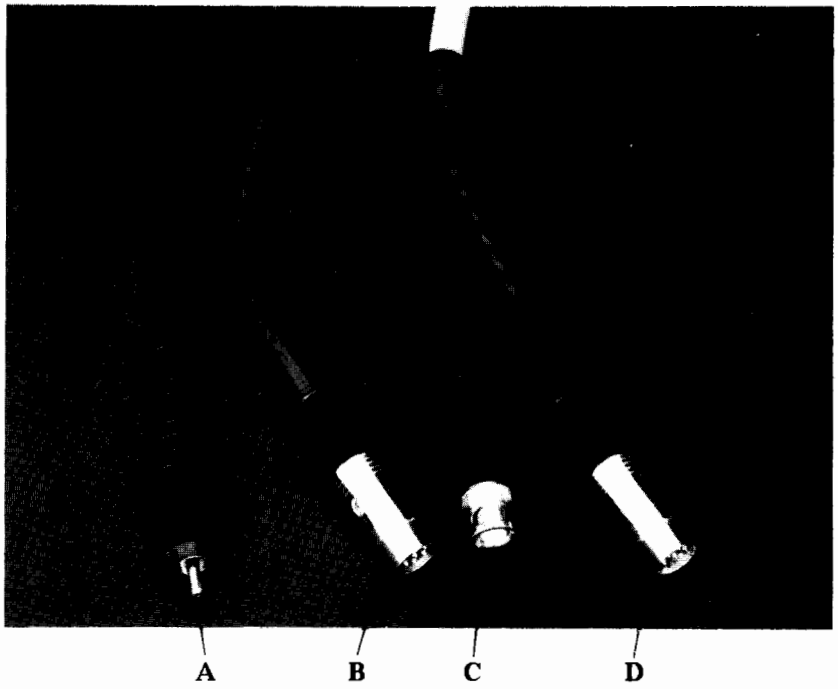
HP 45263D Rear View

7. Locate the keyboard. There are two connectors on the rear of the keyboard. Plug the end of the keyboard cable marked • into the keyboard connector marked •.



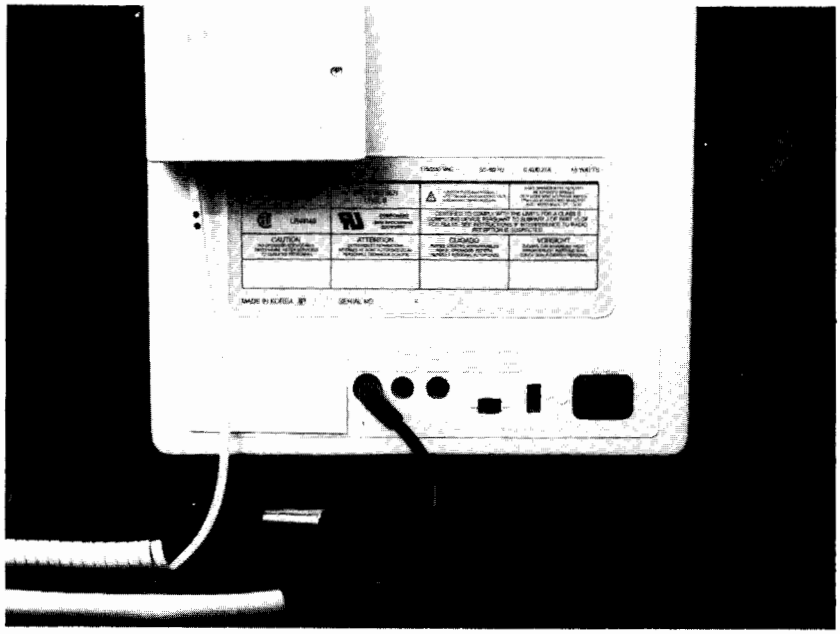
Keyboard Rear View

8. Locate the video cable. It is shown below, with all four connectors labeled. These labels will refer to the cable as used in this section



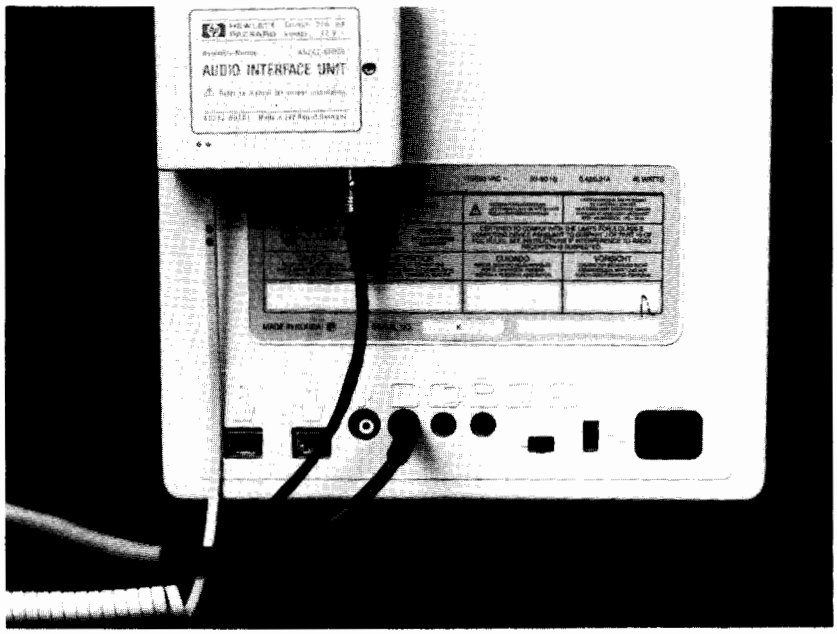
Video Cable Connectors

9. Plug the connector labeled A in Step 8 into the HP 45263D jack plug socket.



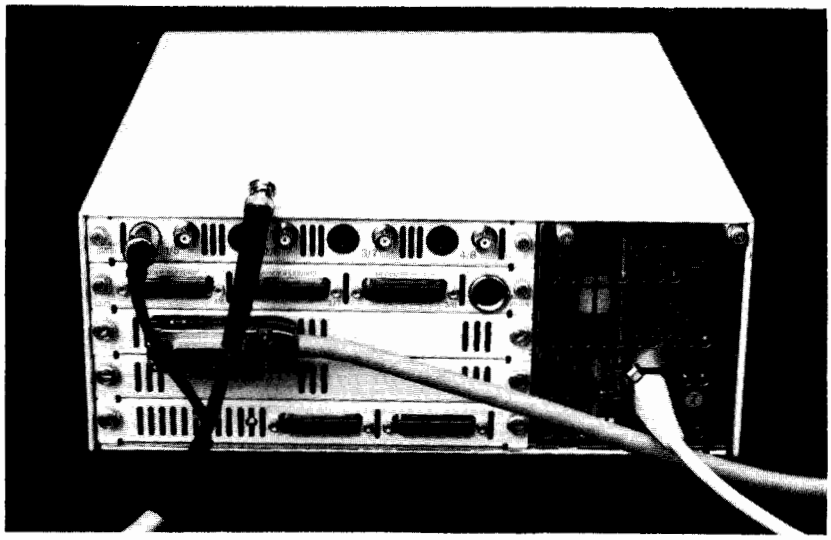
HP 45263D Rear View

10. Plug the connector labeled **B** in Step 8 into the DIN socket on the right hand side of the audio interface unit.



HP 45263D Rear View

11. Plug the connector labeled **C** in Step 8 into the BNC port of the lowest-numbered Video Channel available on your HP 260. Twist the connector clockwise until it locks.



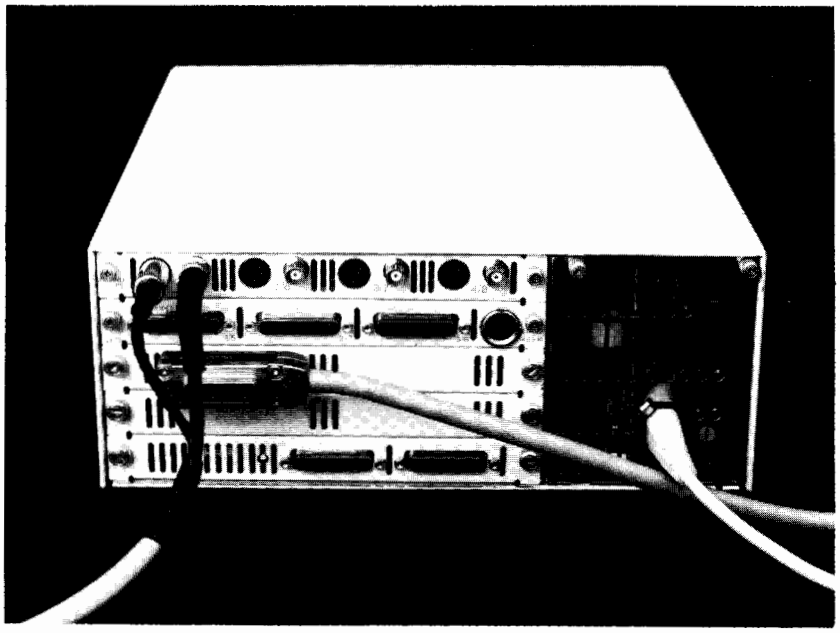
HP 260 Rear View

CAUTION

The first HP 45263D Video Workstation installed must be attached to Video Channel 1. This is the Video Channel labeled "1/5" on the video board closest to the base of the HP 260.

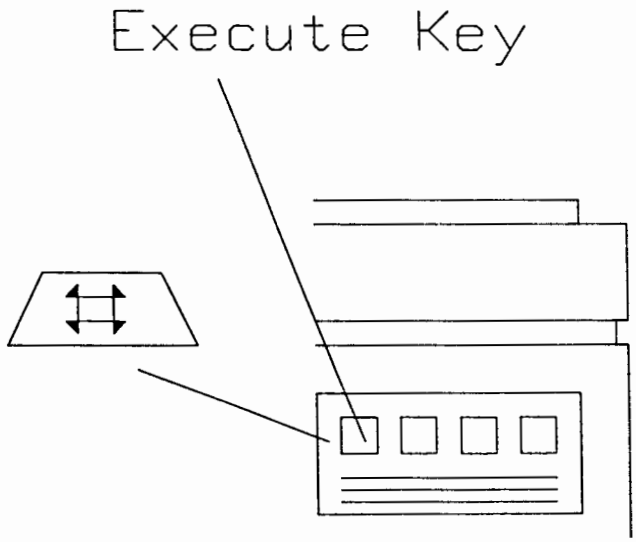
Attach each further video workstation to the lowest-numbered Video Channel available on your HP 260.

12. Plug the connector labeled **D** in Step 8 into the corresponding DIN socket.

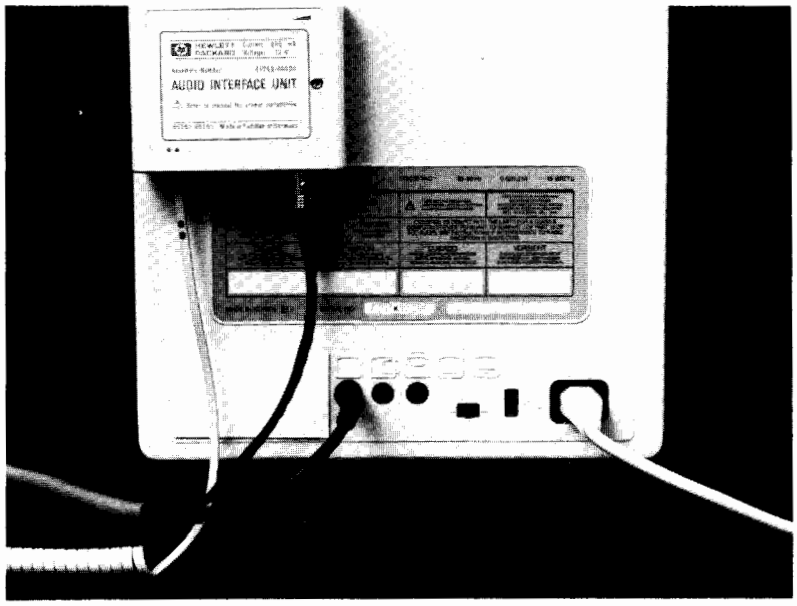


HP 260 Rear View

13. Locate the adhesive label which displays the symbol [☼]. This label is used to identify your workstation's EXECUTE key. Affix the EXECUTE key label to the front of the EXECUTE key on the numeric key pad, as shown in the illustration.



14. Plug the HP 45263D's power cord into its power socket.



HP 45263D Rear View

15. Plug the free end of the power cord into the mains power outlet.

16. Push the power switch to turn on the HP 45263D. Note that the power indicator on the left of the switch is illuminated.

Configuring the HP 45263D Video Workstation

The HP 45263D Video Workstation requires no configuration.

Configuring the HP 260 for the HP 45263D

The HP 260 cannot be configured until all its peripherals are attached and it is switched on. So install the remaining workstations and continue at the section entitled "Installing Serial Peripherals". Once the system is switched on, you will be shown how to configure your HP 260 for workstations and terminals.

INSTALLING THE HP 2392A WORKSTATION

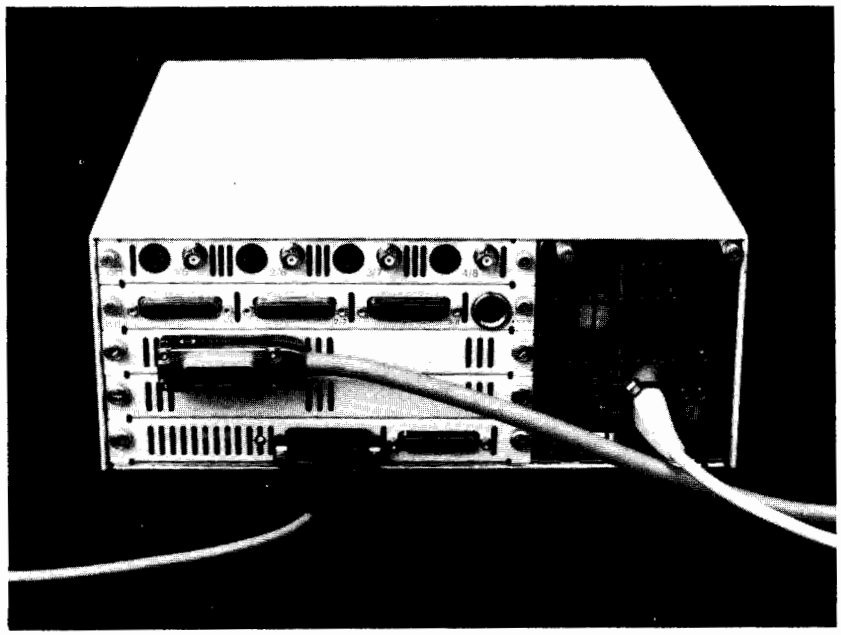
This manual does not duplicate the instructions for assembling your HP 2392A workstation. Refer to the HP 2392A documentation for its assembly instructions. This manual assumes that you have correctly unpacked your HP 2392A and attached the keyboard.

1. Place the HP 2392A workstation where it is to operate.

2. The HP 2392A's operating voltage is shown at the rear of the workstation. Verify that the operating voltage of the workstation matches the power available at your site. **If the operating voltage is not correct,** consult the HP 2392A documentation for information on changing the voltage.

3. Ensure that the HP 2392A is switched off, and that it is not plugged into the power outlet,

4. Plug one end of the serial cable into the lowest-numbered serial port available on your HP 260. The port in the illustration is the Integrated Serial Port labeled -1. Tighten the securing screws on either side of the connector using the small, flat-blade screwdriver.



Serial Connection to the HP 260

NOTE

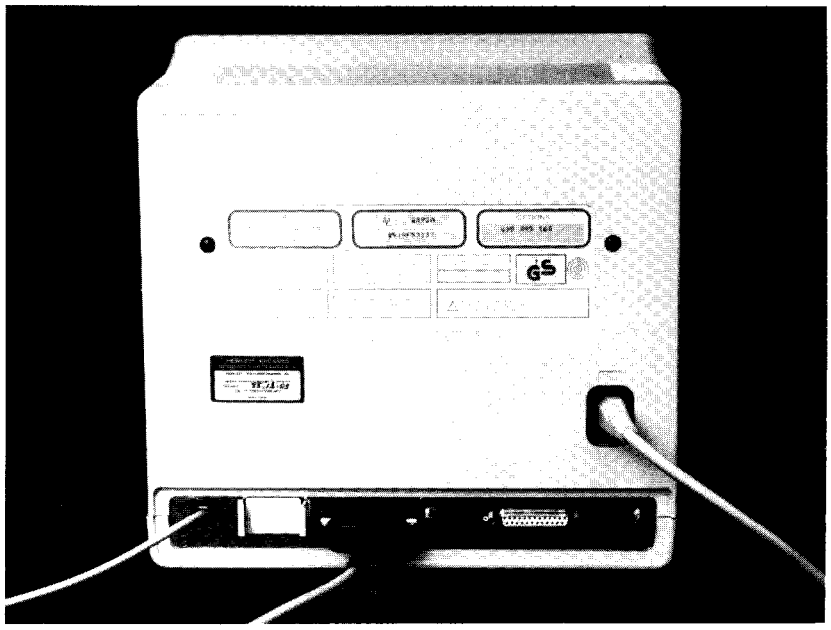
If a video board is not installed, then the first serial workstation must be attached to the Integrated Serial Port labeled -1. Modems cannot be used to communicate between the principal workstation and the HP 260.

Before attaching a workstation to the ASI Ports labeled 4/9 and 5/10, you must fit the connection cable which converts the dual-port socket into two, standard 25-pin connectors. One such cable is supplied with each ASI board. The installation of this cable is described in the appendix titled "Connecting ASI Ports 4/9 and 5/10". Modem communication is not available on the ports labeled 4/9 and 5/10.

RS-422 communication is not available from the Integrated Serial Ports labeled -1 and -2.

5. Plug the other end of the serial cable into the central 25-pin serial port at the rear of the HP 2392A.

6. Plug the HP 2392A power cable into the power socket at the rear of the HP 2392A. The rear of the HP 2392A should resemble the illustration below.



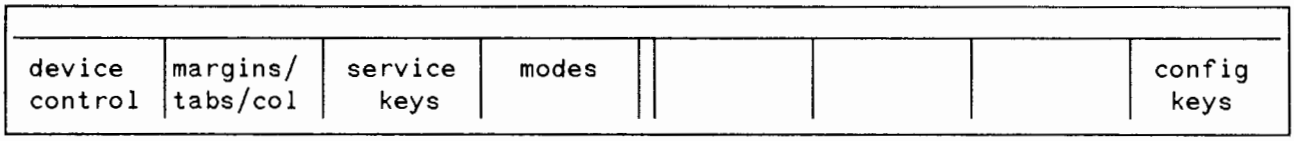
HP 2392A Rear View

7. Plug the free end of the power cable into the wall power outlet.

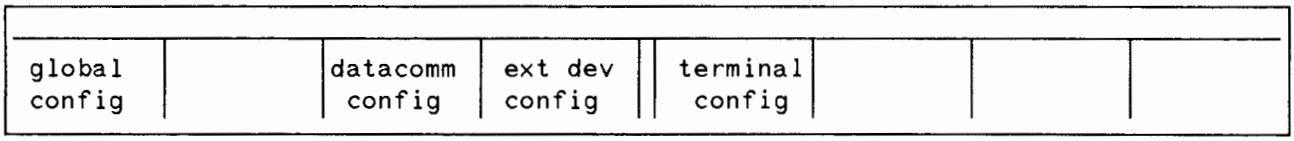
8. Push the ON/OFF switch to turn the terminal on

Configuring the HP 2392A Workstation

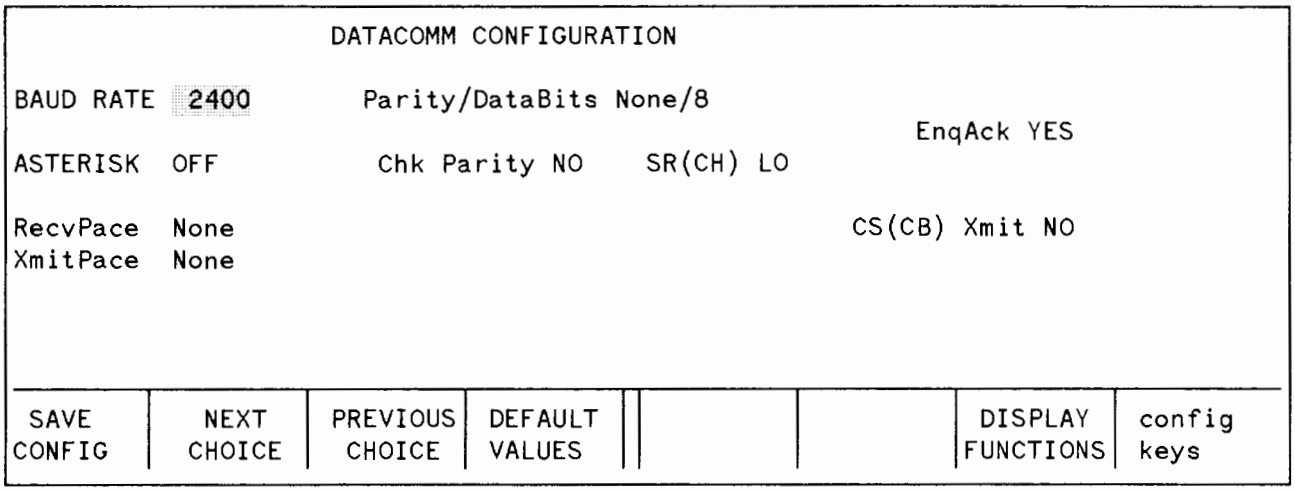
1. Press the key labeled **USER SYSTEM**. The following softkey labels will be displayed.



2. Press [f8], labeled **config keys**. The following softkey labels will be displayed.



3. Press [f3], labeled **datacomm config**. The following screen will be displayed.



4. Press [f4], labeled **DEFAULT VALUES**.

5. If your computer is an HP 260 Series30 or an HP 260 Series40, press [f2], labeled **NEXT CHOICE**, until the Baud rate changes to 19200. If your computer is any other model of the HP 250 or HP 260, press [f2], labeled **NEXT CHOICE**, until the Baud rate changes to 9600.

NOTE

19200 Baud is the maximum rate for direct serial communication with the HP 260 Series30 or the HP 260 Series40. 9600 Baud is the maximum rate for communication with any other model of the HP 250 or HP 260. If you wish to connect an HP 2392A using a modem, configure the Baud rate to the speed specified by the modem.

6. Use the TAB key to move through the fields until the **RecvPace** field is highlighted.

7. Press f2, labeled **NEXT CHOICE**, until the **RecvPace** field displays Xon/Xoff. (All the other configuration values are as the default.) The terminal configuration screen should resemble the following illustration.

```
                          DATACOMM CONFIGURATION

BAUD RATE 19200           Parity/DataBits None/8             Clock  INT
                                                             EnqAck YES
ASTERISK  OFF              Chk Parity NO    SR(CH) LO

RecvPace  XonXoff                                        CS(CB) Xmit NO
XmitPace  None



 SAVE   |  NEXT  |PREVIOUS| system  ||         | config | DISPLAY | config
CONFIG  | CHOICE | CHOICE |defaults ||         | menus  | FUNCTNS | keys
```

8. Press f1, labeled **SAVE CONFIG**.

9. **Record the component, Baud rate and data transfer method on the Serial Configuration Worksheet.**

Configuring the HP 260 for the HP 2392A

The HP 260 cannot be configured until all its peripherals are attached and it is switched on. So install the remaining workstations and continue at the section entitled "Installing Serial Peripherals". Once the system is switched on, you will be shown how to configure your HP 260 for workstations and terminals.

INSTALLING THE HP 700/92 WORKSTATION

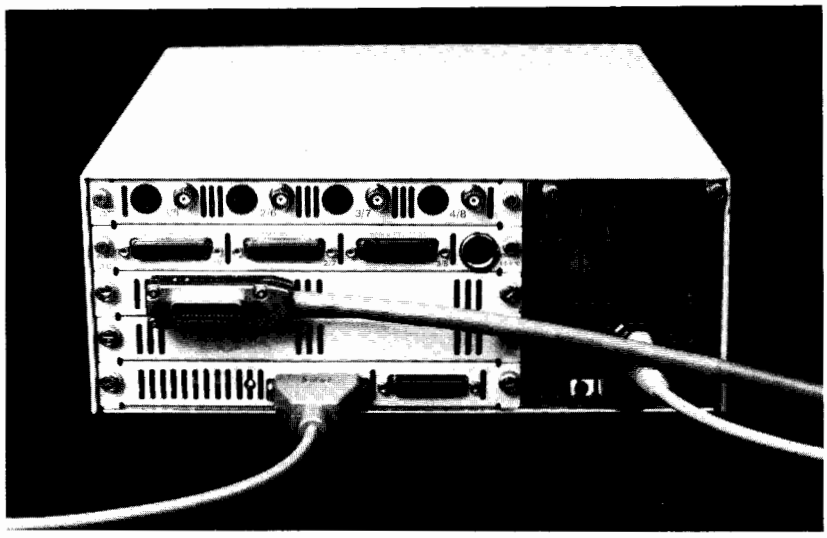
This manual does not duplicate the instructions for assembling your HP 700/92 workstation. Refer to the HP 700/92 documentation for its assembly instructions. This manual assumes that you have correctly unpacked your HP 700/92 and attached the keyboard.

1. Place the HP 700/92 workstation where it is to operate.

2. The HP 700/92's operating voltage is shown at the rear of the workstation. Verify that the operating voltage of the workstation matches the power available at your site. **If the operating voltage is not correct,** consult the HP 700/92 documentation for information on changing the voltage.

3. Ensure that the HP 700/92 is switched off, and that it is not plugged into the power outlet,

4. Plug one end of the serial cable into the lowest-numbered serial port available on your HP 260. The port in the illustration is the Integrated Serial Port labeled -1. Tighten the securing screws on either side of the connector using the small, flat-blade screwdriver.



Serial Connection to the HP 260

NOTE

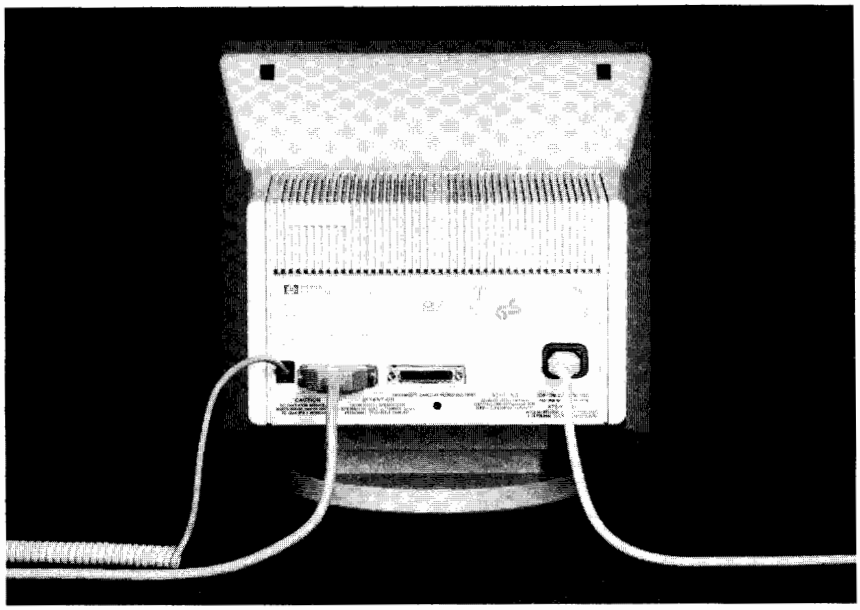
If a video board is not installed, then the first serial workstation must be attached to the Integrated Serial Port labeled -1. Modems cannot be used to communicate between the principal workstation and the HP 260.

Before attaching a workstation to the ASI Ports labeled 4/9 and 5/10, you must fit the connection cable which converts the dual-port socket into two, standard 25-pin connectors. One such cable is supplied with each ASI board. The installation of this cable is described in the appendix titled "Connecting ASI Ports 4/9 and 5/10". Modem communication is not available on the ports labeled 4/9 and 5/10.

RS-422 communication is not available from the Integrated Serial Ports labeled -1 and -2.

5. Plug the other end of the serial cable into the central 25-pin serial port at the rear of the HP 700/92.

6. Plug the HP 700/92 power cable into the power socket at the rear of the HP 700/92. The rear of the HP 700/92 should resemble the illustration below.



HP 700/92 Rear View

7. Plug the free end of the power cable into the wall power outlet.

8. Push the ON/OFF switch to turn the terminal on.

CONFIGURING THE HP 700/92

The HP 260 must be powered up, and must be configured correctly before the HP 700/92 can be used as a workstation. Similarly, the HP 700/92 must be properly configured before it can be used as a workstation. To configure the HP 700/92 for use as an HP 260 workstation:

1. Power on the HP 700/92; the device is automatically in terminal mode.
2. Press the key labeled **User System**. The following softkey labels will be displayed.

device control	margins/ tabs/col	service keys	modes				config keys

3. Press [f8], labeled **config keys**. The following softkey labels will be displayed.

global config		datacomm config	ext dev config	terminal config			

4. Press the [f1] softkey, labeled **global config**.
5. Press [f4], labeled **DEFAULT VALUES**.

   If you wish, you may replace the default values for "Frame Rate", "Display", and "Inverse Background" with those of your choice.
6. Using the [TAB] key, move the cursor to the field whose value you wish to alter.
7. Press [f2], labeled **NEXT CHOICE**, to display a new value.

Here is an example of a typical global configuration for your 700/92 workstation.

```
                        GLOBAL CONFIGURATION

Frame Rate    72        Display OFF    15          Inverse Background  NO

   Columns    80         Cursor Type   Line                   Keyclick  ON

Auto Repeat   ON        Warning Bell    ON              Static Cursor  NO
```

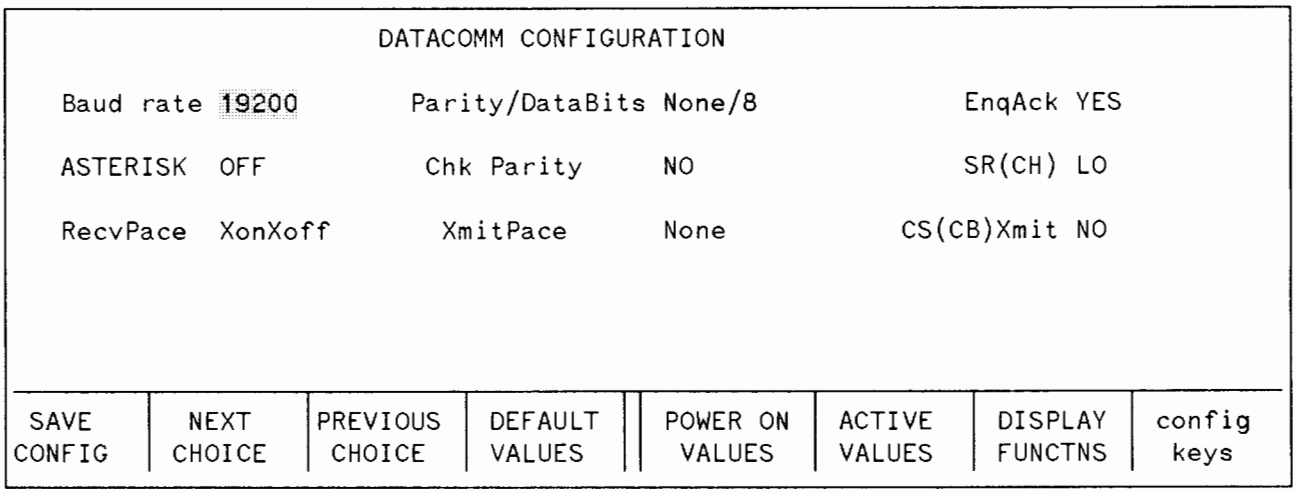
SAVE CONFIG	NEXT CHOICE	PREVIOUS CHOICE	DEFAULT VALUES	POWER ON VALUES	ACTIVE VALUES	DISPLAY FUNCTNS	config keys

8. Press [f1], labeled **SAVE CONFIG**, to store the configuration values.
9. Press [f8], labeled **config keys**, to return to the main configuration menu.
10. Next, press [f3], labeled **datacomm config**.
11. Press [f4], labeled **DEFAULT VALUES**, and you will see the following screen.

```
                      DATACOMM CONFIGURATION

 BAUD RATE  9600       Parity/DataBits None/8          EnqAck YES

 ASTERISK   OFF         Chk Parity     NO              SR(CH) LO

 RecvPace   XonXoff      XmitPace      None         CS(CB)Xmit NO
```

SAVE CONFIG	NEXT CHOICE	PREVIOUS CHOICE	DEFAULT VALUES	POWER ON VALUES	ACTIVE VALUES	DISPLAY FUNCTNS	config keys

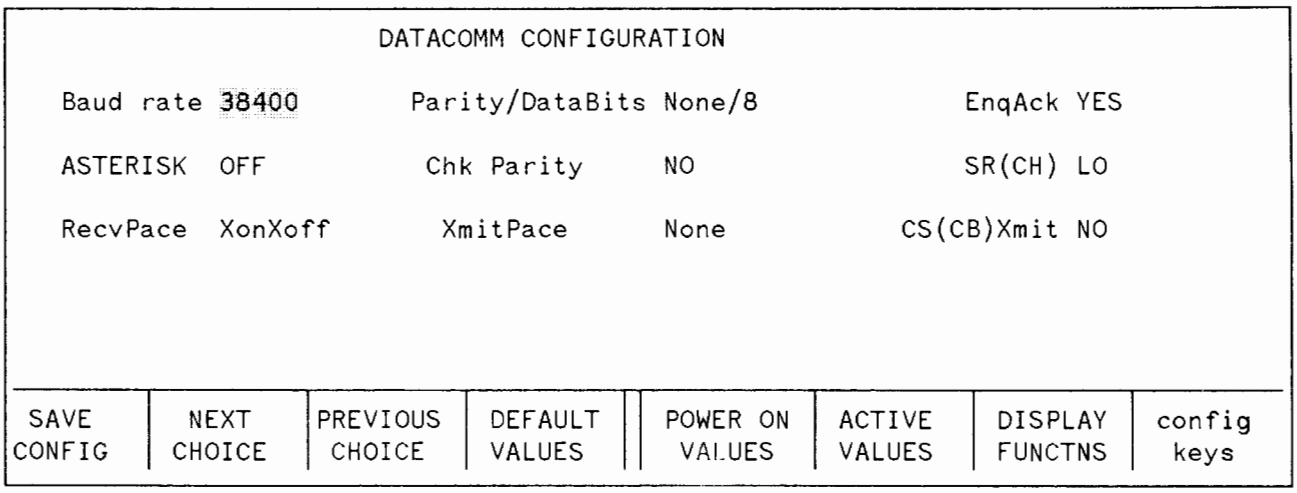
The screen below shows a typical configuration on an **integrated port (-1 or -2)**.



12. Using the [TAB] key, move the cursor to the field "Baud rate".

13. Press [f2], labeled **NEXT CHOICE**, to select the Baud rate you require. The recommended Baud rate is 19200 for integrated ports, and 38400 for ASI ports.

The following screen shows a typical configuration on an **ASI port (1...10)**.



NOTE

19200 Baud is the maximum rate for direct serial communication with the HP 260 Series30 or the HP 260 Series40 via integrated ports, and 38400 Baud the maximum rate for ASI ports. 9600 Baud is the maximum rate for communication with any other model of the HP 250 or HP 260. If you wish to connect an HP 700/92 using a modem, configure the Baud rate to the speed specified by the modem.

14. Now press [f1], labeled **SAVE CONFIG**, to store the new values.

15. Press [f8], labeled **config keys**, to return to the main configuration menu.

16. Next, press the [f4] softkey, labeled **ext dev config**, to attach a printer to your 700/92 workstation.

17. Press [f4], labeled **DEFAULT VALUES**. The **ext dev config** screen should resemble the one below.

```
                    EXTERNAL DEVICE CONFIGURATION

  Baud Rate  2400        Parity/DataBits None/8      PrinterNulls 000

PrinterType ROMAN8              SRRXmit NO              SRRInvert LO

   XmitPace None             CS(CB)Xmit NO
```

SAVE CONFIG	NEXT CHOICE	PREVIOUS CHOICE	DEFAULT VALUES	POWER ON VALUES	ACTIVE VALUES	DISPLAY FUNCTNS	config keys

You must be sure to alter the Baud rate and other parameters to match those of your printer.

18. Using the [TAB], move the cursor to the "Baud rate" field, and then press [f2], labeled **NEXT CHOICE**, to select the Baud rate which you require.

19. Move the cursor to the "XmitPace" field and press [f2] again to select the value which you require.

Below is a typical example of how the **ext dev config** menu can look.

```
                    EXTERNAL DEVICE CONFIGURATION

  Baud Rate 19200        Parity/DataBits None/8        PrinterNulls 000

PrinterType ROMAN8              SRRXmit NO              SRRInvert LO

   XmitPace Xon/Xoff   CS(CB)Xmit NO
```

SAVE CONFIG	NEXT CHOICE	PREVIOUS CHOICE	DEFAULT VALUES	POWER ON VALUES	ACTIVE VALUES	DISPLAY FUNCTNS	config keys

20. Now press [f1], labeled **SAVE CONFIG**, to store the new values.

21. Press the key labeled **User System** again to access the system softkeys.

22. Next, press the softkey, "device control", and then press [f1], labeled **TO EXT DEV**. An asterisk will appear after "DEV", confirming that the system recognizes that a printer is part of the new configuration.

23. Press the key labeled **User System** again to access the system softkeys.

24. Press [f8], **CONFIG KEYS**, to return to the main configuration menu.

25. Next, press [f1], labeled **terminal config**.

26. Set the default configuration by pressing [f4], **DEFAULT VALUES**, and the following screen will appear.

```
                    TERMINAL CONFIGURATION

Datacomm/ExtDev PORT1/PORT2              Keyboard       USASCII
    Terminal Id 70092                    Language       ENGLISH

     Local Echo OFF   CapsLock OFF     Start Col 001          Bell ON
  XmitFnctn(A)  NO     SPOW(B) NO   InhEolWrp(C) NO      Line/Page(D) Line
                NO  Inh DC2(H) NO                        Esc Xfer(N) NO


   FldSeparator     BlkTerminator        Return=Enter NO     ReturnDef
     Tab=Spaces NO     NumPad Tab= Tab        Print Fields     TermMode HP

 SAVE    | NEXT    | PREVIOUS | DEFAULT | POWER ON | ACTIVE  | DISPLAY  | config
 CONFIG  | CHOICE  | CHOICE   | VALUES  | VALUES   | VALUES  | FUNCTNS  | keys
```

You must not forget to set the fields "Keyboard" and "Language" to the values you require; you have a choice of seven languages. If you wish the TAB key on the numeric keypad to function as the [RETURN] key, you must alter the value of the "NumPad Tab=" field to **Tab**.

27. Using the [TAB] key, move the cursor to the "Keyboard" field, and press [f2], labeled **NEXT CHOICE**, to select the value you require.

28. Move the cursor down to the "Language" field, and press [f2], labeled **NEXT CHOICE**, to select the language you require.

29. Now move the cursor to the "NumPad Tab=" field and press [f2], **NEXT CHOICE**, to alter the value to **Return**.

30. Press [f1], labeled **SAVE CONFIG**, to store the new configuration values.

31. Finally, you must press [SHIFT] and "DEL/Esc" simultaneously to reset your 700/92 workstation to workstation mode.

Configuring the HP 260 for the HP 700/92

The HP 260 cannot be configured until all its peripherals are attached and it is switched on. So install the remaining workstations and continue at the section entitled "Installing Serial Peripherals". Once the system is switched on, you will be shown how to configure your HP 260 for workstations and terminals.

INSTALLING THE HP VECTRA

This manual does not duplicate the instructions to build your HP Vectra personal computer. Refer to the HP Vectra documentation to assemble your computer. This section assumes that you have correctly assembled your HP Vectra.

NOTE

Before an HP Vectra Personal Computer can be used as a workstation or terminal by the HP 260, you must load the AdvanceLink terminal emulator program.

You must also have an HP 45242M cable to connect your HP Vectra to the HP 260.

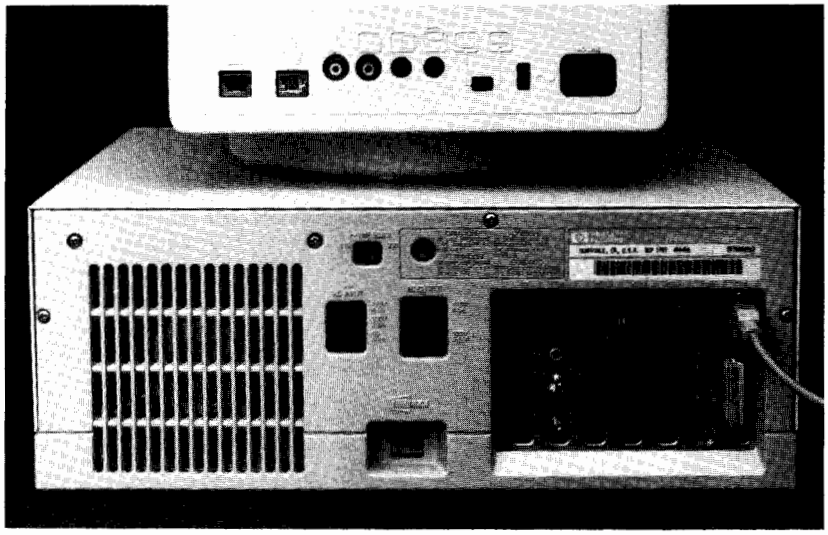
Consult your Hewlett-Packard Sales Representative or Value-Added System Supplier if you want to obtain the program and cable.

1. Verify that the operating voltage of the HP Vectra matches the power available at your site. **If the operating voltage is not correct,** consult the HP Vectra's documentation for information on changing the voltage.

2. Place your HP Vectra where it is to operate.

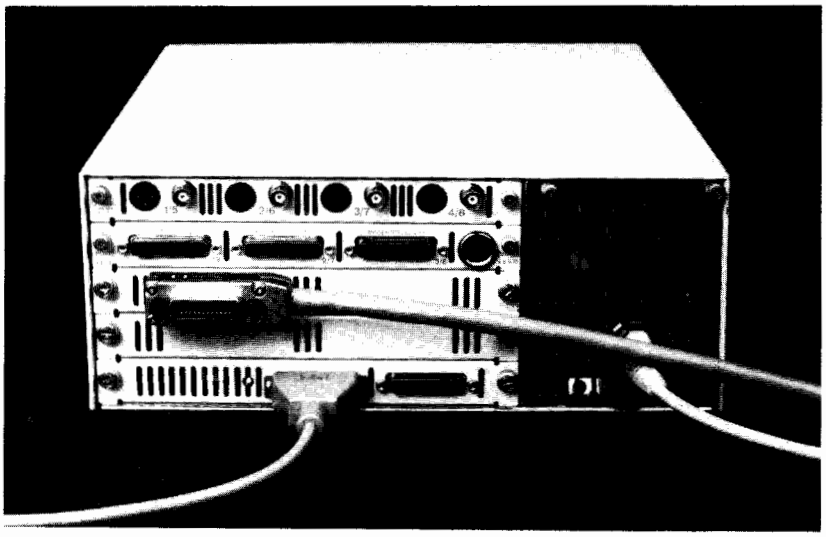
3. Make sure that the HP Vectra is switched off, and that its power cord is not plugged into the mains outlet.

4. Plug the smaller end of the HP 45242M cable into the HP Vectra serial port. For clarity, this illustration shows the serial cable only.



HP Vectra Serial Port

5. Plug the other end of the HP 45242M cable into the lowest-numbered serial port available on your HP 260. The port in the illustration is the Integrated Serial Port labeled -1. Tighten the securing screws on either side of the connector using a small, flat-blade screwdriver.



Serial Connection to the HP 260

NOTE

If a video board is not installed, then the first serial workstation must be attached to the Integrated Serial Port labeled -1. Modems cannot be used to communicate between the principal workstation and the HP 260.

Before attaching a workstation to the ASI Ports labeled 4/9 and 5/10, you must fit the connection cable which converts the dual-port socket into two, standard 25-pin connectors. One such cable is supplied with each ASI board. The installation of this cable is described in the appendix titled "Connecting ASI Ports 4/9 and 5/10". Modem communication is not available on the ports labeled 4/9 and 5/10.

RS-422 communication is not available from the Integrated Serial Ports labeled -1 and -2.

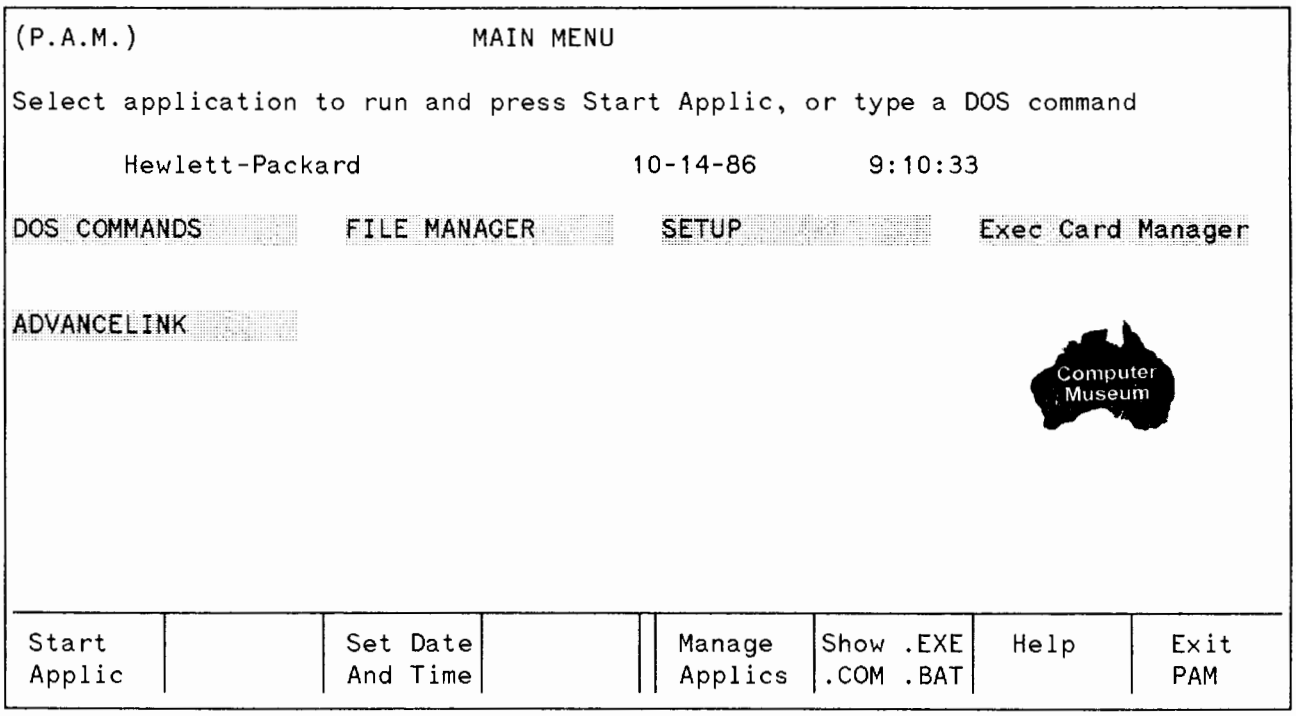
6. Plug the power cord for the HP Vectra into the wall outlet.

7. Push the ON/OFF switch in to turn the HP Vectra on.

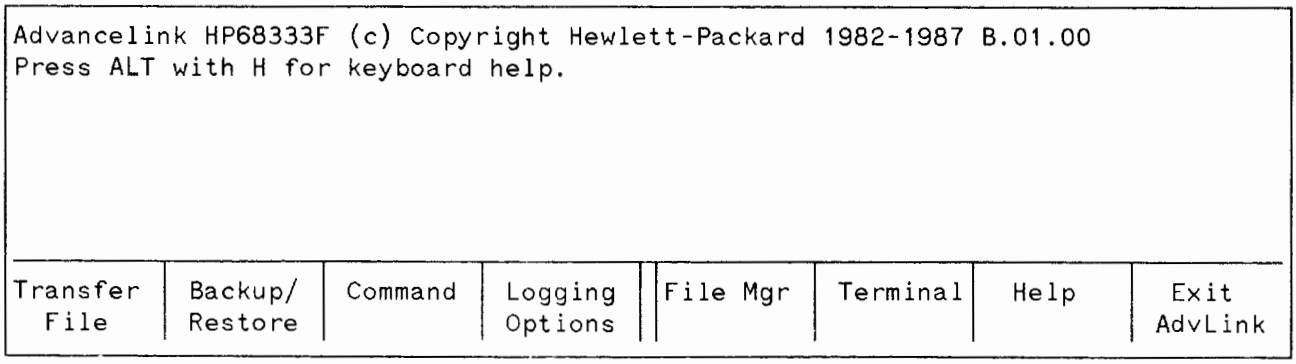
CONFIGURING THE HP VECTRA

The HP 260 must be powered up and must be configured correctly before the HP Vectra can be used as a workstation. Similarly, the HP Vectra must be properly configured before it can be used as a workstation. To configure the HP Vectra for use as an HP 260 workstation:

1. Switch on the HP Vectra. The Personal Application screen appears. The ADVANCELINK application must be installed (B.01.00 or a more recent version). Other applications can vary depending upon your system.



2. Use the keys labeled ←, ↑, ↓, and → to select ADVANCELINK; then press f1, labeled **Start Applic**. The following screen will be displayed.



3. Press [f6], labeled **Terminal**. The following softkeys will be displayed.

Copy Data	Margins/ Tabs/Col	ReadDisc	Modes		Config Keys		Main

4. Press [f6], labeled **Config Keys**. The following softkeys will be displayed.

Global Config	Remote Config			Terminal Config			Done

5. Press [f2], labeled **Remote Config**. The following screen will be displayed.

```
            POINT TO POINT DATACOMM CONFIGURATION  (SERIAL1)

Baud Rate  9600        Parity/DataBits None/8
                                                    EnqAck YES
ASTERISK   OFF          Chk Parity NO               SR(CH)  LO

RecvPace   None                                  CS(CB) Xmit NO
XmitPace   None
```

Save Config	Next Choice	Previous Choice	Default Values			Display Functns	Done

6. Press [f4], labeled **DEFAULT VALUES**.

7. If your computer is an HP 260 Series30 or HP 260 Series40, press [f2], labeled **NEXT CHOICE**, until the Baud rate changes to **19200**.

NOTE

19200 Baud is the maximum rate for direct serial communication with the HP 260 Series30 or the HP 260 Series40 via integrated ports, and 38400 Baud the maximum rate for ASI ports. 9600 baud is the maximum rate for direct serial communication with any other model of the HP 250 or HP 260. If you wish to connect an HP Vectra using a modem, configure the baud rate to the speed specified by the modem.

8. Use the [TAB] key to move through the fields until the **RecvPace** field is highlighted.

9. Press [f2], labeled **Next Choice**, until the **RecvPace** field displays **Xon/Xoff**. (All the other configuration values are as the default.) The terminal configuration screen should resemble the following illustration.

```
          POINT TO POINT DATACOMM CONFIGURATION  (SERIAL1)

Baud Rate 19200        Parity/DataBits None/8
                                                      EnqAck YES
ASTERISK  OFF           Chk Parity NO                 SR(CH)  LO

RecvPace  XonXoff                                  CS(CB) Xmit  NO
XmitPace  None

 SAVE    | NEXT    | PREVIOUS | DEFAULT  |  Config  |          | DISPLAY  | Done
 CONFIG  | CHOICE  | CHOICE   | VALUES   |  Keys    |          | FUNCTNS  |
```

10. Press [f1], labeled **SAVE CONFIG**.

11. Press [f6], labeled **Config Keys**. Then press press [f1], labeled **Global Config**. The following screen will be displayed.

```
                        GLOBAL CONFIGURATION


Keyboard      USASCII
                                                  Personality HP
Language      English                          Terminal Mode Graphic
                                                  Printer I/F None
Remote To     None                                Plotter I/F None

Memory Size   32K

Video Type    Enhanced Graphics Adapter/Standard Color Display

HP Mode       YES                                 Screen Size 24 lines

 Save    | Next    | Previous | Default  |  |  |  | Display  | Done
 Config  | Choice  | Choice   | Values   |  |  |  | Functns  |
```

12. Press [f4], labeled **DEFAULT VALUES**.

13. Move the cursor to the "Terminal Mode" field and change the value to "Graphic", by pressing [f2], labeled **NEXT CHOICE**.

14. Tab across to the "Remote To" field and specify your Vectra's remote port ID (for example, "Serial1").

15. Move the cursor to the "Printer I/F" field and press **NEXT CHOICE** until the value you require appears (for example, "PRN" to take advantage of the MS-DOS system printer).

16. Tab down to the field labeled "Video Type". Keep pressing [f2], **NEXT CHOICE**, until the values you require appear on either side of the /, (for example "Enhanced Graphics Adapter/Enhanced Color Display").

17. Finally, position the cursor on the "Screen Size" field and alter the value to "24 lines" by pressing [f2], **NEXT CHOICE**.

18. Press [f1], **SAVE CONFIG**, to store the new configuration values.

If you have configured a local printer, you must now press [f1], labeled **Copy Data** (on the main AdvanceLink screen), and then press [f2], **To Print**, so that an asterisk appears in the bottom corner of that softkey on the screen.

Configuring the HP 260 for the HP Vectra

The HP 260 cannot be configured until all its peripherals are attached and it is switched on. So install the remaining workstations and continue at the section entitled "Installing Serial Peripherals". Once the system is switched on, you will be shown how to configure your HP 260 for workstations and terminals.

INSTALLING THE HP 150

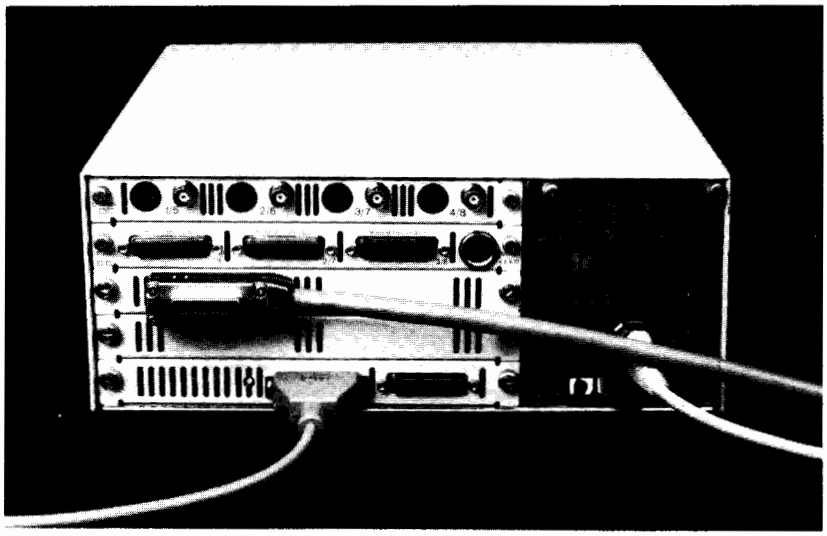
This manual does not duplicate the instructions to build your HP 150 personal computer. Refer to the HP 150 documentation to assemble your computer. This section assumes that you have correctly assembled your HP 150.

1. Place the HP 150 where it is to operate.

2. Verify that the operating voltage of the HP 150 matches the power available at your site. **If the operating voltage is not correct,** consult the HP 150 documentation for information on changing the voltage.

3. Make sure that the HP 150 is switched off, and that its power cord is not plugged into the mains outlet.

4. Plug one end of the serial cable into the lowest-numbered serial port available on your HP 260. The port in the illustration is the Integrated Serial Port labeled -1. Tighten the securing screws on either side of the connector using the small, flat-blade screwdriver.



Serial Connection to the HP 260

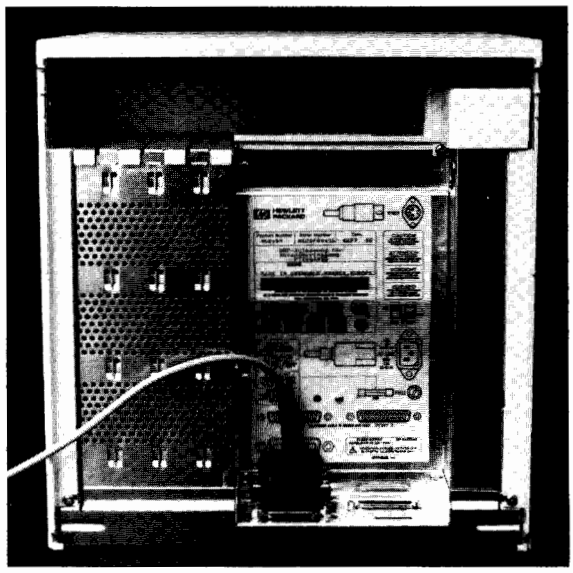
NOTE

If a video board is not installed, then the first serial workstation must be attached to the Integrated Serial Port labeled -1. Modems cannot be used to communicate between the principal workstation and the HP 260.

Before attaching a workstation to the ASI Ports labeled 4/9 and 5/10, you must fit the connection cable which converts the dual-port socket into two, standard 25-pin connectors. One such cable is supplied with each ASI board. The installation of this cable is described in the appendix titled "Connecting ASI Ports 4/9 and 5/10". Modem communication is not available on the ports labeled 4/9 and 5/10.

RS-422 communication is not available from the Integrated Serial Ports labeled -1 and -2.

5. Plug one end of the serial cable into either of the serial ports labeled PORT 1 or PORT 2 on the HP 150. Remove the back of the cabinet to expose these serial ports. The illustration shows a serial cable connected to the serial port labeled PORT 1 on an HP 150 II.



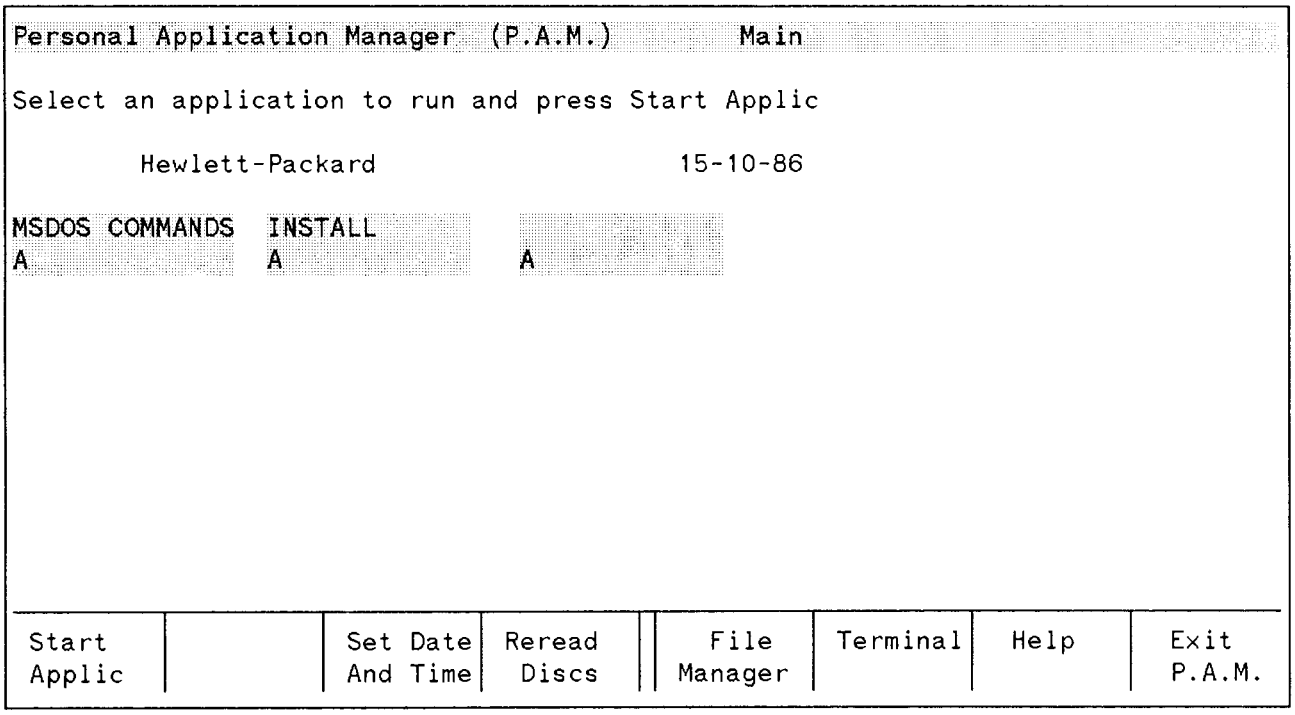
HP 150 Rear View with Back Cover Removed

6. Reassemble the HP 150 and plug it into the wall outlet.

7. Push the ON/OFF switch to turn the HP 150 on.

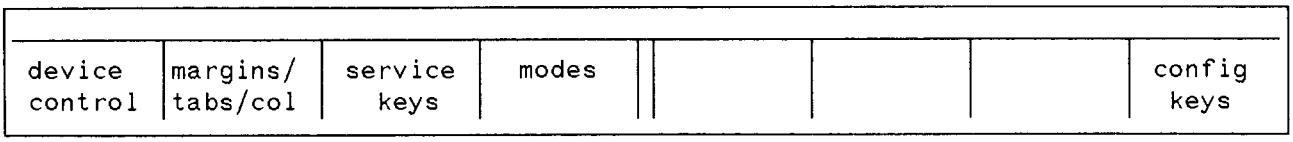
Configuring the HP 150

1. After you have switched on the HP 150, the Personal Application Manager Screen appears. The display can vary depending upon the applications installed on your HP 150.



2. Select f6, labeled **Terminal**.

3. Press the key labeled **USER SYSTEM**. The following softkey labels will be displayed.



4. Press [f8], labeled **config keys**. The following softkey labels will be displayed.

global config		port1 config	port2 config	terminal config	accessory config		

5. If you connected the serial cable to the HP 150 port labeled PORT 1 then press [f3], labeled **port1 config**. If you connected the serial cable to the HP 150 port labeled PORT 2 then press [f4], labeled **port2 config**. In this example **Port1 config** is chosen.

```
                    FULL DUPLEX HARDWIRED (PORT1)

BAUD RATE  2400      Parity/DataBits None/8            Clock  INT
                                                       EnqAck YES
ASTERISK   OFF        Chk Parity NO    SR(CH) LO

RecvPace   None                                   CS(CB) Xmit NO
XmitPace   None
```

SAVE CONFIG	NEXT CHOICE	PREVIOUS CHOICE	system defaults		config menus	DISPLAY FUNCTNS	config keys

6. Press [f4], labeled **system defaults**. The label for [f4] will change to **DEFAULT VALUES**.

7. Press [f4], now labeled **DEFAULT VALUES**.

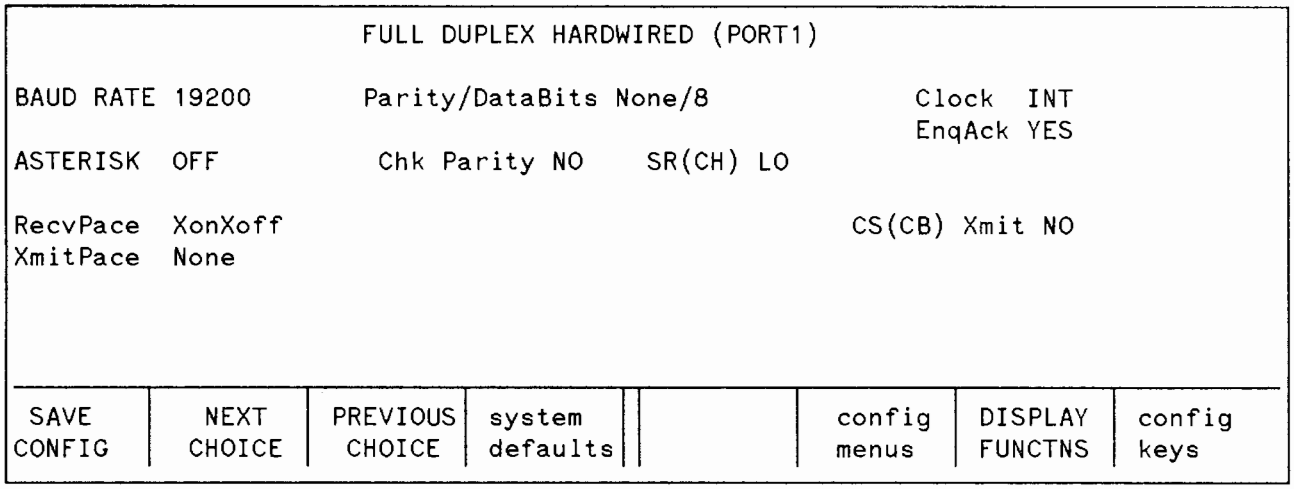
8. Press [f2], labeled **NEXT CHOICE**, until the Baud rate changes to **19200**.

NOTE

19200 Baud is the maximum rate for direct serial communication. If you wish to connect an HP 150 using a modem, configure the Baud rate to the speed specified by the modem.

9. Use the [TAB] key to move through the fields until the **RecvPace** field is highlighted.

10. Press [f2], labeled **Next Choice**, until the **RecvPace** field displays **Xon/Xoff**. (All the other configuration values are as the default.) The terminal configuration screen should resemble the following illustration.



11. Press (f1), labeled **SAVE CONFIG**.

12. **Record the component, Baud rate and data transfer method on the Serial Configuration Worksheet.**

Configuring the HP 260 for the HP 150

The HP 260 cannot be configured until all its peripherals are attached and it is switched on. So install the remaining workstations and continue at the section entitled "Installing Serial Peripherals". Once the system is switched on, you will be shown how to configure your HP 260 for workstations and terminals.

INSTALLING THE HP 110 PORTABLE PLUS

This manual does not duplicate the instructions for unpacking and installing your HP 110 Portable Plus personal computer. Refer to the HP 110 Portable Plus documentation for the assembly instructions. This manual assumes that you have correctly assembled your HP 110 Portable Plus.

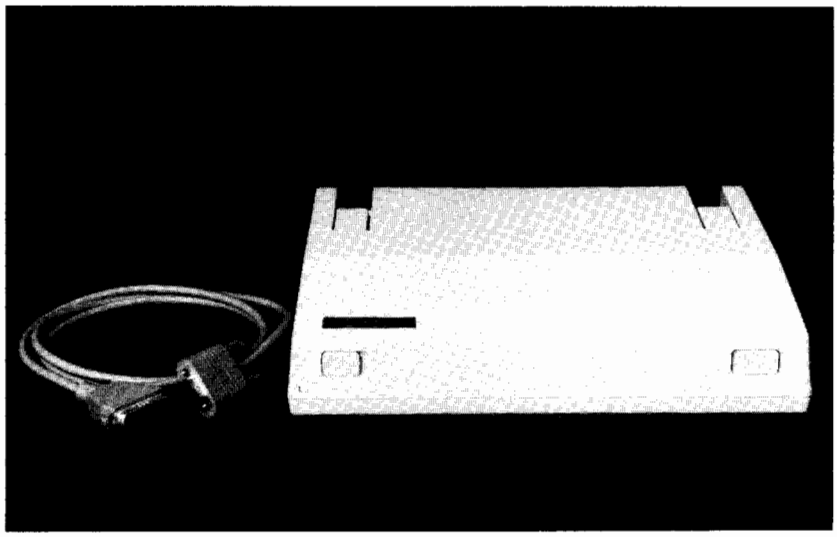
NOTE

Before an HP 110 Portable Plus can be used as a workstation or terminal, you must load the REFLECTION 1 terminal emulator program.

You must also have an HP 92221M cable to connect your HP 110 Portable Plus to the HP 260.

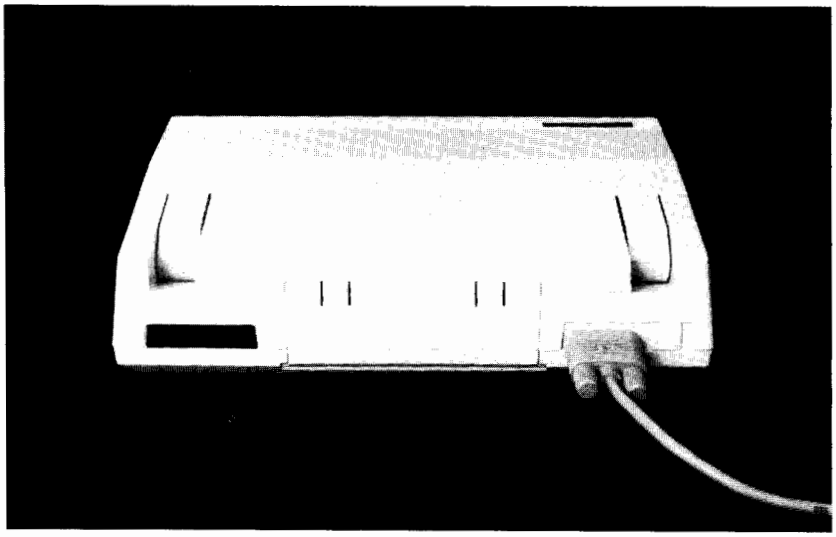
Consult your Hewlett-Packard Sales Representative or Value-Added System Supplier to obtain the program and cable.

1. Place the HP 110 Portable Plus where you want to use it. You will use the components illustrated below.



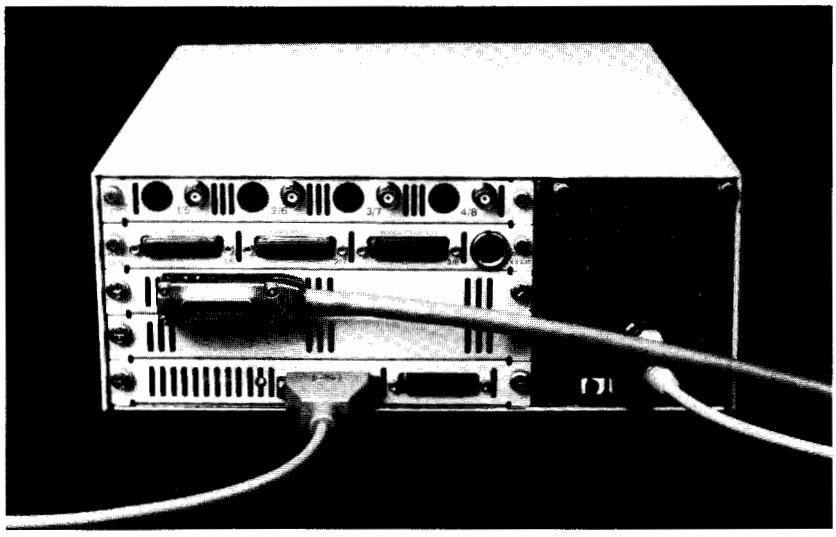
HP 110 Portable Plus and HP 92221M Serial Cable

2. Plug the smaller end of the HP 92221M cable into the serial port at the rear of the HP 110 Portable Plus. Using your fingers, tighten the screws at either side of the connector.



HP 110 Portable Plus Serial Connection

3. Plug the other end of the HP 92221M cable into the lowest-numbered serial port available on your HP 260. The port in the illustration is the Integrated Serial Port labeled -1. Tighten the securing screws on either side of the connector using the small, flat-blade screwdriver.



Serial Connection to the HP 260

NOTE

If a video board is not installed, then the first serial workstation must be attached to the Integrated Serial Port labeled -1. Modems cannot be used to communicate between the principal workstation and the HP 260.

Before attaching a workstation to the ASI Ports labeled 4/9 and 5/10, you must fit the connection cable which converts the dual-port socket into two, standard 25-pin connectors. One such cable is supplied with each ASI board. The installation of this cable is described in the appendix titled "Connecting ASI Ports 4/9 and 5/10". Modem communication is not available on the ports labeled 4/9 and 5/10.

4. Lift the cover; this automatically turns the HP 110 Portable Plus on.

Configuring the HP 110 Portable Plus

1. When the HP 110 Portable Plus has warmed up, the Personal Applications Manager screen appears. The REFLECTION 1 application must be installed. The other applications can vary depending upon your system..

```
Personal Application Manager  (P.A.M.)    Main          nnnn Bytes free on A:

Move the pointer to the desired application, then press START APPLIC

Hewlett-Packard                              Battery 100%    15-10-86

DOS COMMANDS          HP REFLECTION          VT REFLECTION
 B                     B                      B

 START    | FILE     | TIME &  | REREAD   |  DATACOMM | SERIAL   |          | Off
 APPLIC   | MANAGER  | DATE    | DISCS    |  CONFIG   | CONFIG   |          |
```

2. Use the keys labeled [←], [↑], [↓], and [→] to select the highlighted box marked HP REFLECTION. Press [f1], labeled START APPLIC. The following softkeys will be displayed.

device control	margins/ tabs/col	config keys	modes keys	COMMAND LINE	file transfer	HELP	EXIT

3. Press [f3], labeled **config keys**. The following softkeys will be displayed.

com1 config	com2 config	terminal page 1	terminal page 2	printer config	enhancmt config		System Keys

4. Press [f1], labeled **Com1 config**. The following information is displayed.

COM1 CONFIGURATION

Baud rate	9600	Xmit Indicator (*)	OFF
Parity	NO	DCD Required	NO
Check Parity	NO	CTS Required	NO
Receive Pacing	NONE	DSR Required	NO
Transmit Pacing	NONE	Stop Bits	1
Enq/Ack Pacing	YES		

NEXT CHOICE	PREVIOUS CHOICE	DEFAULT VALUES	ACTIVE VALUES	ACTIVATE CONFIG	SAVE TO DISK		config keys

5. Press [f3], labeled **DEFAULT VALUES**.

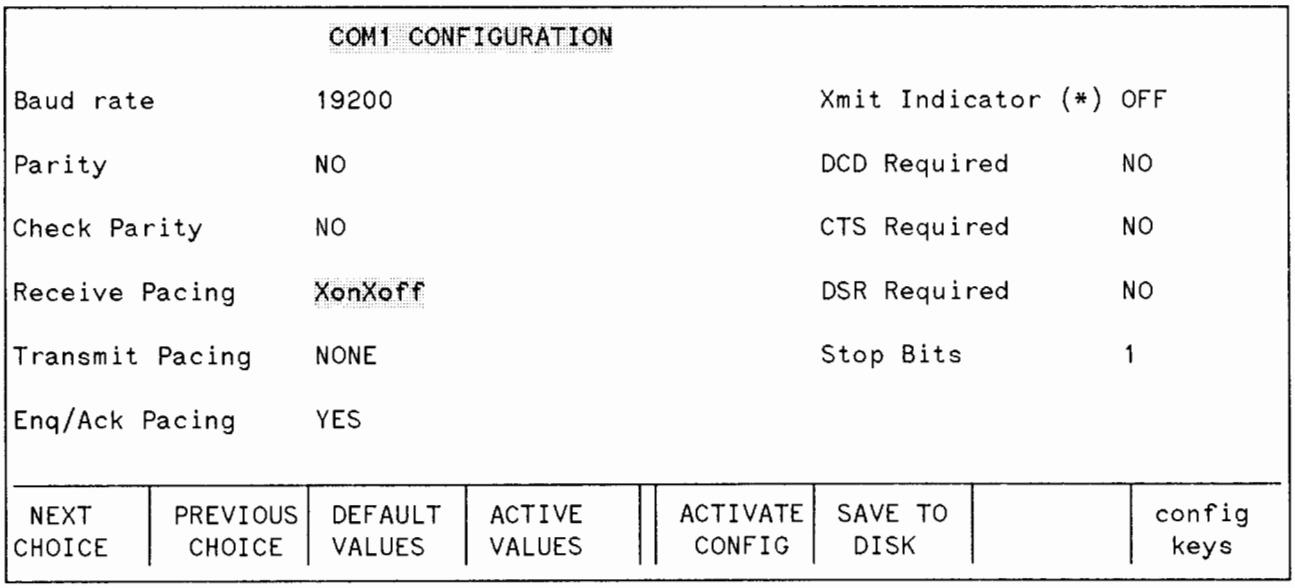
6. Press [f2], labeled **NEXT CHOICE**, until the Baud rate changes to **19200**.

NOTE

19200 Baud is the maximum rate for direct serial communication. If you wish to connect an HP 110 Portable Plus using a modem, configure the Baud rate to the speed specified by the modem.

7. Use the [TAB] key to move through the fields until the **RecvPace** field is highlighted.

8. Press [f2], labeled **NEXT CHOICE**, until the **RecvPace** field displays **Xon/Xoff**. (All the other configuration values are as the default.) The terminal configuration screen should resemble the following illustration.



9. Press [f5], labeled **ACTIVATE CONFIG**, to save the configuration.

10. **Record the component, Baud rate and data transfer method on the Serial Configuration Worksheet.**

Configuring the HP 260 for the HP 110 Portable Plus

The HP 260 cannot be configured until all its peripherals are attached and it is switched on. So install the remaining workstations and continue at the section entitled "Installing Serial Peripherals". Once the system is switched on, you will be shown how to configure your HP 260 for workstations and terminals.

INSTALLING THE IBM PC, PC AT, AND PC XT

This manual does not duplicate the instructions for building your IBM PC, PC AT and PC XT personal computers. Refer to the IBM PC, PC AT, and PC XT documentation to assemble any of these PCs. This manual assumes that you have correctly assembled your IBM PC, PC AT, or PC XT.

NOTE

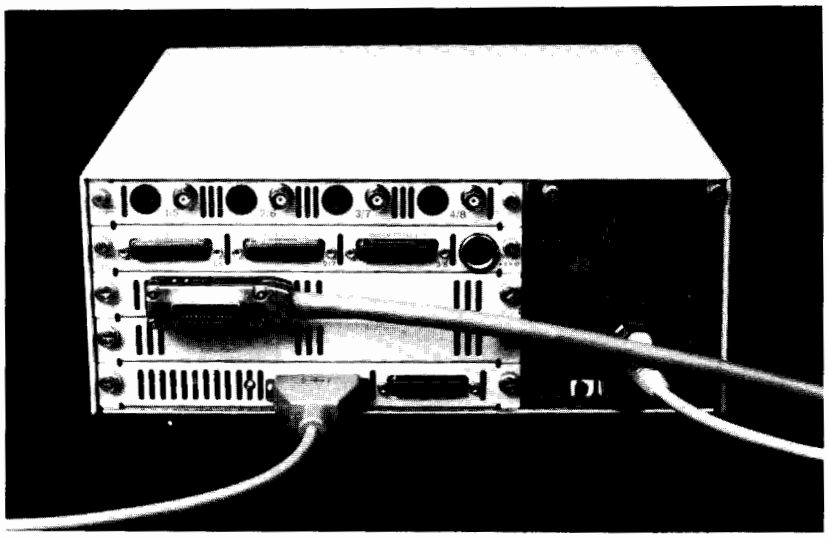
Before an IBM PC, PC AT, or PC XT can be used as a workstation or terminal, you must load the AdvanceLink terminal emulator program. Consult your Hewlett-Packard Sales Representative, or Value-Added System Supplier to obtain this program.

It is your responsibility to provide a serial cable to connect your IBM PC, PC AT, or PC XT to your HP 260. Consult the manual titled "Preparing for Your HP 260" for information.

The IBM PC, PC AT, and PC XT operate as workstations on your HP 260. However, Hewlett-Packard cannot support or guarantee equipment not manufactured by Hewlett-Packard.

1. Make sure that the IBM PC, PC AT, or PC XT is switched off, and the power cord disconnected.
2. Place the IBM PC, PC AT, or PC XT where it is to operate.
3. Plug one end of your cable into a serial port on the IBM PC, PC AT, or PC XT.

4. Plug the other end of the serial cable into the lowest-numbered serial port available on your HP 260. The port in the illustration is the Integrated Serial Port labeled -1. Tighten the securing screws on either side of the connector using the small, flat-blade screwdriver.



Serial Connection to the HP 260

NOTE

If a video board is not installed, then the first serial workstation must be attached to the Integrated Serial Port labeled -1. Modems cannot be used to communicate between the principal workstation and the HP 260.

Before attaching a workstation to the ASI Ports labeled 4/9 and 5/10, you must fit the connection cable which converts the dual-port socket into two, standard 25-pin connectors. One such cable is supplied with each ASI board. The installation of this cable is described in the appendix titled "Connecting ASI Ports 4/9 and 5/10". Modem communication is not available on the ports labeled 4/9 and 5/10.

5. Plug the IBM PC, PC AT, or PC XT into the wall outlet.

6. Switch on the IBM PC, PC AT, or PC XT.

Configuring the IBM PC, PC AT, or PC XT

Configure the serial port used by your IBM PC, PC AT, or PC XT with the following communication parameters. Consult the documentation supplied with the computer and the AdvanceLink program for instructions.

Baud rate	19200
EnqAck	YES
RecvPace	Xon/Xoff
Parity	None
Check Parity	No
Data Bits	8
Stop Bits	1

NOTE

19200 Baud is the maximum rate for direct serial communication. If you wish to connect an IBM PC, PC AT, or PC XT using a modem, configure the Baud rate to the speed specified by the modem.

1. **Record the component, Baud rate and data transfer method on the Serial Configuration Worksheet.**

Configuring the HP 260 for the IBM PC, PC AT, or PC XT

The HP 260 cannot be configured until all its peripherals are attached and it is switched on. So install the remaining workstations and continue at the section entitled "Installing Serial Peripherals". Once the system is switched on, you will be shown how to configure your HP 260 for workstations and terminals.

INSTALLING SERIAL PERIPHERALS

SECTION 4

INTRODUCTION

Now that you have installed your workstations and terminals, this section describes how to install all other peripherals that communicate serially with your HP 260.

Your HP 260 supports many peripherals and for reasons of space it is not possible to cover them all. These instructions are generic to all serial peripherals. No attempt is made to indicate the position of individual power switches, power sockets, serial sockets or configuration methods. Refer to the peripheral's manual for such information.

This section describes how to install serial peripherals when the system is first set up. If you want to add new serial peripherals to an existing system, then consult the appendix titled "Adding Serial Peripherals To An Existing System".

NOTE

The configuration parameters for the HP 2334A Multimux are supplied in the appendix titled "Configuring the HP 2334A".

This section should be used in conjunction with the Serial Configuration Table and the Serial Configuration Worksheet, which are supplied in the appendix titled "Serial Configuration Table and Worksheet". The worksheet is used to record each peripheral as it is attached, and the table supplies the configuration values for RS-232-C and RS-422 data transfer.

Three Stages of Installation

Installation of each serial peripheral has three stages.

- Physical, or hardware, attachment of the peripheral. This includes assembling the peripheral and attaching the cable connecting the **HP** 260 to the peripheral.

- Peripheral Configuration. Each peripheral is configured to make sure that its data communication speed and communication parameters match those of the **HP** 260.

- **HP** 260 Configuration. The **HP** 260 must be configured for all peripherals. Configuration includes setting the port used and the data communication method. Configuration of your **HP** 260 is described in the section titled "Configuring Your **HP** 260". You will use this section to configure your **HP** 260 after **all** your peripherals have been installed and configured.

There are two methods of serial communication; direct communication (RS-232-C or RS-422) and modem communication. Configuration information supplied in the Serial Configuration Table applies to direct communication only. The configuration needed by a modem depends upon the modem itself. Consult the modem's documentation for such information.

TO ATTACH EACH SERIAL PERIPHERAL...

1. Place the serial peripheral where it is to be used.

2. Verify that the operating voltage of the peripheral matches the power available at your site. **If the operating voltage is not correct,** consult the peripheral's documentation for information on changing the voltage.

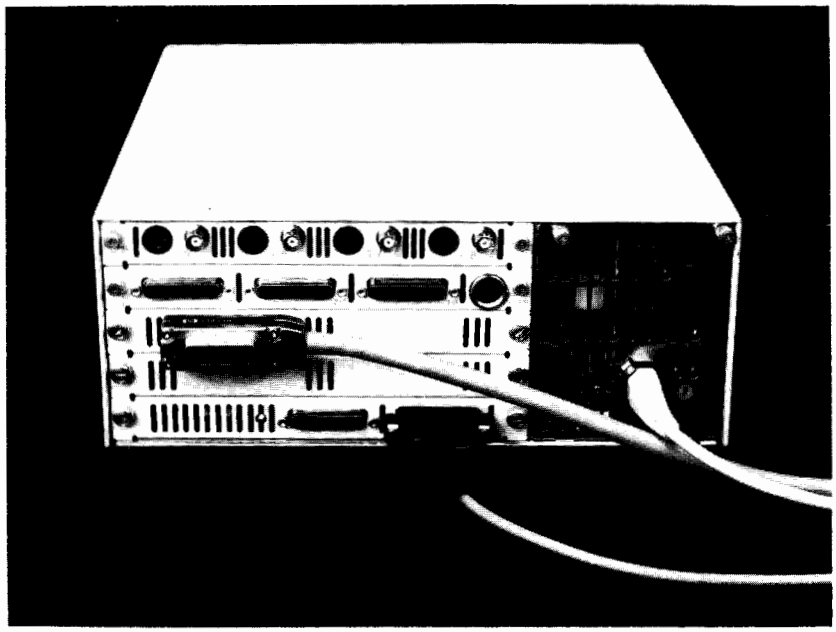
3. Make sure the peripheral is switched off.

4. Attach one end of the data communication cable to the serial port on the peripheral. (The illustration shows the serial port of an HP 2225D ThinkJet printer).

Peripheral Serial Port and Serial Cable

5. Use a small, flat-blade screwdriver to tighten the screws on either side of the connector.

6. Attach the free end of the serial cable to the lowest numbered serial port available on the HP 260 SPU. In the following illustration, the Integrated Serial Port labeled -2 is used.



Integrated Serial Port -2 and Serial Cable

7. Use a small, flat-blade screwdriver to tighten the screws on either side of the connector.

NOTE

The two Integrated Serial Ports labeled -1 and -2 support any printer or workstation supported by the HP 260. **All other peripherals, (for example plotters, terminals, or connections to an HP 3000), can operate only on ASI Ports 1 to 10.** RS-422 communication is not available from the Integrated Serial Ports.

Before attaching a peripheral to the ASI Ports labeled 4/9 and 5/10, you must fit the connection cable which converts the dual-port socket into two standard 25-pin connectors. One such cable is supplied with each ASI board. The installation of this cable is described in the appendix titled "Connecting ASI Ports 4/9 and 5/10". Modem communication is not available on the ports labeled 4/9 and 5/10.

8. Plug the peripheral's power cord into the peripheral's power socket.

9. Plug the free end of the power cord into the mains power outlet.

10. Switch the peripheral on.

11. Refer to the peripheral manual and configure the peripheral to the value given in the Serial Configuration Table.

12. **Record the peripheral, its configuration values, and the data communication method on the Serial Configuration Worksheet.**

13. Repeat Steps 1 to 12 for all your other serial peripherals.

14. If you have ordered the Mini-Rack Cabinet, turn to the appendix titled "Building the Mini-Rack Cabinet" to correctly secure the data cables and reassemble your cabinet.

15. Continue with the section titled "Starting Up Your HP 260".

STARTING UP YOUR HP 260

SECTION 5

INTRODUCTION

This section describes how to start up your HP 260 for the first time. This section is split into five parts.

- **Powering Up the System**. This describes switching on the HP 260 and loading the operating system into memory. The operating system is supplied by Hewlett-Packard on either a cartridge tape or 3.5" microfloppy disc.

- **Initializing the System Disc**. This describes how to prepare a fixed disc for the storage of your system software. This fixed disc is known as the **system disc**. On all subsequent system start-ups the operating system is loaded from the system disc. Loading from a fixed disc is the fastest way of loading the operating system and saves wear on the microfloppy or cartridge tape.

- **Copying the Operating System and DROMs**. This describes how to copy the operating system and DROMs from the microfloppy disc or cartridge tape to the system disc.

- **Copying the Run-Only Programs**. This describes how to copy the Run-Only programs from the microfloppy disc or cartridge tape to the system disc.

- **Copying the Query program**. This describes how to choose the correct language for the QUERY data base enquiry program and how to copy the QUERY program from the microfloppy disc or cartridge tape to the system disc.

GETTING STARTED

1. Ensure that your principal workstation is correctly attached. (The principal workstation is described in the section titled "Installing The Workstations and Terminals").

CAUTION

If the principal workstation is not correctly attached, you will be unable to communicate with your HP 260.

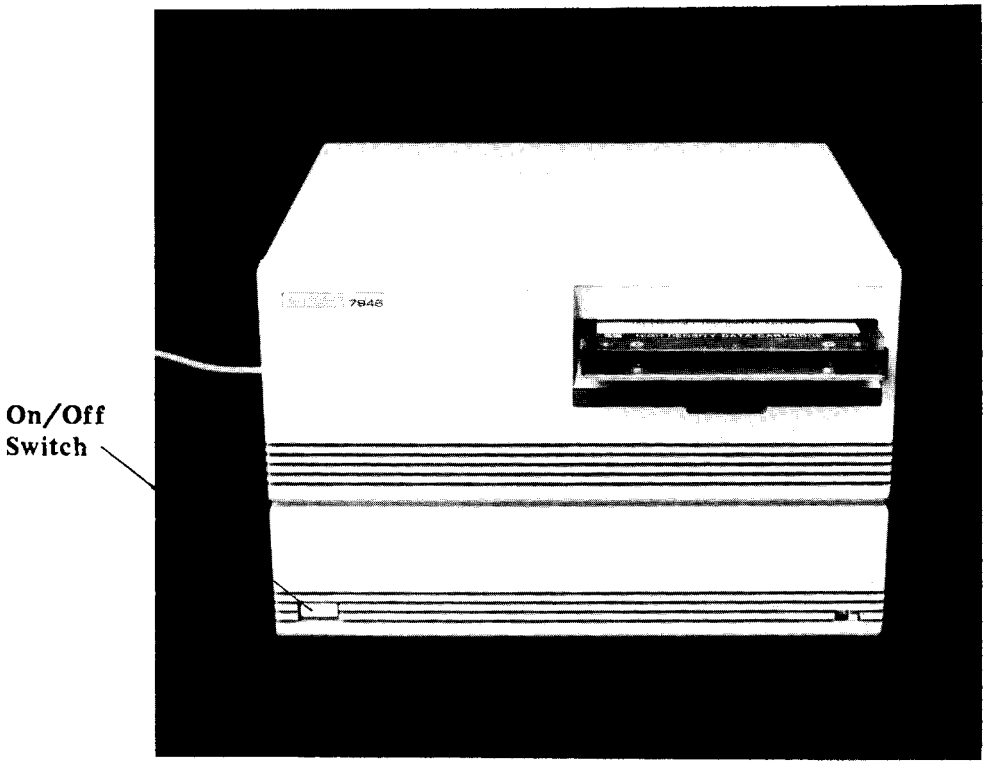
2. Locate the one cartridge tape or the six microfloppy discs on which your system software is supplied.

If Your Operating System is Supplied on a Cartridge Tape

1. Locate the mass storage device that contains a cartridge tape drive.

2. Plug the mass storage device's power cable into the mains power outlet. The On/Off switch for the HP 7912P disc is at the bottom rear of its cabinet. The On/Off switches on all other mass storage devices are at the bottom left-hand corner of the front of their cabinets. Push the On/Off switch to turn the mass storage device on. Wait 30 seconds for the disc to warm up.

3. Insert the tape cartridge labeled "SYSTEM" such that the exposed tape is closest to the drive, and the transparent cover is uppermost. Wait for the BUSY light on the tape drive to extinguish before continuing. (Failure to do so can cause **LOADER ERROR F**).



HP 7946A Disc and Tape Cartridge

If Your Operating System is Supplied on a 3.5in Microfloppy

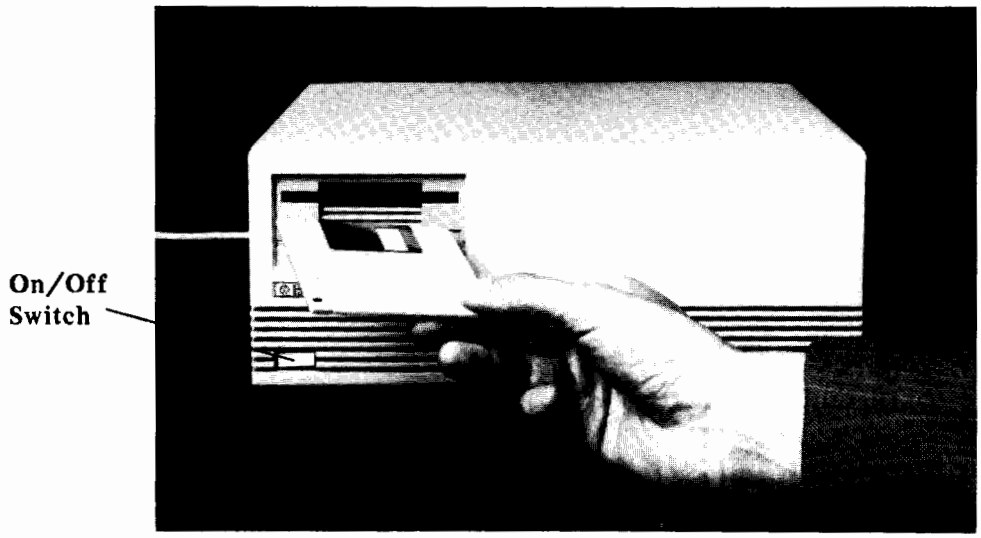
CAUTION

The microfloppy drive is protected by a cardboard sheet during shipping. Remember to remove this cardboard sheet before powering up or inserting a microfloppy disc.

1. Locate the disc drive that contains an integral microfloppy disc drive.

2. Plug the disc's power cable into the mains power outlet. The On/Off switch for your disc is at the bottom left-hand corner of the front of the cabinet. Push the On/Off switch to turn the disc on. Wait 30 seconds for the disc to warm up.

3. Insert the microfloppy labeled "SYSTEM" such that the label is at the top and the disc's metal "shutter" is pointing at the slot in the disc drive. Slide the disc in until you feel the disc drop into the slot. Do not force the disc.



HP 9133L Disc and Microfloppy

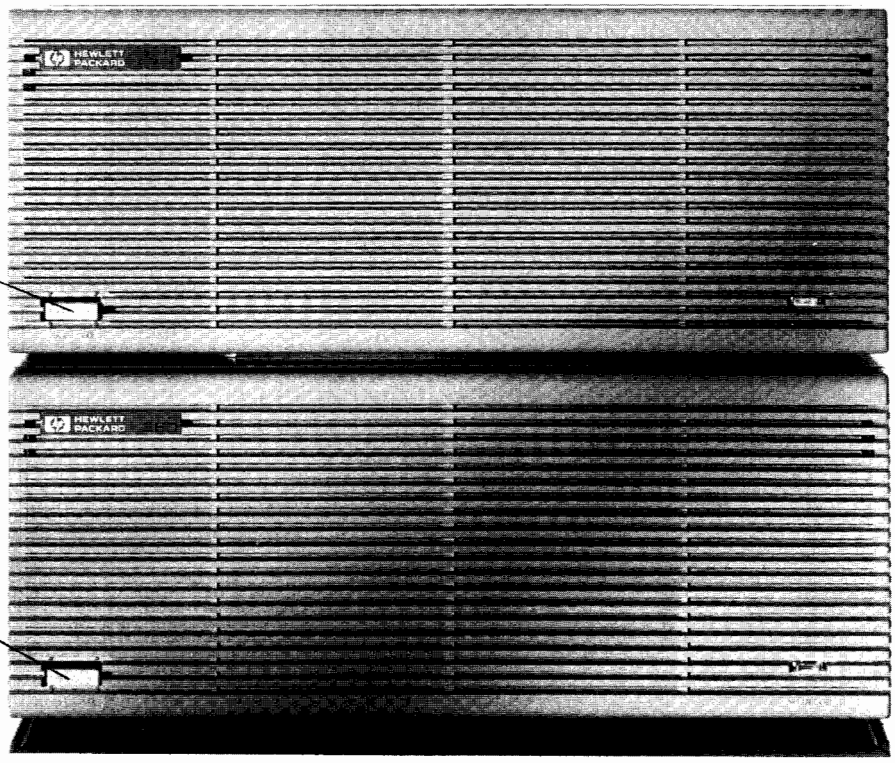
NOTE

The microfloppy drive is not locked while in use. Do not remove the microfloppy until instructed to do so.

POWERING UP THE SYSTEM

The components of your HP 260 system must be started in the following order.

1. Plug each system component into the mains power outlet.
2. Switch on any other mass storage devices. Wait 30 seconds for the discs to warm up.
3. Switch on the printers, plotters, terminals and data entry devices.
4. Switch on the workstations.
5. If an I/O Extender is fitted, push the On/Off switch to turn on the I/O Extender. The I/O Extender's On/Off switch is at the bottom left-hand corner of the front of the cabinet.
6. Push the On/Off switch to turn on the SPU. The SPU's On/Off switch is at the bottom left-hand corner of the front of the cabinet.



HP 260 I/O Extender and SPU Front View

The HP 260 performs self tests, and loads the operating system and DROMs. Messages showing these tasks will be displayed on the principal workstation. The following example screens show some common messages displayed when loading the operating system from an HP 7946A cartridge tape drive. (The self-test and other messages can vary slightly from system to system.)

```
ST 4
 1 P
 2 P
 3 P
 4 P
 5 P
 6 P
 7 P
 8 P
 9 P
 A P
 C P
 E P
```

NOTE

If the system fails a self-test, system loading will halt, and an "F" will appear in the second column, indicating which component failed. Should this occur, refer to your manual titled "Operating and Managing your HP 260".

```
The system is waiting for the disc to warm up

System loading from 7946 on address 5 unit# 1

SYSTEM I/O INITIALIZATION

ASYNCHRONOUS DATA COMM SELF TEST

LOADING DROMS

PIO DROM FORCE-LOADED

LOAD KEY "PRIMER"_
```

7. Wait until the final instruction appears on the screen.

```
LOAD KEY "PRIMER"_
```

8. **Now press the key labeled (RETURN). If your principal workstation is an HP Vectra, this key is labeled (ENTER).** The following softkey labels will be displayed.

RUN "ROUTIL"	RUN "CONFIG"	RUN "QUERIN"				RUN "INIT"	

CAUTION

The operating system is set to recognize a U.S. English keyboard (USASCII). If your keyboard language is not U.S. English, the keyboard characters will not be recognized by the HP 260. **Until you configure the operating system to recognize your keyboard, use only the softkeys, the keys on the numeric keypad, and the key labeled (RETURN) (labeled (ENTER) on the HP Vectra).**

Consult the manual titled "Operating and Managing your HP 260" for a facsimile of each workstation's keyboard layout.

INITIALIZING THE SYSTEM DISC

Before any mass storage device can be used it must be initialized. Initialization organizes the disc for the storage and retrieval of information. Your system disc, that is, the fixed disc to which your system software will be copied, must be initialized before you can copy the system software to it.

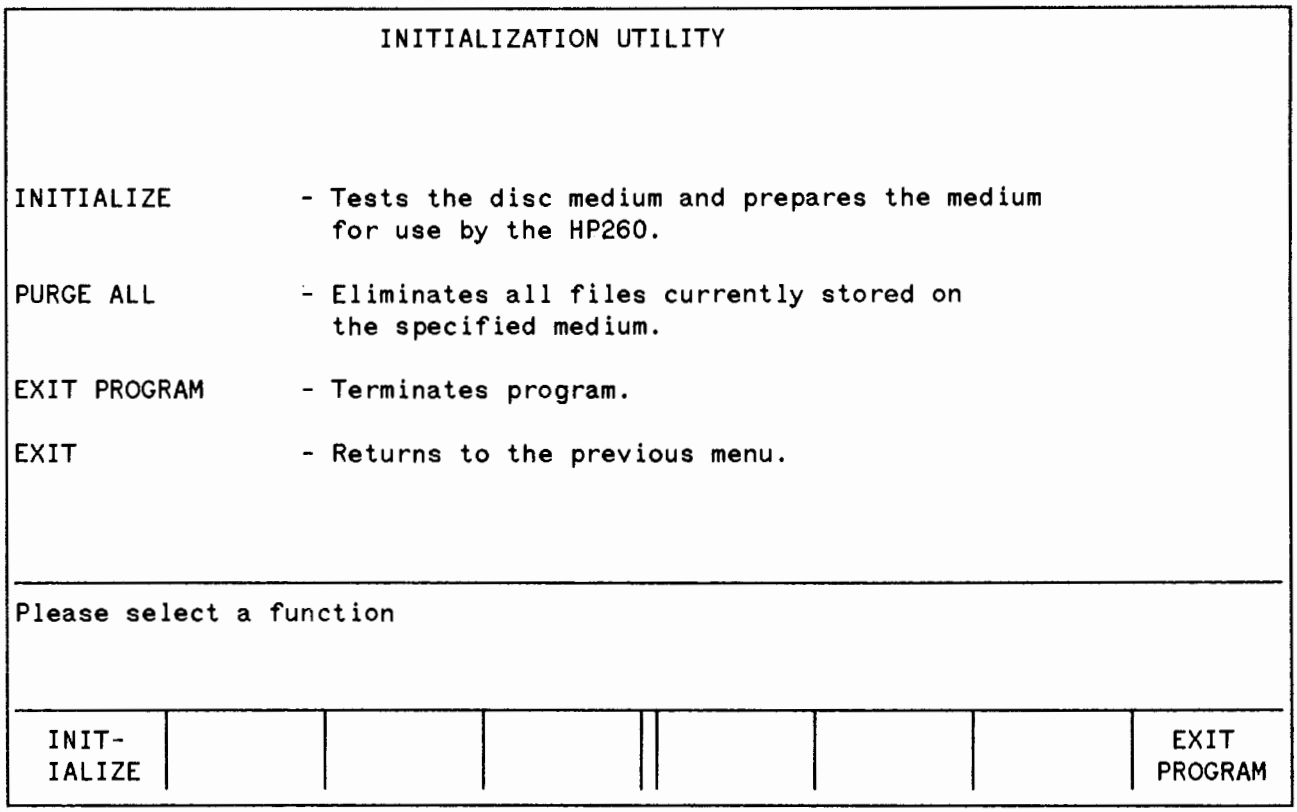
Your system software contains programs to copy files and initialize discs. When using these programs, remember that:

- The eight rectangles (known as softkey labels) at the base of each screen correspond to the eight softkeys at the top of your keyboard.
- If you are ever lost, simply press [f8], labeled **EXIT**. Each time you press it you will work back through the program until the key is labeled **EXIT PROGRAM**; pressing [f8] when labeled **EXIT PROGRAM** exits the entire program.
- The INIT and ROUTIL utilities have many other features. These are fully covered in the "HP 260 UTILITIES Manual".
- Your system software is supplied on either one cartridge tape or six microfloppies. *Instructions in italics apply to microfloppies only.* All other instructions apply to both tape and microfloppy installations.

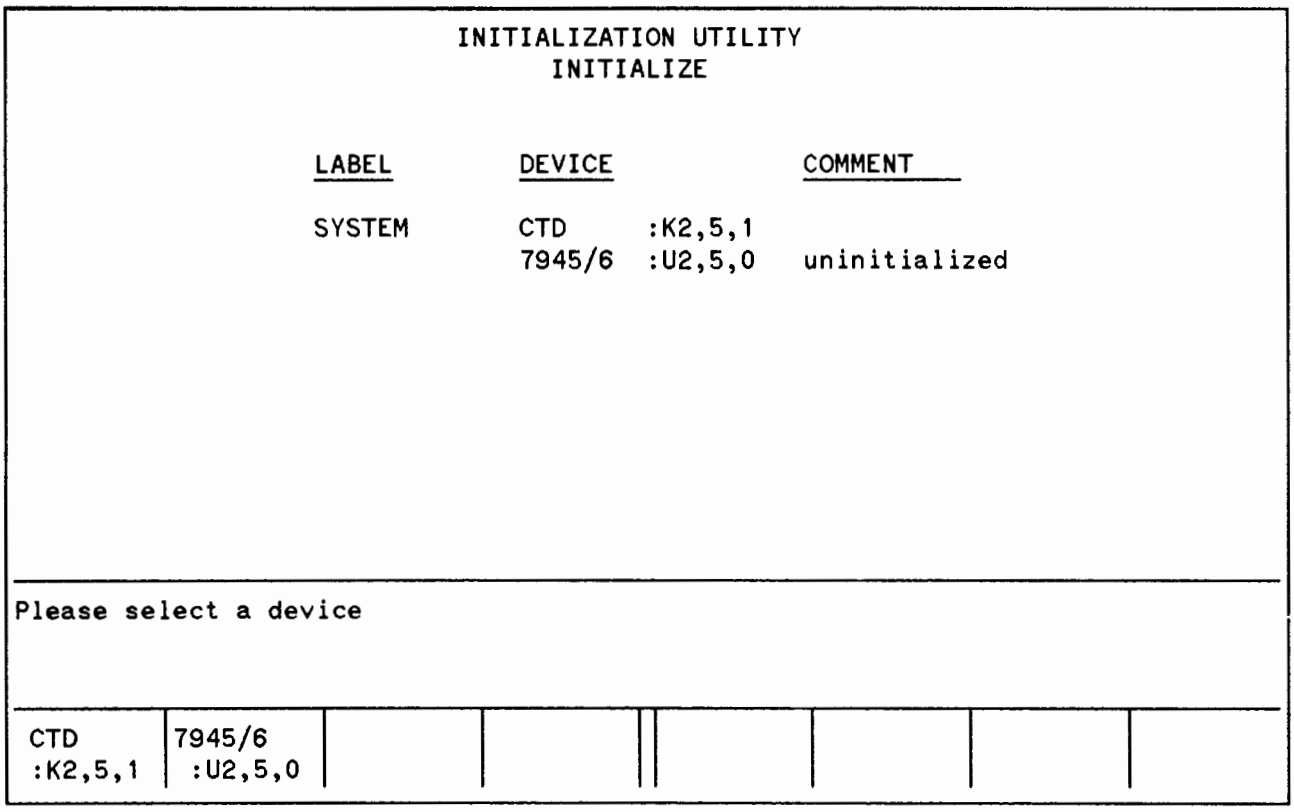
After successfully powering up your HP 260 and pressing the key labeled [RETURN], the following softkey labels are displayed.

RUN "ROUTIL"	RUN "CONFIG"	RUN "QUERIN"				RUN "INIT"	

1. *Press the microfloppy drive release button. The* SYSTEM *microfloppy will eject from the drive. Insert the microfloppy labeled* UTILITY1 *into the microfloppy drive.*
2. Press [f7], labeled **"RUN INIT"**



3. Press [f1], labeled **INIT-IALIZE**. The following screen will be displayed.



4. The screen shows every mass storage device attached to your HP 260 system. The example system has one HP 7946A disc with integral cartridge tape. Press the softkey labeled with the product number of your system disc. In this example, press [f2] to initialize the HP 7946A disc. The system disc will be marked **uninitialized** on the display.

NOTE

Make sure that you select the fixed disc, not its integral removable media.

```
                          INITIALIZATION UTILITY
                               INITIALIZE

Selected device is  7945/46  :U2,1,0

Media will be initialized with:  standard format
                                 interleave: 1
                                 # of tracks for directory: 9
                                 file entries: 3056

DIRECTORY       - Changes directory capacity (see UTILITIES manual).




Please press CONTINUE to proceed

CONTINUE |  |  |  |  |  | DIRECTORY 9:3056 |  | EXIT
```

5. Check that you have selected the correct disc. (If not, press the softkey labeled **EXIT**). To initialize the disc, press the softkey labeled **CONTINUE**. Ignore all other keys (for example, **DIRECTORY**, or **INTERLEAVE**).

6. The initialization of your system disc can take up to 60 minutes. Approximate intialization times for your discs are listed below.

Disc	**Size** (megabytes)	**Initialize Time** (minutes)
HP 7912P	64	35
HP 7941/2A	24	18
HP 7945/6A	55	40.5
HP 9133/4H	20	30
HP 9133/4L	40	45
HP 9153/4B/C	20	30
HP 9153C	40	60
HP 7957A/B	80	35
HP 7958A/B	132	60

7. When the message **INITIALIZATION COMPLETE** appears press [f8], labeled **EXIT PROGRAM**.

COPYING THE OPERATING SYSTEM AND DROMS

The operating system and DROMs can now be copied to the initialized system disc. *Instructions in italics apply to microfloppies only.* Other instructions apply when loading from either cartridge tapes or microfloppies.

After exiting from the **INIT** program, the following softkey labels will be displayed.

RUN "ROUTIL"	RUN "CONFIG"	RUN "QUERIN"				RUN "INIT"	

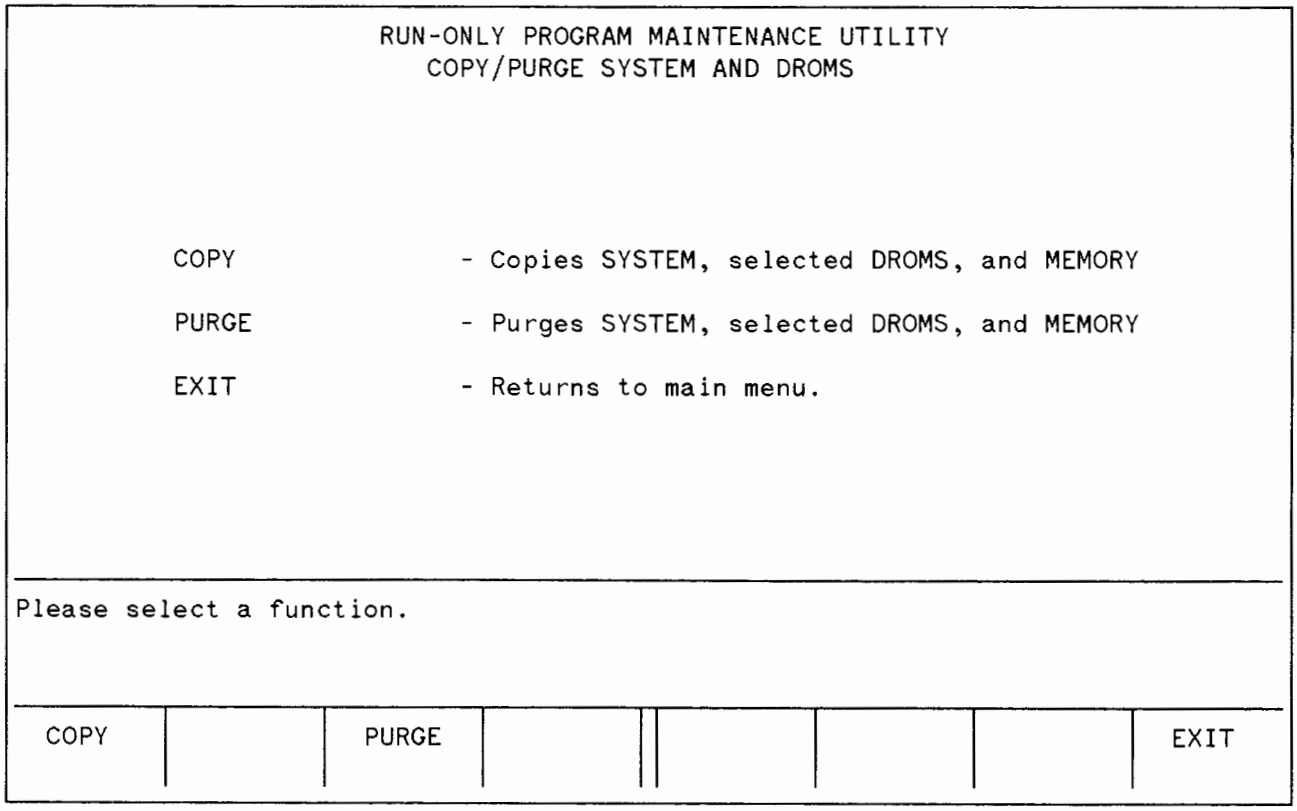
1. *Remove the miocrofloppy labeled* UTILITY1 *from the drive and insert the microfloppy labeled* SYSTEM.

2. Press [f1], labeled **RUN ROUTIL**. The following screen will appear.

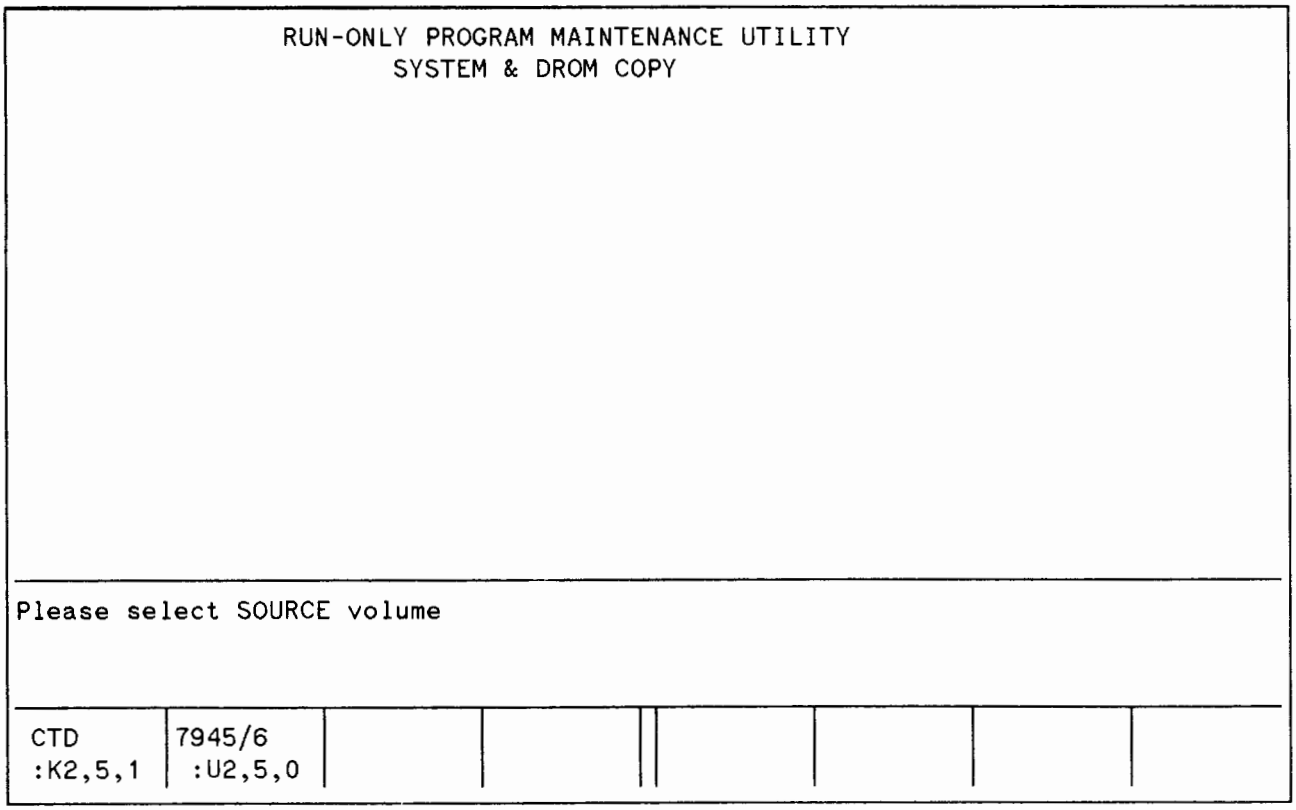
```
                RUN-ONLY PROGRAM MAINTENANCE UTILITY
                          MAIN MENU

        COPY PROGRAMS      - Copies RUN-ONLY programs between devices.

        PURGE PROGRAMS     - Purges RUN-ONLY programs.

        RUN-ONLY           - Makes a specific program RUN-ONLY.

        SYSTEM & DROMS     - Copies or purges SYSTEM and DROM files.

        EXIT ROUTIL        - Terminates program.


Please insert desired volumes and select a function.
```

COPY PROGRAMS	PURGE PROGRAMS		RUN-ONLY		SYSTEM & DROMS		EXIT ROUTIL

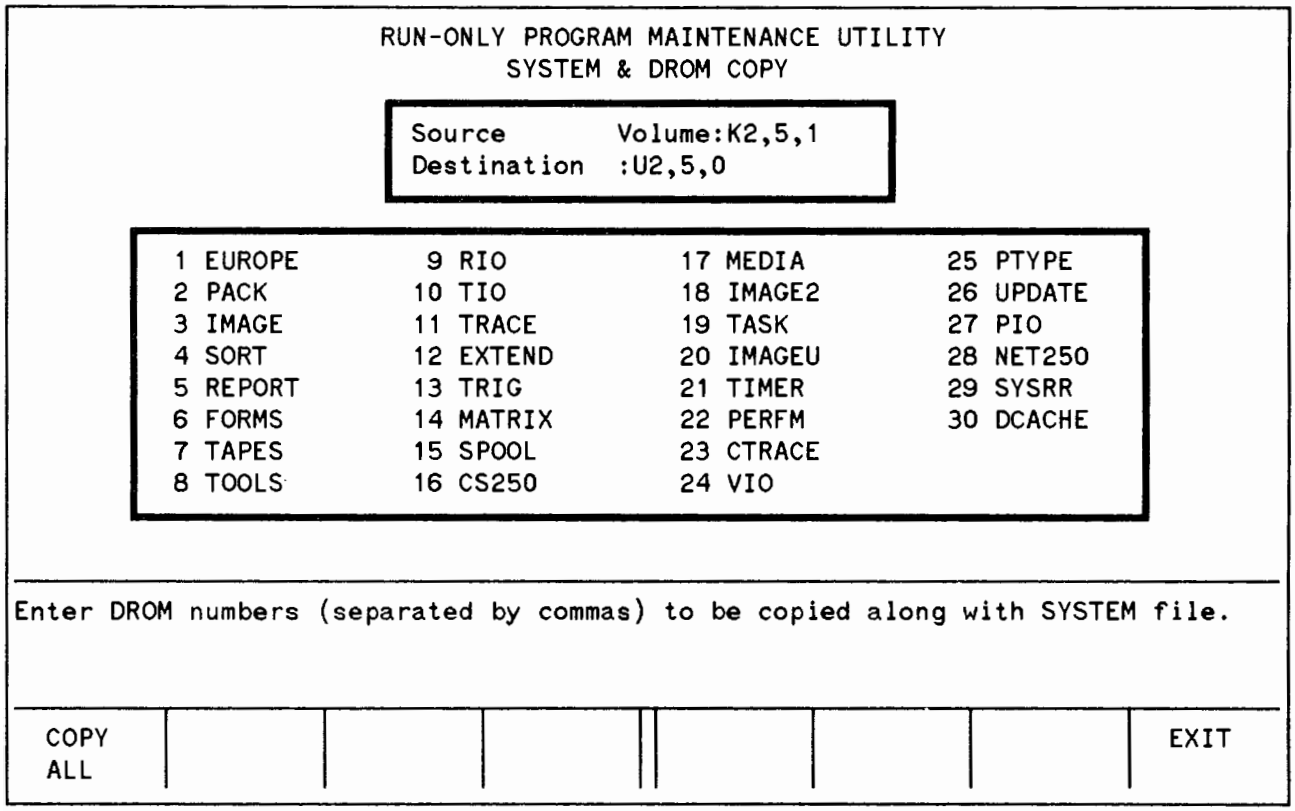
3. Press [f6], labeled **SYSTEM & DROMS**. The following screen will appear.



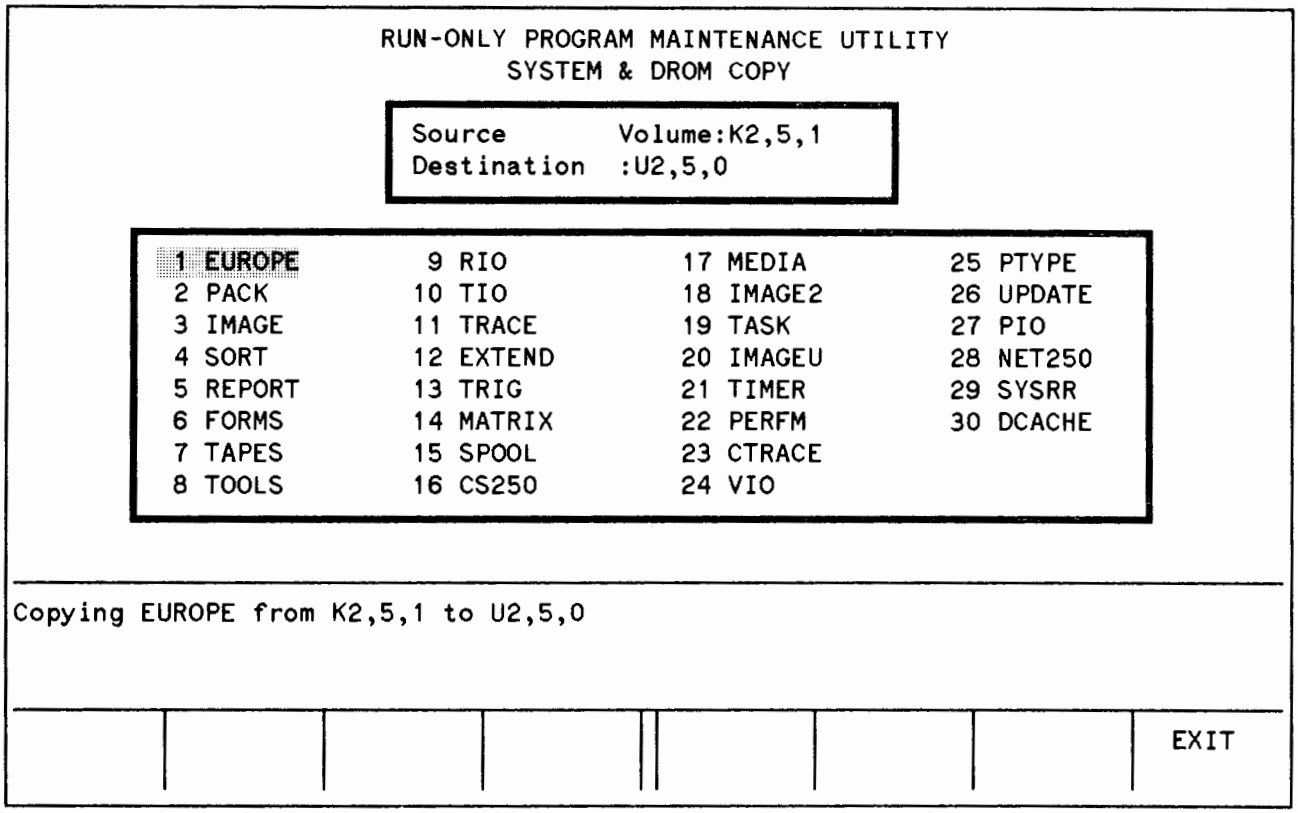
4. Press [f1], labeled **COPY**.



5. Press the softkey labeled with the product number of the mass storage device from which the SYSTEM & DROMS are to be copied. (The prefix will be either ":A" if copying from a microfloppy or ":K" if copying from a cartridge tape. In this example it is a cartridge tape). When prompted for the **DESTINATION** volume, press the softkey labeled with the fixed disc to receive the programs. (The destination volume is the fixed disc that you have initialized; in this example it is the HP 7946A).



6. The screen displays the list of DROMs and identifies the source and destination volumes you specified. If the source and destination volumes are correct, press [f1], labeled **COPY ALL**. The operating system and each DROM will be copied to the fixed disc.



7. Each DROM is displayed in inverse video as it is copied.

8. After all the DROMS have been copied press [f8], labeled **EXIT**.

COPYING THE RUN-ONLY PROGRAMS

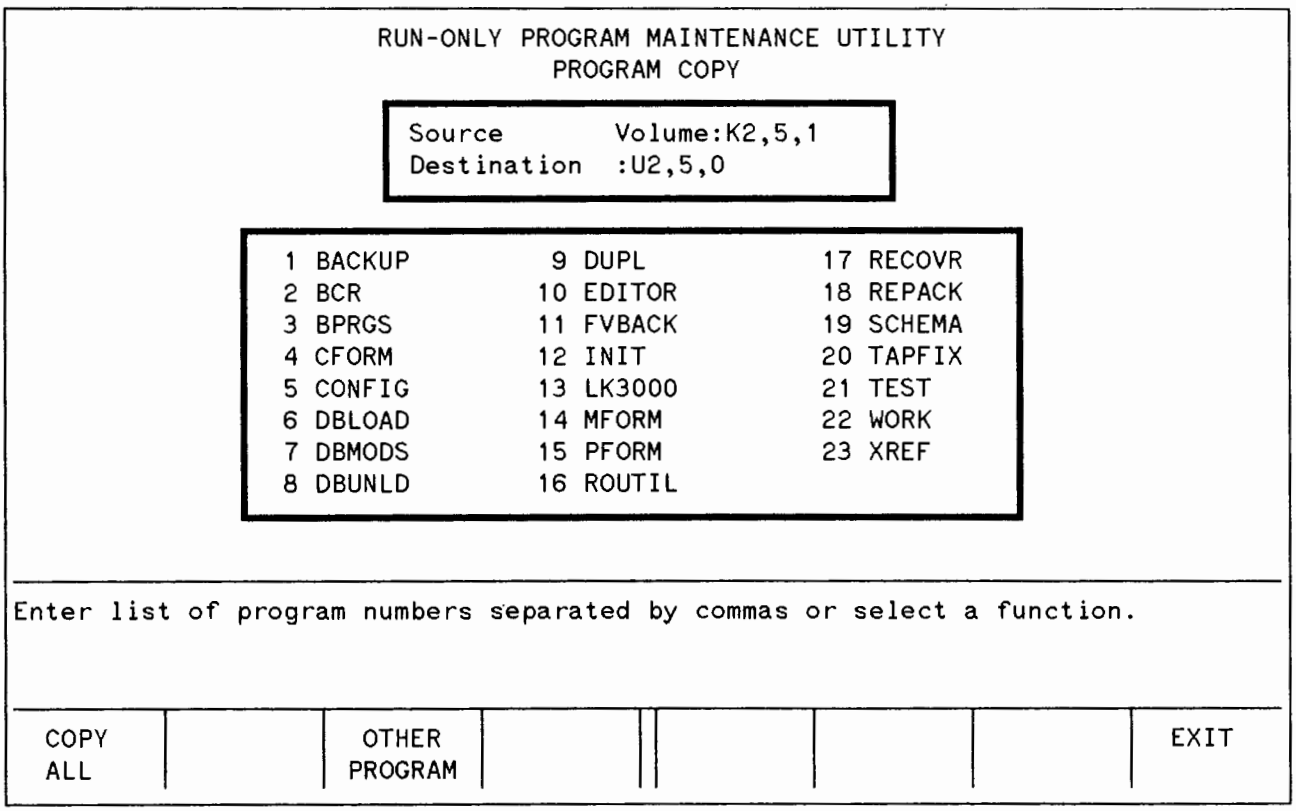
The operating system has been copied. Now you must copy the Run-Only programs.

You can install the RUN-ONLY programs (the standard HP 260 utilities) in one of two ways:

- From microfloppies, in which case you must use the ROUTIL utility.
- From a stand-alone tape drive (for example, a 9144A), in which case you should use the FVBACK utility due to reasons of performance.

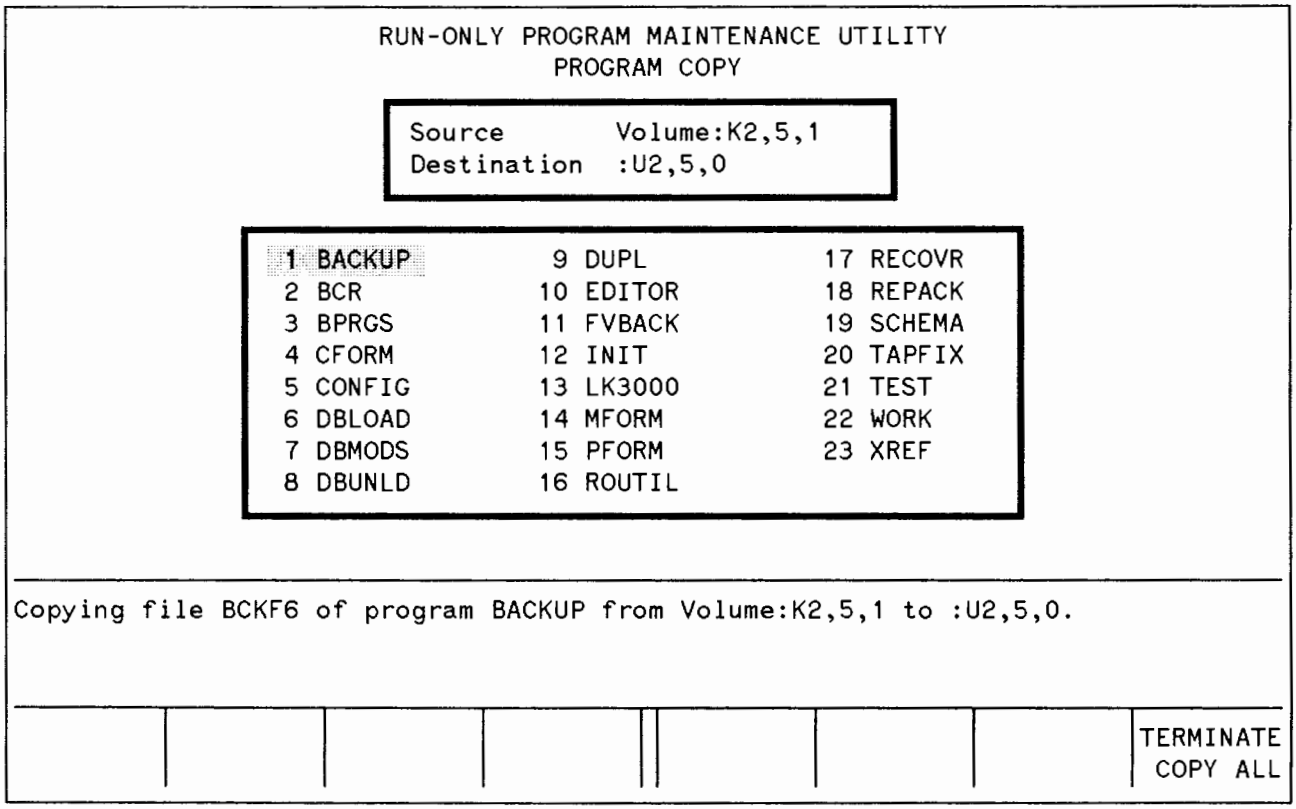
```
                    RUN-ONLY PROGRAM MAINTENANCE UTILITY
                              MAIN MENU

        COPY PROGRAMS      - Copies RUN-ONLY programs between devices.

        PURGE PROGRAMS     - Purges RUN-ONLY programs.

        RUN-ONLY           - Makes a specific program RUN-ONLY.

        SYSTEM & DROMS     - Copies or purges SYSTEM and DROM files.

        EXIT ROUTIL        - Terminates program.


Please insert desired volumes and select a function.

| COPY PROGRAMS | PURGE PROGRAMS |  | RUN-ONLY |  | SYSTEM & DROMS |  | EXIT ROUTIL |
```

1. Press [f1], labeled **COPY PROGRAMS**.
2. Now, identify the source and destination for the COPY procedure. Select your distribution medium as the SOURCE volume. (The prefix will be either ":A", if copying from a microfloppy, or ":K", if copying from a cartridge tape.) When prompted for the **DESTINATION** volume, press the softkey labeled with the fixed disc to receive the programs. (The **DESTINATION** volume is normally the fixed disc you have initialized in the previous step.)



3. The screen will now display the list of Run-Only programs. Press [f1], labeled **COPY ALL**, to copy all the Run-Only programs to the fixed disc.

Your screen may look different to the above example, depending on the current list of RUN-ONLY programs on your source volume. (If you are installing from a microfloppy, refer to step 5.)



4. Each program is displayed in inverse video as it is copied.

5. *The Run-Only programs are held on four microfloppies. When you have copied the contents of the microfloppy labeled* SYSTEM, *copy the contents of the microfloppies labeled* UTILITY1, *and* UTILITY2. *You have copied the full contents of each microfloppy after the final program is highlighted and then returned to normal display. Keep each microfloppy as a backup. The fourth microfloppy contains* QUERY, *which must be installed separately.*

6. After all the programs have been copied, [f8] will be labeled **EXIT**. Press [f8], labeled **EXIT**, until you leave the ROUTIL program.

7. If you need GPL, you may use GPL LOD to copy GPL text and library. (Refer to the GPL Programming Manual for details.)

Installing Utilities Using FVBACK

On the tape labeled SYSTEM there is a backup file named "FVUTL". This file contains the standard HP 260 utilities. If you are installing the utilities with FVBACK, it is recommended that you follow this procedure:

4. After installing SYSTEM and DROM, exit ROUTIL.

5. Run FVBACK (it will be loaded from the SYSTEM tape); use the third softkey set of the PRIMER keys for assistance. For more details on FVBACK, you should consult the "HP 260 Utilities Manual".

6. Select the function **RESTORE**.

7. Select the source volume containing the backup file, the SYSTEM tape.

8. Enter the name of the backup file, FVUTL.

9. Select the destination volume to which the contents of the backup file will be restored. If you are installing a new system, the destination volume will most probably be the disc which you have just initialized. You may ignore the message from the system, telling you that the destination volume contains files, since none of the files you have already installed will be purged.

10. Press the key labeled **CONTINUE**.

11. If you are installing a new operating system and the utilities to a disc on which a previous version was installed, press the key labeled **PURGE IS OFF** to toggle to **PURGE IS ON**.
    If you are installing a new system, leave the **PURGE** option in its default mode, **PURGE IS OFF**.

12. Select the key **ALL FILES** to restore the entire contents of the FVUTL backup-file.

13. After all the files have been restored, press **EXIT** and then the **EXIT PROGRAM** key to leave the FVBACK utility.

You may now continue with the normal installation procedure, that is with the language-oriented installation of QUERY.

NOTE

If you have used the Utility Installation from the FVUTL backup-file, make sure that you set the MSI to the disc containing the SYSTEM file which you wish to configure, before you run the CONFIG utility to change your system configuration. If you have used the PRIMER keys to install the utilities, ROUTIL will automatically tell you that the MSI is properly set.

COPYING THE QUERY PROGRAM

Now you must select the language that you want the QUERY data base enquiry program to use when displaying messages and when prompting for information. After you choose the language, the QUERY program will be copied to your system disc.

After exiting from the ROUTIL program, the following softkey labels will be displayed.

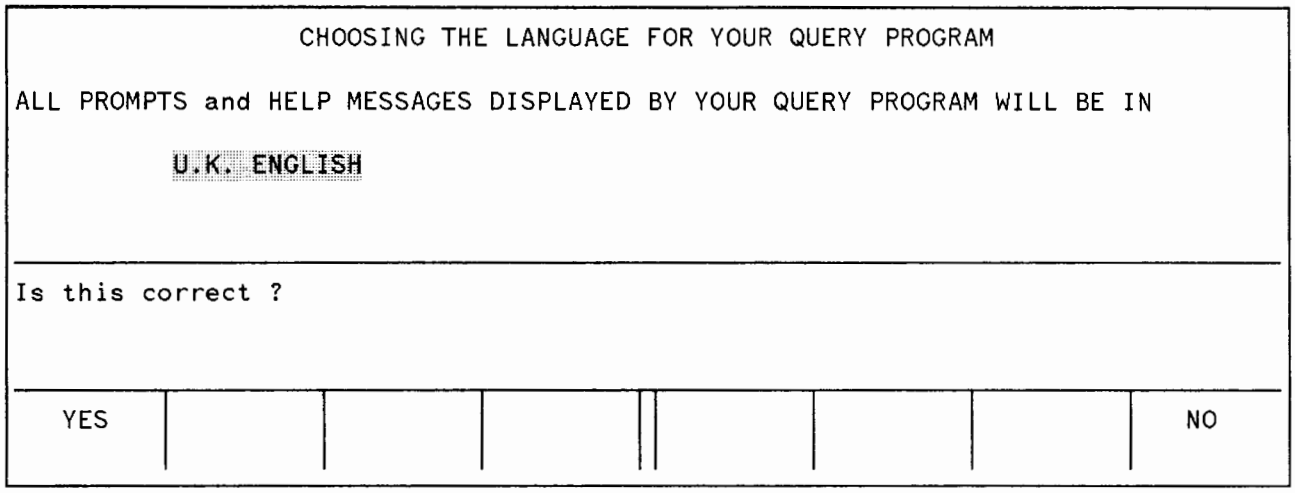
RUN "ROUTIL"	RUN "CONFIG"	RUN "QUERIN"				RUN "INIT"	

1. *Insert the microfloppy labeled* QUERY *in the microfloppy drive.*
2. Press [f3], labled **RUN QUERIN**. The following screen will be displayed.


```
                CHOOSING THE LANGUAGE FOR YOUR QUERY PROGRAM

The QUERY program has been written in 7 languages.
Press the softkey labeled with the language that you prefer for your
prompts and messages.

U.K. ENGLISH and U.S. ENGLISH differ in date and currency symbol representation
-------------------------------------------------------------------------------
Please select the language for your QUERY program messages and prompts.
```

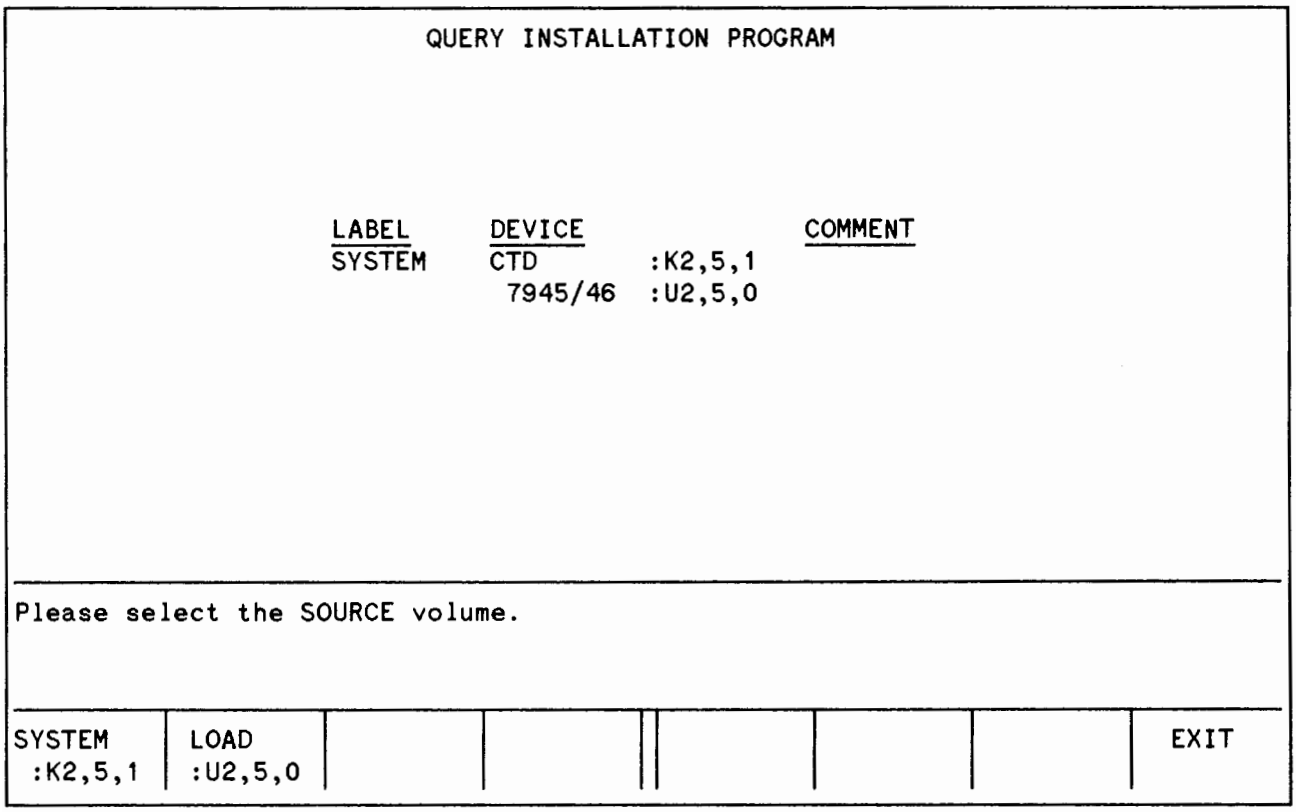
FRENCH	GERMAN	ITALIAN	KATAKANA	SPANISH	U.K. ENGLISH	U.S. ENGLISH	EXIT PROGRAM

3. Press the softkey labeled with the language you want for your QUERY program. In this example [f5], labeled **U.K. English**, will be chosen. Once you have chosen the language, the following screen will be displayed.



4. Make sure that you have the correct language. If so, press [f1], labeled **YES**. If not, or you are not sure, press [f8], labeled **NO**, and re-enter the correct language.

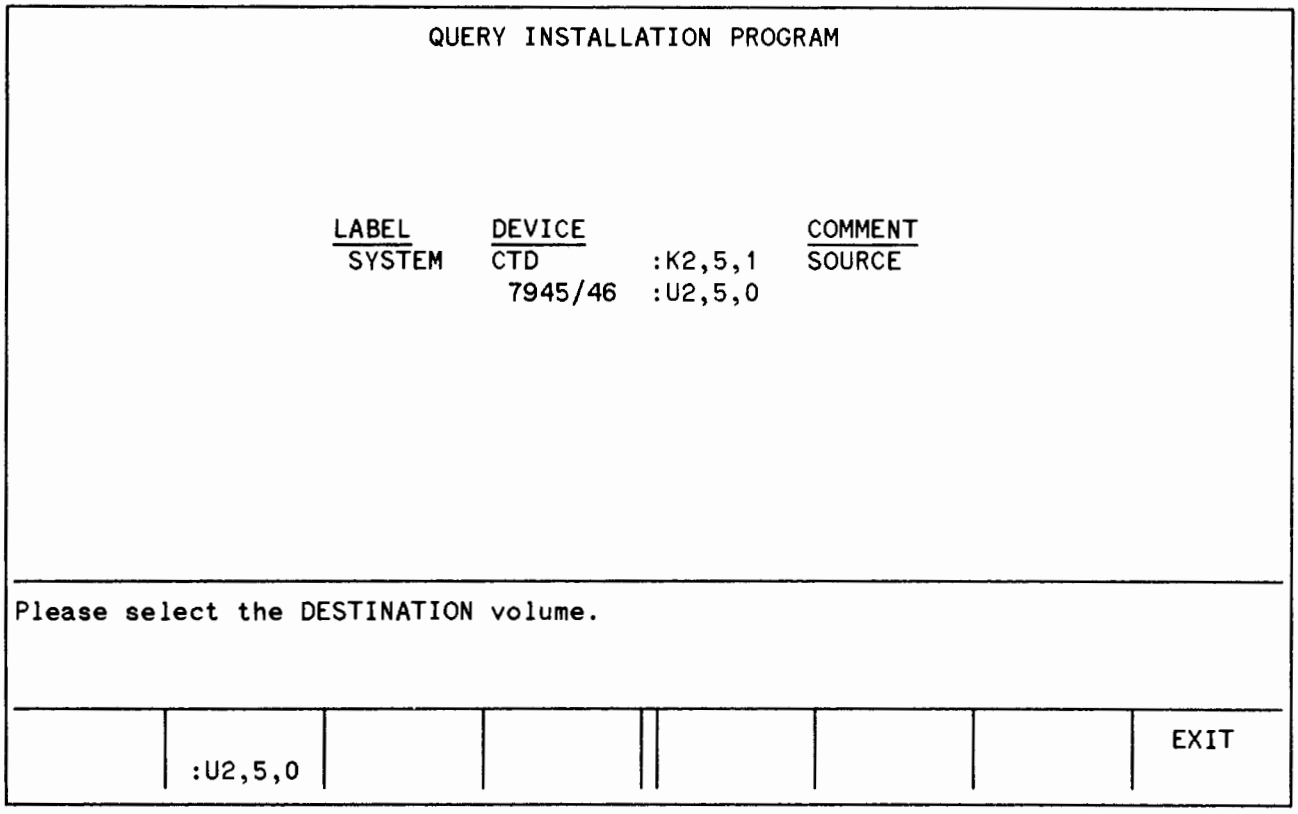
5. Next the installation program asks you to identify the **SOURCE** volume. A list of all currently available mass storage devices and their volumes is displayed (an example is shown below).



If your computer's system software is supplied on cartridge tape, press the softkey whose label includes the volume label **SYSTEM**.

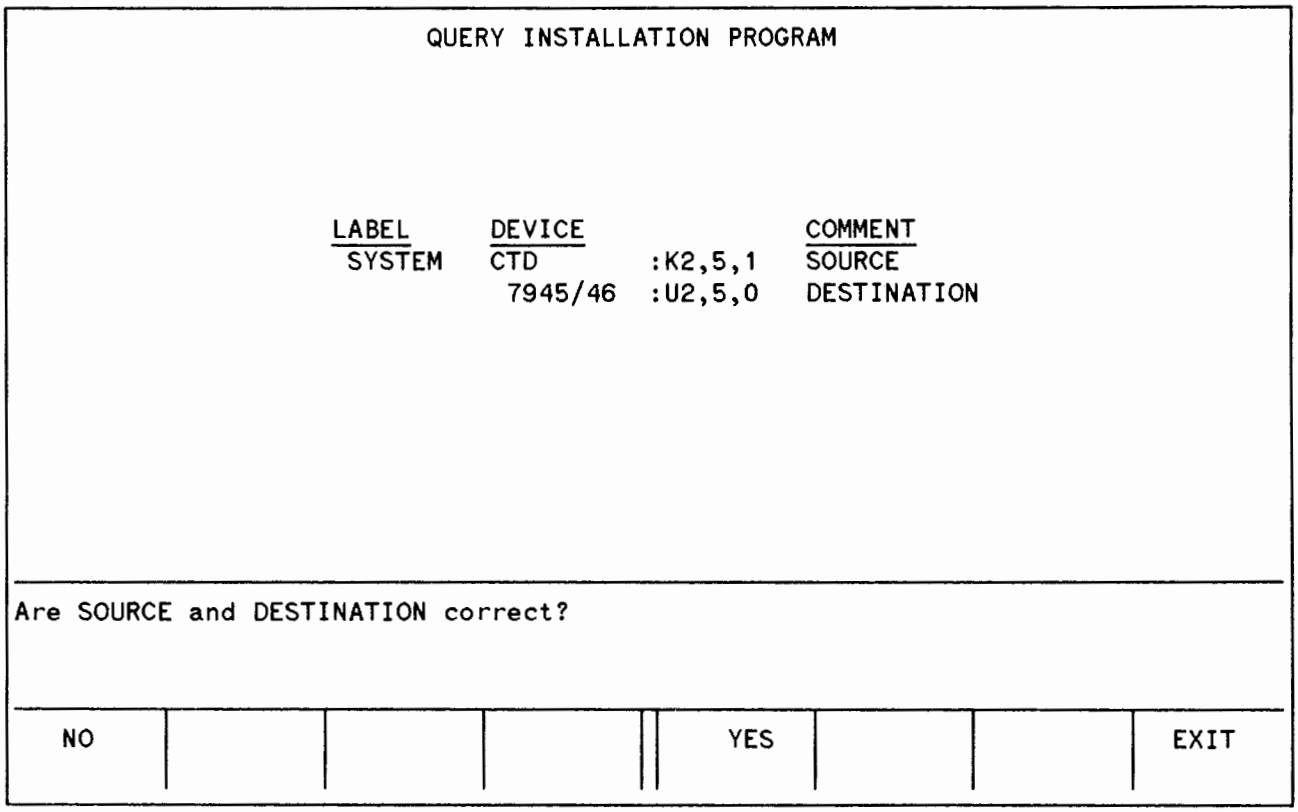
If your computer's system software is supplied on flexible disc, press the softkey whose label includes the volume label **QUERY**.

The word **SOURCE** is added to the comment column in the list on the display, identifying the volume you specified (similar to the following example).



6. The installation program now asks you to identify the **DESTINATION** volume (the volume to which the QUERY software should be copied). This device is called the **DESTINATION** device. Press the softkey identifying the disc to which QUERY should be copied.

The word **DESTINATION** is added to the comment column on the display, identifying the volume on which QUERY will be installed.



7. As shown in the previous example screen, the installation program next asks you to verify that the SOURCE and DESTINATION volumes are correctly specified. If you wish to specify a different SOURCE or DESTINATION volume, press [f1], labeled **NO**; the program will once again ask you to select these volumes. If the SOURCE and DESTINATION volumes are correct, press [f5], labeled **YES**.

8. The installation program now copies QUERY from the SOURCE volume to the DESTINATION volume. When the installation is complete, the program ends and the following softkey labels are displayed.

RUN "ROUTIL"	RUN "CONFIG"					RUN "INIT"	

Note that the softkey labeled **RUN "QUERIN"** has been deleted.

9. *After the* QUERY *program has ended, remove the microfloppy labeled* QUERY *from the microfloppy drive. Keep the microfloppy as a backup*

10. After the QUERY program has been copied, press the button on the cartridge tape drive labeled **Unload**. As soon as the **BUSY** light stops flashing, press the eject button to remove the cartridge tape. Do not remove the tape before the **BUSY** light is extinguished or data can be lost. Keep the cartridge tape as a backup.

CONFIGURING YOUR HP 260

SECTION 6

INTRODUCTION

This section describes how to tell your HP 260 which peripherals you have attached. This section has four parts.

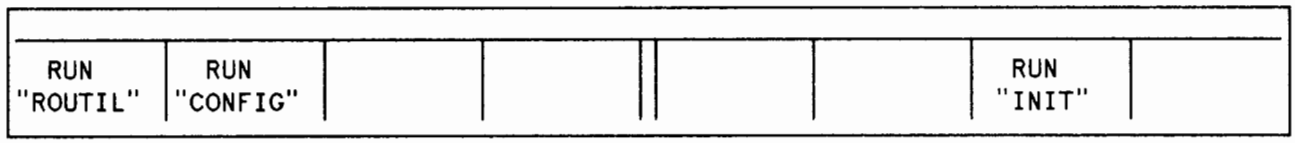
- **Setting the Keyboard**. This describes how to tell the HP 260 which keyboard is connected to your workstation.
- **Configuring Workstations on the HP 260**. This describes how to configure the HP 260 to recognize all your workstations.
- **Configuring Other Serial Devices on Your HP 260**. This describes how to configure the HP 260 to recognize all terminals, printers, plotters, bar code readers, and data entry devices.
- **Setting DROMs to Load Automatically**. This describes how to make sure that any necessary DROMs are loaded into the operating system whenever the HP 260 is started up. (DROMs are optional software modules, containing enhancements to the operating system.)

You need your Serial Configuration Worksheet when configuring your HP 260. This holds a record of all your peripherals, the ports to which they are attached, and their method of data communication.

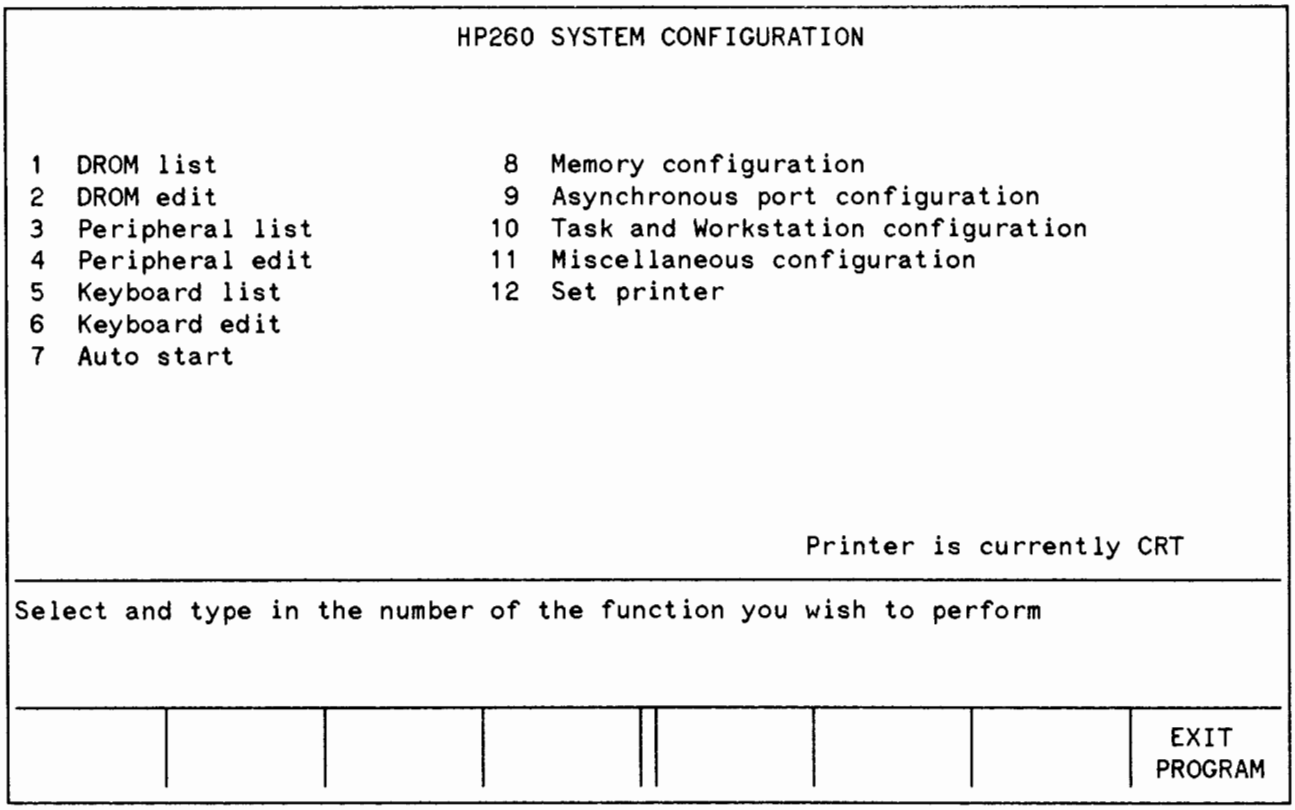
SETTING THE KEYBOARD

Typewriter keyboard layouts and characters vary from country to country. Hewlett-Packard provides keyboards to suit most countries. The HP 260 operating system can recognize and understand input from all the different keyboard types. However, you have to tell your HP 260 which type of keyboard you use, or confusion will result.

After copying your QUERY program, the following softkey labels are displayed.



Press [f2], labeled **RUN CONFIG**. The following screen will appear.



1. **As supplied to you, the operating system is set to recognize a U.S. keyboard (USASCII). If your workstations use U.S keyboards, then you need not set the HP 260 keyboard configuration. Please go directly to "Configuring Workstations on the HP 260".**

   If your workstations use any other type of keyboard then select **Keyboard Edit** by typing

   6 (RETURN)

The following screen will be displayed.

```
                         HP260 SYSTEM CONFIGURATION
                              KEYBOARD EDIT

#  KEYBRD NAME   TYPE       SELECTED    #  KEYBRD NAME   TYPE       SELECTED

1    US          PRIMARY    MAIN        12 FLEMISH       PRIMARY
2    FRENCH      PRIMARY                13 SWISS GERMAN  PRIMARY
3    GERMAN      PRIMARY                14 SWISS ROMAN   PRIMARY
4    ITALIAN     PRIMARY                15 LINE DRAW     SECONDARY  AUXILIARY
5    SPANISH     PRIMARY
6    SWEDISH     PRIMARY
7    UK          PRIMARY
8    DANISH      PRIMARY
9    KATAKANA    SECONDARY
10   FR. CANADN  PRIMARY
11   FINNISH     PRIMARY                      ALTERNATE CHARACTER SET:
                                                 ROMAN EXTENSION

Please select a function

 EDIT  |   EDIT   | CHANGE  | RECORD ||  OLD  |       |       |  EXIT
 MAIN  |AUXILIARY |CHAR SET | CONFIG ||  LIST |       |       |
```

2. The screen shows the different types of keyboard that the **HP** 260 can recognize. **Press** (f1), labeled **EDIT MAIN**. The following screen will be displayed.

```
                          HP260 SYSTEM CONFIGURATION
                              KEYBOARD EDIT

#  KEYBRD NAME   TYPE       SELECTED    #  KEYBRD NAME   TYPE       SELECTED

1    US          PRIMARY    MAIN       12 FLEMISH       PRIMARY
2    FRENCH      PRIMARY               13 SWISS GERMAN  PRIMARY
3    GERMAN      PRIMARY               14 SWISS ROMAN   PRIMARY
4    ITALIAN     PRIMARY               15 LINE DRAW     SECONDARY  AUXILIARY
5    SPANISH     PRIMARY
6    SWEDISH     PRIMARY
7    UK          PRIMARY
8    DANISH      PRIMARY
9    KATAKANA    SECONDARY
10   FR. CANADN  PRIMARY
11   FINNISH     PRIMARY                          ALTERNATE CHARACTER SET:
                                                     ROMAN EXTENSION
-------------------------------------------------------------------------------
New main keyboard # (1-15)?

-------------------------------------------------------------------------------
                                                                        EXIT
```

3. Enter the number beside the language that you use. For example, if you use an Italian language keyboard then type:

   4 (RETURN)

   The word **MAIN** will move from row 1, labeled **US**, to row 4, labeled **ITALIAN**.

4. Press (f4), labeled **RECORD CONFIG**, to save the new keyboard choice to disc.

5. Press (f8), labeled **EXIT**, to return to the CONFIG main menu.

NOTE

The HP 260 can recognize two keyboards. The **MAIN** keyboard, which you have just set, and the **AUXILIARY** keyboard. Use of the **AUXILIARY** keyboard, (often the line drawing set), and the alternate character set are discussed in the "HP 260 Utilities Manual". Only keyboards of type **PRIMARY** can be the **MAIN** keyboard.

CONFIGURING WORKSTATIONS ON THE HP 260

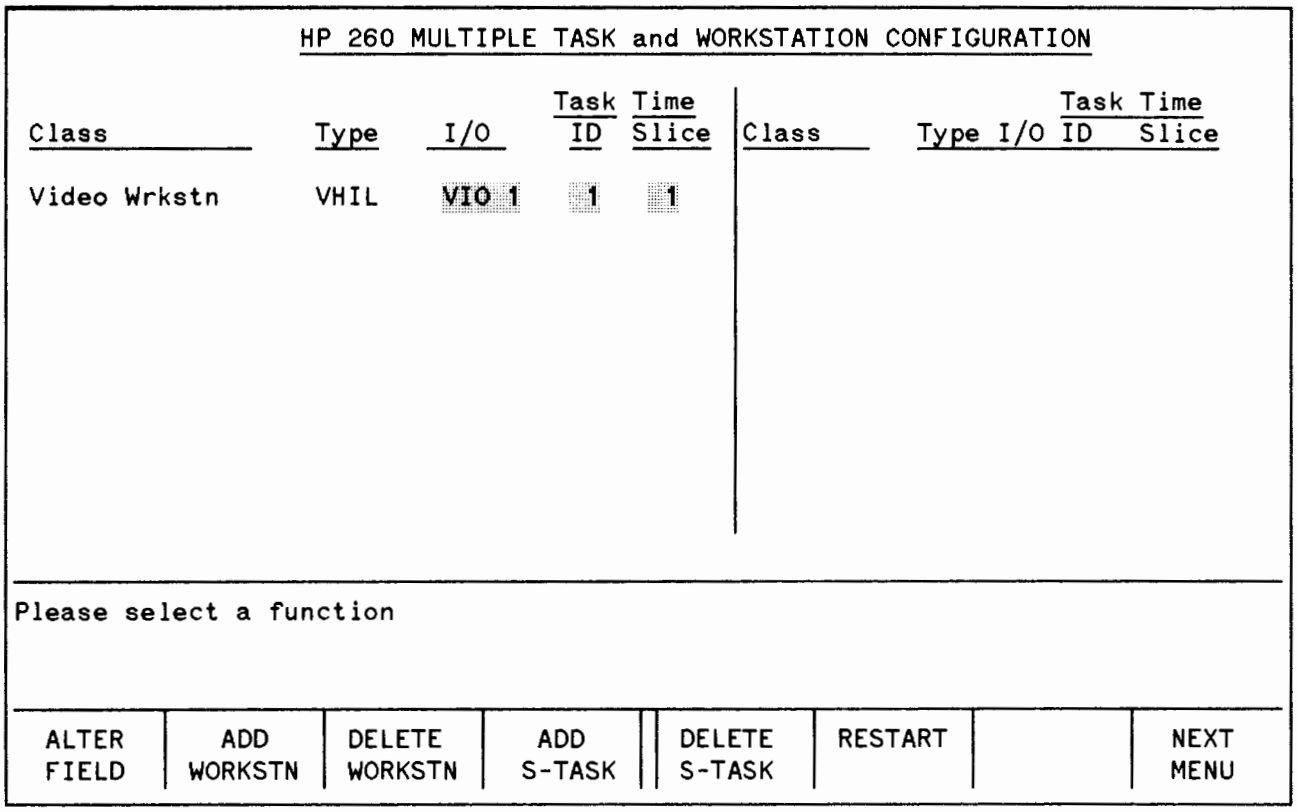
After exiting from the keyboard edit program, the CONFIG utility main menu is displayed.

```
                         HP260 SYSTEM CONFIGURATION


 1  DROM list                  8  Memory configuration
 2  DROM edit                  9  Asynchronous port configuration
 3  Peripheral list           10  Task and Workstation configuration
 4  Peripheral edit           11  Miscellaneous configuration
 5  Keyboard list             12  Set printer
 6  Keyboard edit
 7  Auto start



                                           Printer is currently CRT
--------------------------------------------------------------------------
Select and type in the number of the function you wish to perform

--------------------------------------------------------------------------
|        |        |        |        ||        |        |        |  EXIT   |
|        |        |        |        ||        |        |        | PROGRAM |
```

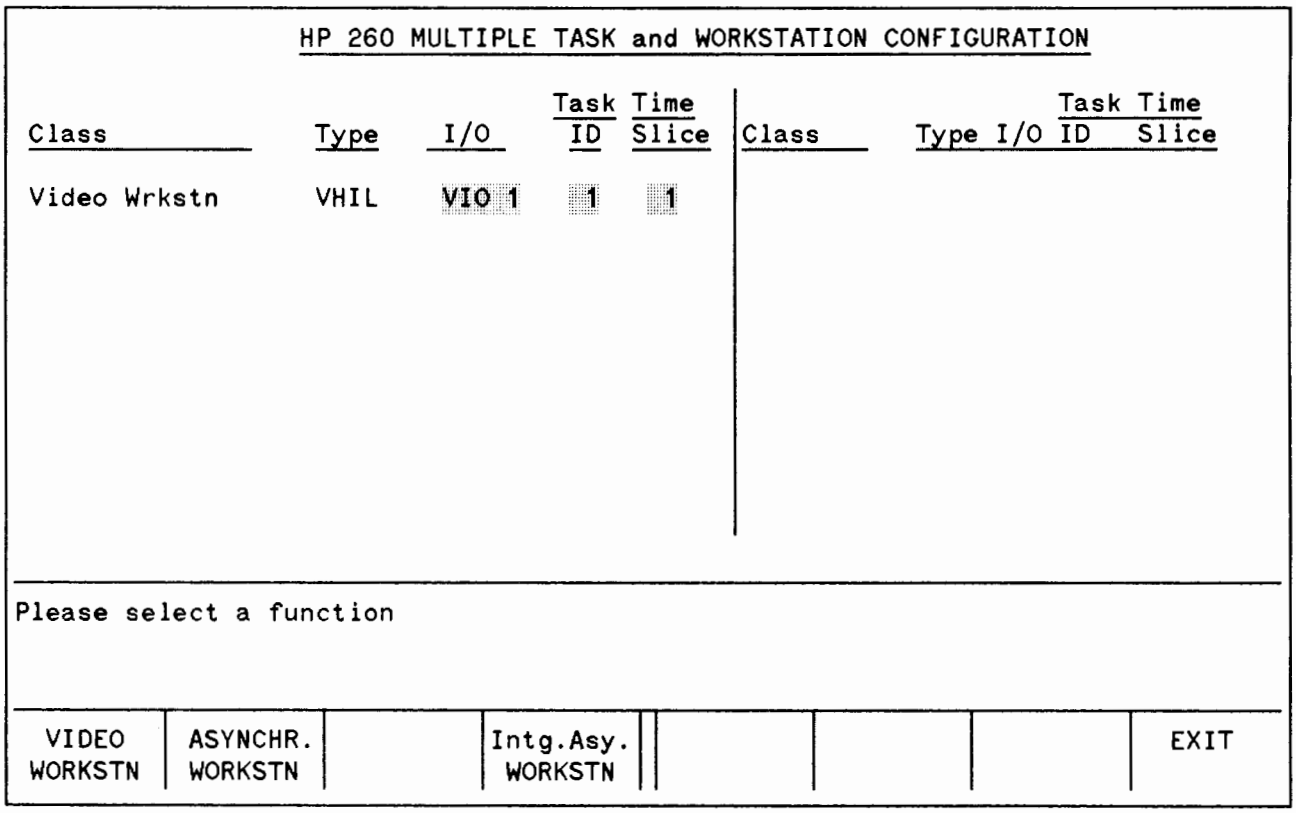
1. Select **Task and Workstation Configuration** by typing

   10 (RETURN)

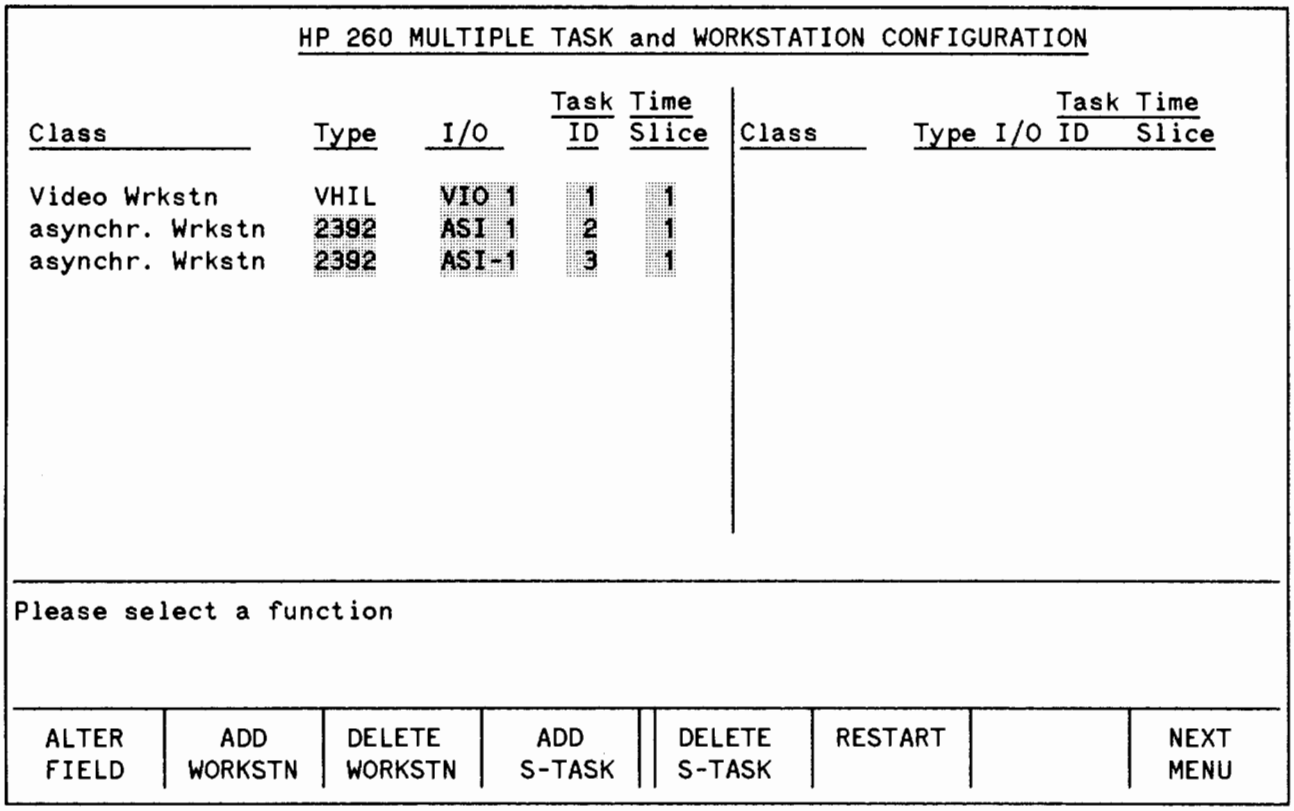
The following screen will be displayed.



2. Press [f2], labeled **ADD WORKSTN**.



3. To add a video workstation, press [f1], labeled **VIDEO WORKSTN**. To add a serial workstation to an ASI Port, press [f2], labeled **ASYNC WORKSTN**. To add a serial workstation to an Integrated Serial Port, press [f4], labeled **Intg.Asy. WORKSTN**.



The screen with one workstation of each type.

4. The CONFIG program automatically allocates each workstation to the lowest numbered ASI Port or Video Channel available. If an Integrated Serial Port is chosen, the CONFIG program selects first port -1 and then port -2. Check that the port allocated is the same as the port to which the workstation is attached. If not, you can alter the port in the following way.

   - Use the keys labeled ⟵, ↑, ↓, and ⟶ to move the cursor to the field labeled **I/O**.
   - Press f1, labeled **ALTER FIELD**.
   - Enter the correct port number.

5. Repeat Steps 3 and 4 for every video workstation attached to your HP 260.

6. Repeat Steps 3 and 4 for every serial workstation on your Serial Configuration Worksheet.

7. When you have configured all your workstations, press f8, labeled **NEXT MENU**, and then f1, labeled **RECORD CONFIG**.

8. Press f8, labeled **EXIT**, to leave the **Multiple Task and Workstation Configuration** program.

CONFIGURING OTHER SERIAL DEVICES ON THE HP 260

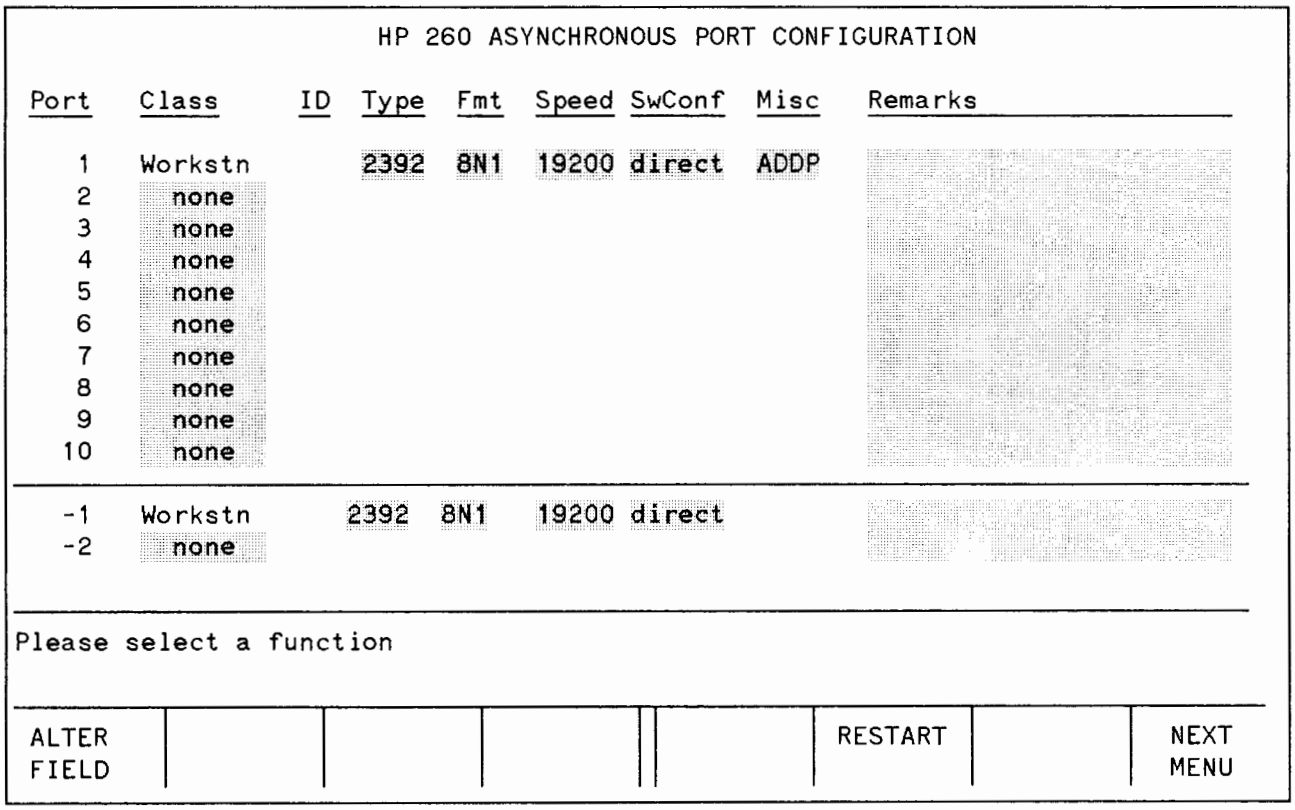
After exiting from the **Task and Workstation Configuration Program**, the following screen will be displayed.

```
                          HP260 SYSTEM CONFIGURATION


 1  DROM list                   8  Memory configuration
 2  DROM edit                   9  Asynchronous port configuration
 3  Peripheral list            10  Task and Workstation configuration
 4  Peripheral edit            11  Miscellaneous configuration
 5  Keyboard list              12  Set printer
 6  Keyboard edit
 7  Auto start



                                      Printer is currently CRT
--------------------------------------------------------------------
Select and type in the number of the function you wish to perform

--------------------------------------------------------------------
                                                           EXIT
                                                          PROGRAM
```


1. Select **Asynchronous Port Configuration**, by typing:

   9 (RETURN)

The following screen will be displayed.



Note that the serial workstations configured earlier appear on the screen.

2. Select a peripheral from your Serial Configuration Worksheet. In this example, you will configure the HP 260 for an HP 2932A printer attached to the Integrated Serial Port labeled -2.

3. Use the keys labeled ⟵, ↑, ↓, and ⟶ to move the cursor to the field labeled **Class** for the port to which your peripheral is attached.

4. Press f1, labeled **ALTER FIELD**.

```
                    HP 260 ASYNCHRONOUS PORT CONFIGURATION

Port  Class     ID  Type    Fmt  Speed  SwConf  Misc    Remarks

   1  Workstn       2392    8N1  19200  direct  ADDP
   2    none
   3    none
   4    none
   5    none
   6    none
   7    none
   8    none
   9    none
  10    none
-----------------------------------------------------------------------
  -1   Workstn      2392  8N1   19200 direct
  -2   _ none

-----------------------------------------------------------------------
Select the new device class for port -2

-----------------------------------------------------------------------
 none   |        | Terminal | Printer || Computer |      |      | EXIT
```

5. The softkey labels now display the device classes. Determine the device class of your peripheral from the Serial Configuration Table. (An HP 2932A printer has the device class **Printer**.)

6. Press the softkey labeled with the **Class** of your peripheral. In this example, press f4, labeled **Printer**.

The following screen will be displayed.

```
                         HP 260 ASYNCHRONOUS PORT CONFIGURATION

 Port  Class    ID  Type   Fmt  Speed SwConf  Misc   Remarks

    1  Workstn      2392   8N1  19200 direct  ADDP
    2    none
    3    none
    4    none
    5    none
    6    none
    7    none
    8    none
    9    none
   10    none
 ----------------------------------------------------------------------
   -1   Workstn     2392 8N1   19200 direct
   -2   Printer     293x 8N1    9600 direct

 ----------------------------------------------------------------------
 Please select a funtion

 ALTER  |        |        |        ||        | RESTART |        | EXIT
 FIELD  |        |        |        ||        |         |        | MENU
```

7. The HP 260 allocates a peripheral of that **Class** next to the port selected. It also allocates the default communication parameters in the other fields. Normally these default parameters are correct for all peripherals. In this example, they are correct for the HP 2932A printer.

   Check that the peripheral is of the correct **Type** and that it is assigned to the correct port. Then check that the entries under **Speed** and **Format** are identical to those on your Serial Configuration Worksheet. If any field is not correct, you can alter it in the following way. (You can alter any field displayed in half-bright inverse video.)

   - Use the keys labeled [←], [↑], [↓], and [→] to move the cursor to the incorrect field.
   - Press [f1], labeled **ALTER FIELD**.
   - Enter the correct value. (You will be prompted using the softkeys.)

NOTE

Make sure that the configuration values for your serial workstations are also correct.

If you connected a peripheral via a modem, you must set the the field labeled **SwConf**.

If you attached an HP 2334A Multimux consult the appendix titled "Configuring the HP 2334A"

8. Repeat Steps 2 to 7 for each peripheral on your Serial Configuration Worksheet.

9. Once your HP 260 has been configured for all your peripherals press [f8], labeled **NEXT MENU**. When the next softkey set appears press [f1], labeled **RECORD CONFIG**, to save your configuration on disc. Finally, press [f8], labeled **EXIT**, to return to the CONFIG main menu.

SETTING DROMS TO LOAD AUTOMATICALLY

DROMs are optional software modules, containing enhancements to the operating system. These enhancements are needed to operate certain peripherals, for example the TIO DROM is needed before you can operate a plotter. A list of the DROMs that each peripheral requires is supplied in the Serial Configuration Table. The following instructions ensure that all the DROMs you need will be loaded automatically by the operating system.

After exiting from the **Asychronous Port Configuration Program**, the following screen is displayed.

```
                          HP260 SYSTEM CONFIGURATION


 1  DROM list                    8  Memory configuration
 2  DROM edit                    9  Asynchronous port configuration
 3  Peripheral list             10  Task and Workstation configuration
 4  Peripheral edit             11  Miscellaneous configuration
 5  Keyboard list               12  Set printer
 6  Keyboard edit
 7  Auto start



                                          Printer is currently CRT
--------------------------------------------------------------------
Select and type in the number of the function you wish to perform

--------------------------------------------------------------------
|        |        |        |        ||        |        |        | EXIT
|        |        |        |        ||        |        |        | PROGRAM
```

1. Select **DROM edit** by typing

   2 (RETURN)

   the following screen will be displayed.

```
                          HP260 SYSTEM CONFIGURATION
                                DROM EDIT

#  NAME      AUTO LOAD   #  NAME      AUTO LOAD   #  NAME      AUTO LOAD   #  NAME      AUTO LOAD

1  EUROPE                9  RIO                  17 MEDIA                 25 PTYPE
2  PACK                  10 TIO                  18 IMAGE2                26 UPDATE    x
3  IMAGE                 11 TRACE                19 TASK                  27 PIO       x
4  SORT                  12 EXTEND               20 IMAGEU                28 NET250
5  REPORT                13 TRIG                 21 TIMER                 29 SYRSRR
6  FORMS                 14 MATRIX               22 PERFM                 30 DCACHE
7  TAPES                 15 SPOOL                23 CTRACE
8  TOOLS                 16 CS250                24 VIO          x

                                                  Largest available space:  nnnnnn
                                                  Total unused DROM space:  nnnnnn
-------------------------------------------------------------------------------
Please select a function

-------------------------------------------------------------------------------
 EDIT |  |  | RECORD CONFIG || OLD LIST |  |  | EXIT
```

2. DROMs that will be automatically loaded each time the HP 260 is switched on are labeled with an **X** in the **AUTO LOAD** column.

3. Using the Serial Configuration Worksheet, determine the DROMs that your peripherals require.

4. If a required DROMs has no **X** in the **AUTO LOAD** column, press [f1], labeled **EDIT**. Enter the DROM number from the list, and press [RETURN]. An **X** now appears in the **AUTO LOAD** column.

   To stop a DROM loading automatically, press [f1], labeled **EDIT**. Enter the DROM number and press [RETURN]. The **X** in the **AUTO LOAD** column will disappear.

5. Repeat Step 4 for each DROM that you need.

NOTE

The UPDATE DROM must always be set to load automatically.

If you have one or more Video Workstations, the VIO DROM must be set to load automatically.

If you have one or more HP 9144A tape drives, the TAPES DROM must be set to load automatically.

If you have one or more serial workstations, the PIO DROM must be set to load automatically.

If you have one or more printers, plotters, terminals or bar code readers, the TIO DROM must be set to load automatically.

If your application programs require additional DROMs then set them to load automatically. For example, if you want to use the GPL program, set the TRIG and MATRIX DROMs to load automatically.

6. When all the DROMs have been set, press [f4], labeled **RECORD CONFIG**; this saves the configuration to the system disc.

7. Press [f8], labeled **EXIT**, to terminate the CONFIG utility.

LOADING THE CONFIGURED OPERATING SYSTEM

You have now configured the operating system that is held on the system disc. Before you can use your HP 260 you must load this configured operating system into memory. This is a simple process.

1. **Ensure that the cartridge tape or microfloppy drives are empty.**
2. Switch off your HP 260.
3. Switch the HP 260 on again.

This time the configured operating system will be loaded from your system disc. The HP 260 will now recognize your peripherals and keyboard language, and will automatically load the DROMs that you have specified

NOTE

Each workstation should display a cursor, and characters typed on a workstation keyboard should be printed on the workstation screen.

If a PC attached to the HP 260 does not respond to keyboard input, type the following characters.

If your workstation is an HP 110 Portable Plus or an HP 150, press (SHIFT)(DELETE).

If your workstation is a an HP Vectra or IBM PC, PC AT, or PC XT press (CONTROL)(BACKSPACE).

If the workstation still does not respond, consult your manual titled "Operating and Managing Your HP 260".

Testing the HP 260 System

The TEST program contains tests to ensure that your system is working correctly. The TEST program is described in the manual titled "Operating and Managing Your HP 260".

AFTER INSTALLATION

Your HP 260 system is now fully installed. Please save this manual with the others in the set as it will be useful if you expand your system.

Further information can be found in the the manual entitled "Operating and Managing Your HP 260". Once you are familiar with your HP 260, turn to your application-software manuals, or if you are programming the HP 260 yourself, your BASIC or other programming manuals.

SERIAL CONFIGURATION TABLE AND WORKSHEET

APPENDIX A

Device	Class	Type	Format
Printers			
LaserJet	Printer	LaserJet	8N1
LaserJet+		LaserJet	8N1
LaserJet II		LaserJet	8N1
HP 2235A		RuggedWriter	8N1
HP 2932A		293x	8N1
HP 2933A		293x	8N1
HP 2934A		293x	8N1
HP 2563A/B		2563	8N1
HP 2631A/B		2631A/B	8N1
HP 2608A		2608A	8N1
HP 2225D		ThinkJet	8N1
QuietJet		QuietJet	8N1
DeskJet		DeskJet	8N1
HP 2601A		2601A	8N1
HP 2602A		2602A	8N1
HP 2603A		2603A	8N1
HP 82905B		82905B	8N1
Others		TTY	8N1
Plotters			
HP 7440A	Terminal	26xx	8N1
HP 7475A		26xx	8N1
HP 7550A		26xx	8N1
HP 7470A		26xx	8N1
Workstations			
HP 700/92	Workstn.	2392	8N1
HP 2392A		2392	8N1
HP 150		2392	8N1
HP 110 Portable Plus		2392	8N1
HP Vectra Families		2392	8N1
IBM PC, PC AT, PC XT		2392	8N1
HP 2622D		2622	
HP 2649D		2649	
Data Entry Terminal			
HP 3081A	Terminal	26xx	8N1
HP 26xx, 2392	Terminal	26xx	8N1
Other Devices			
HP 39800A Bar Code			701
HP 2334A MultiMux	Terminal	26xx	

SERIAL CONFIGURATION TABLE

Device	Speed	DROMs	HandShks	Remarks
Printers				
LaserJet	9600	TIO	XON	
LaserJet+	9600	TIO	XON	
LaserJet II	9600	TIO	XON	
HP 2235A	9600	TIO	XON	
HP 2932A	9600	TIO	ENQ	
HP 2933A	9600	TIO	ENQ	
HP 2934A	9600	TIO	ENQ	
HP 2563A/B	9600	TIO	ENQ	
HP 2631A/B	9600	TIO	ENQ	
HP 2608A	9600	TIO	ENQ	
HP 2225D	9600	TIO	XON	
QuietJet	9600	TIO	XON	
DeskJet	9600	TIO	XON	
HP 2601A	9600	TIO&PTYPE	XON	
HP 2602A	9600	TIO&PTYPE	XON	
HP 2603A	9600	TIO	XON	
HP 82905B	4800	TIO	HdWr	
Others	9600	TIO	Nulls	
Plotters				
HP 7440A	9600	TIO	ENQ	Not on -1, -2
HP 7475A	9600	TIO	ENQ	Not on -1, -2
HP 7550A	9600	TIO	ENQ	Not on -1, -2
HP 7470A	9600	TIO	ENQ	Not on -1, -2
Workstations				
HP 700/92	19200	PIO	ENQ/XON	
HP 2392A	19200	PIO	ENQ/XON	
HP 150	19200	PIO	ENQ/XON	
HP110 Portable Plus	19200	PIO	ENQ/XON	Refl. 1
HP Vectra xx	19200	PIO	ENQ/XON	AdvLink HP Term.
IBM PC,PC AT,PC XT	19200	PIO	ENQ/XON	AdvLink
HP 2622D	9600	RIO		Not on -1, -2
HP 2649D	9600	RIO		Not on -1, -2
Data Entry Terminal				
HP 3081A	2400	TIO	ENQ	Not on -1, -2
HP 26xx, 2392	9600	TIO	ENQ	Not on -1, -2
Other Devices				
HP 39800A Bar Code HP 2334A MultiMux	9600	TIO		Not on -1, -2

Legend: The tables list default values for Format and Speed.
For devices which are not of the Class "workstation", you may change these values. However, you may change only the Speed for workstations.

The above table gives no information about the hardware requirements for the support of each of the devices listed. If you have any questions about the support of a device on a particular model of the HP 250 or HP 260, contact your local Hewlett-Packard sales office, or your computer supplier.

NOTE

The HP 2392A and the Personal Computers can also operate as terminals. The configuration values for these devices when operating as terminals are as listed above except that (1) the **Class** is "Terminal", not "Workstn" and (2) terminals require the TIO DROM, not the PIO DROM.

Direct or Modem Communication

If you use direct serial communication (RS-232-C or RS-422) no additional configuration is necessary. If you use modems between your HP 260 and a peripheral, then you must tell the HP 260 what type of modem you use. The modem types, and the abbreviation used in the the CONFIG utility field labeled **SwConf** are listed below.

Modem Type	"SwConf" Value
Switched European	MoSwEU
Leased DRS High	MoLeHi
Switched U.S.	MoSwUS
Leased DRS Low	MoLeLo

Configuration values for modems supported by the HP 260 are given in the manual titled "Preparing for Your HP 260".

If you use modems, you must also obtain the baud rate from the modem documentation. Both the HP 260 and the peripheral must be set to communicate at this baud rate.

USING THE ASI CONFIGURATION TABLE

You must make sure that the configuration of each peripheral matches the configuration of the HP 260 port to which it is attached. This table lists recommended configuration values for all peripherals.

When Configuring Your Peripherals

When you configure a peripheral you need the values for "Format" and "Speed".

- **"Speed"**. This refers to the baud rate, or speed of data transfer.
- **"Format"**. This describes the form in which data is transferred. The entries are compressed to make the "CONFIG" program easier to use. When expanded, the entries mean:

"CONFIG" Format	Number of Data Bits	Parity	Check Parity	Number of Stop Bits
8N1	8	None	No	1
7O1	7	Odd	Yes	1

Configure your peripheral so that its stop bits, number of data bits and parity match the above expanded values.

When Configuring Your HP 260

The entries under "Class", "Type", "Format", "Speed", and "SwConf" are of the form used by the "Asynchronous Port Configuration" program of the HP 260 "CONFIG" Utility. Therefore all you need to do when configuring the HP 260 is to make sure that the fields are identical with the entries in the table.

Serial Configuration Worksheet

I/O Port	Device	Class	Type	Format	Speed	DROMs	SwConf	Comments
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
-1								
-2								

How To Use This Worksheet

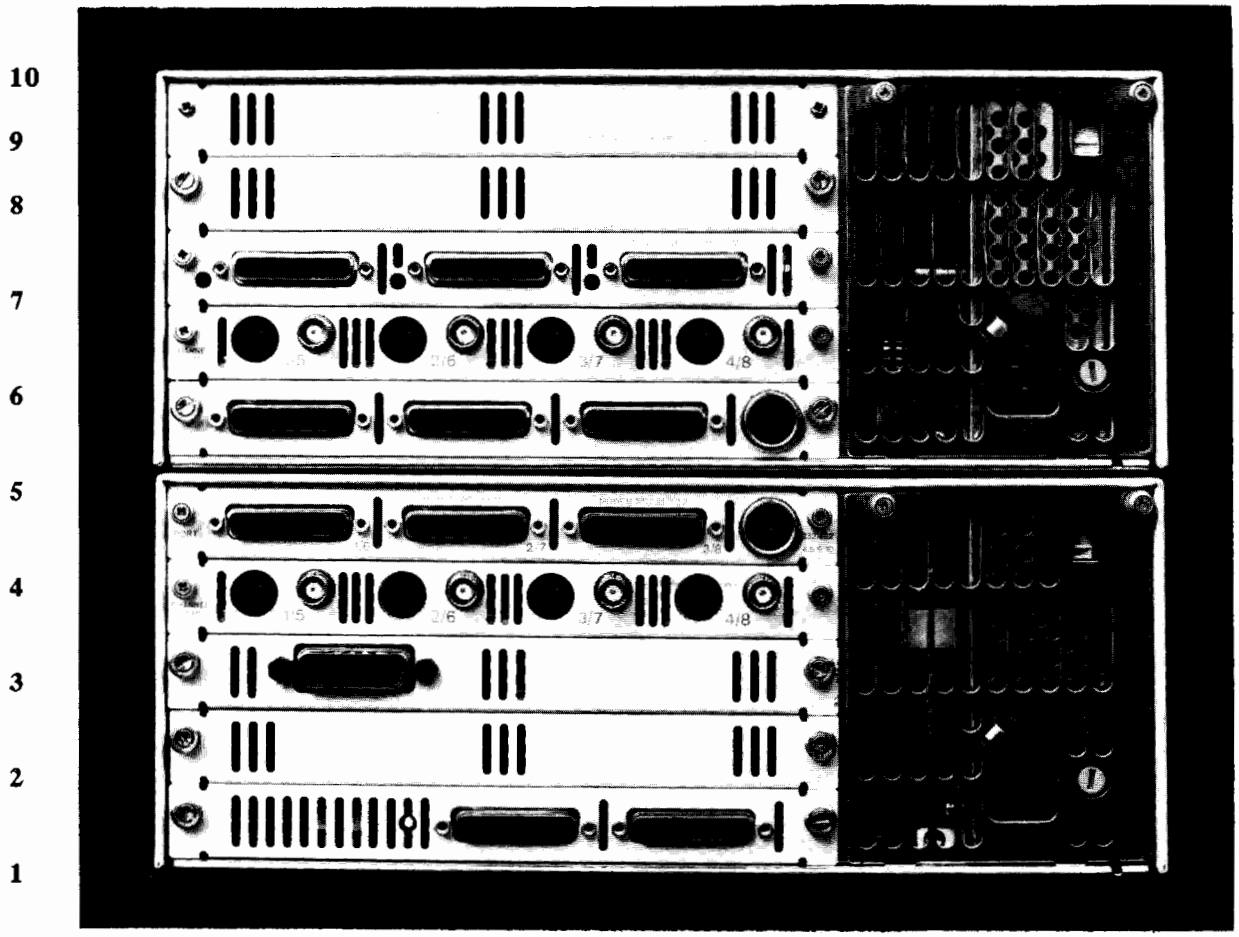
This Worksheet provides a record of your system configuration. Every time you add to or alter your peripherals make a note of the change on this worksheet. (The recommended configuration values for each peripheral are supplied in the Serial Configuration Table).

For example, if you connect an HP 150 II to the ASI Port labeled 3, and do not use a modem, your entry should resemble the following example.

I/O Port	Device	Class	Type	Format	Speed	DROMs	SwConf	Comments
1								
2								
3	HP 150 II	Wrkstn	2392	8N1	19200	PIO	direct	Sales Dept

HP 260 PORTS AND CHANNELS

APPENDIX
B



HP 260 SPU and I/O Extender Rear View

Slot Number	Board Type and Function
10 (I/O Extender)	Reserved for future use
9 (I/O Extender)	Reserved for future use
8 (I/O Extender)	INP board. Three ports for Intelligent Network Processor communication.
7 (I/O Extender)	Second ASI board. ASI ports 6, 7, 8, 9, and 10. Ports 6, 7, and 8 have RS-232-C. RS-422 and modem communication. Ports 9 and 10 have RS-232-C and RS-422 communication only. The connection cable must be fitted before ports 9 and 10 can be used.
6 (I/O Extender)	Second video board. Video channels 5, 6, 7, and 8
5 (SPU)	First video board. Video channels 1, 2, 3, and 4
4 (SPU)	First ASI board. ASI ports 1, 2, 3, 4, and 5. Ports 1, 2, and 3 have RS-232-C. RS-422 and modem communication. Ports 4 and 5 have RS-232-C and RS-422 communication only. The connection cable must be fitted before ports 4 and 5 can be used.
3 (SPU)	HP-IB board. One HP-IB connector.
2 (SPU)	Memory Board(s). Maximum 1.5 Mbyte of extra random-access memory.
1 (SPU)	CPU Board. Two integrated serial ports (-1 and -2). These can support workstations and printers only. RS-232-C and modem communication is available.

NOTE

The ports on each ASI board support any serial peripheral.

All port and channel numbers increase from left to right.

The lowest ASI board is the ASI board closest to the CPU board, and holds ASI ports 1 to 5. The lowest video board is the video board closest to the CPU board, and holds Video Channels 1 to 4.

The order of the boards is not important except that:

- Slot 1 is reserved for the CPU board.
- Slot 2 is reserved for the Memory board(s)

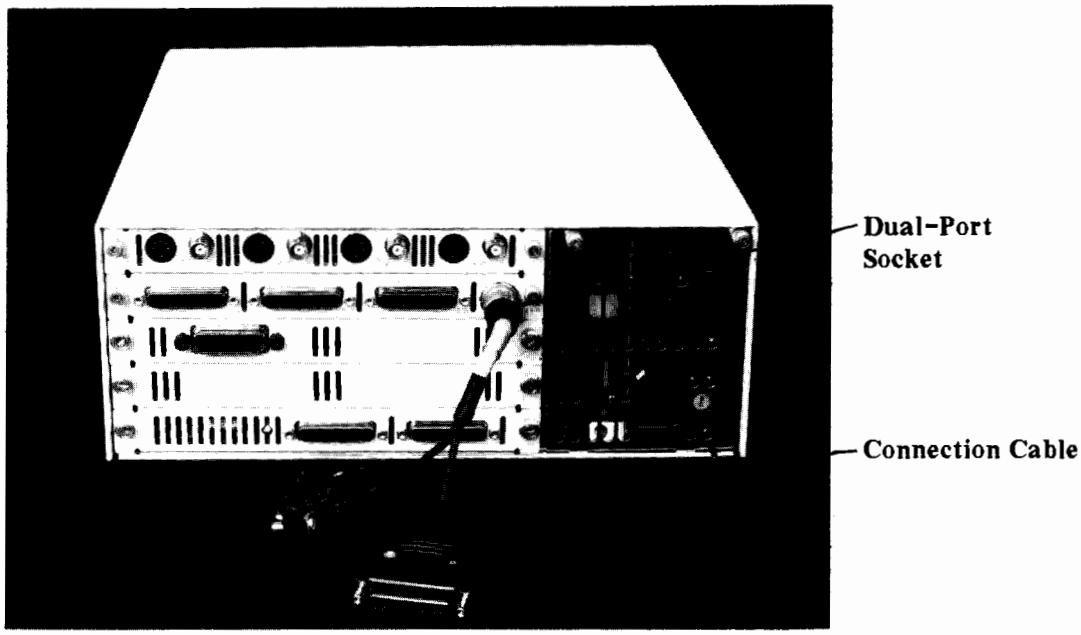
CONNECTING ASI PORTS 4/9 AND 5/10

APPENDIX C

If you want to use ASI Ports 4/9 and 5/10, you must first fit a connection cable which converts the dual-port socket into two, D-type, 25-pin connectors. One connection cable is supplied with each ASI board. The part number of this cable is HP 45127-61601.

To connect this cable:

1. Check that nobody is using the HP 260 system, and switch it off.
2. **Unplug the HP 260 SPU and I/O Extender from the mains power outlet.**
3. Insert the connection cable into the socket labeled "4;9 5;10" on the ASI board. (There are indents in the connector and the socket which ensure that the connector is correctly inserted).



HP 260 Rear View

4. Using your fingers, screw the cover of the connector onto the port until the cable is held securely.
5. There are two labels attached to the connection cable. The labels on one cable display the numbers "4" and "9". the labels on the other cable display the numbers "5", and "10". When attaching a connection cable to the first, or lower, ASI board, remove the labels "9" and "10" from their respective cables. When attaching a connection cable to the second, or higher, ASI board, remove the labels "4" and "5" from their respective cables. Each D-type, 25-pin connector is now identified by the number of the port to which is it attached.
6. You can attach any ASI peripheral to these 25-pin, D-type connectors, however, **modem communication is not available from these two ports.**

BUILDING THE MINI-RACK CABINET

APPENDIX
D

This appendix explains how to assemble the mini-rack cabinet, product number HP 45065A. It also describes how to install your SPU and mass storage devices within the cabinet.

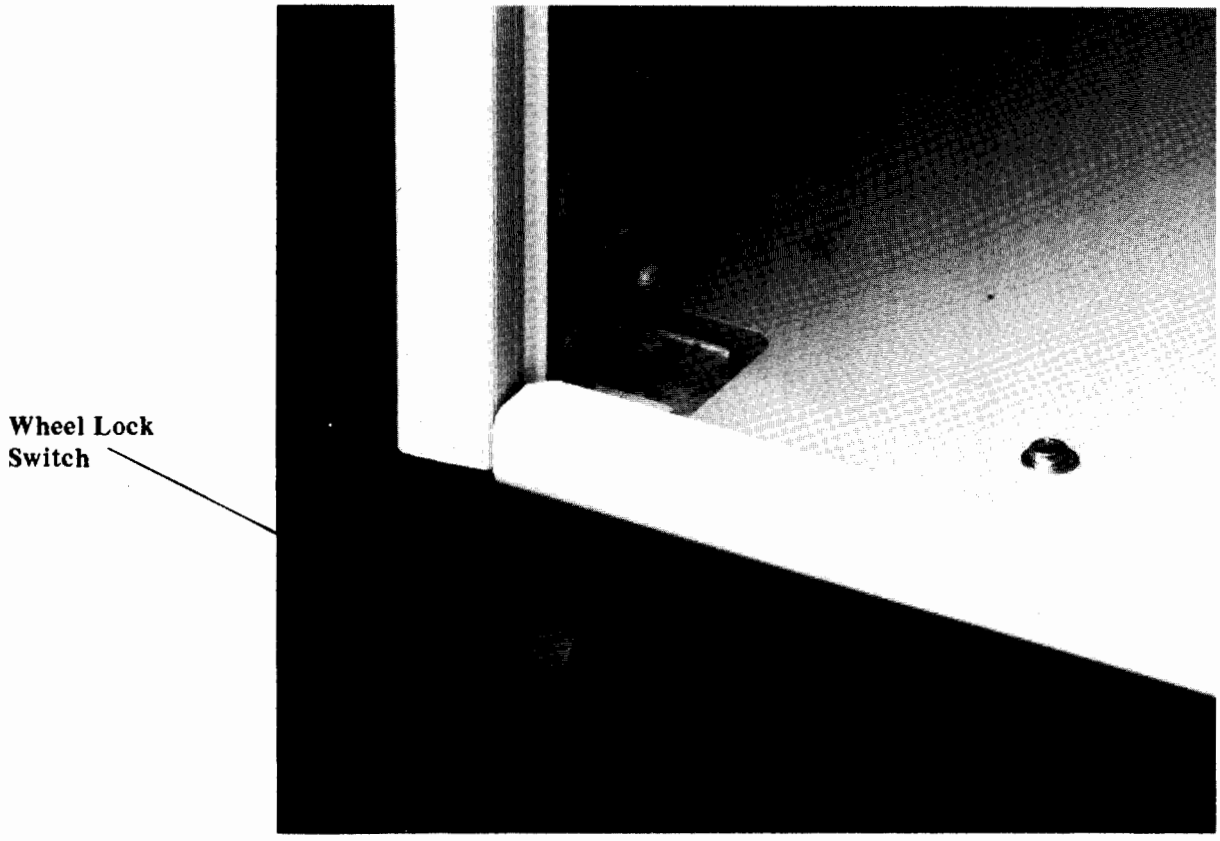
NOTE

This appendix deals with the SPU only. The installation of an SPU and the I/O Extender is identical to the installation of the SPU alone except that an SPU and I/O Extender require twice as much space. (The SPU and I/O Extender must be coupled before they are loaded in the cabinet. This operation must be performed by a Hewlett-Packard Customer Engineer).

GETTING STARTED

You must dismantle the cabinet before installing the system.

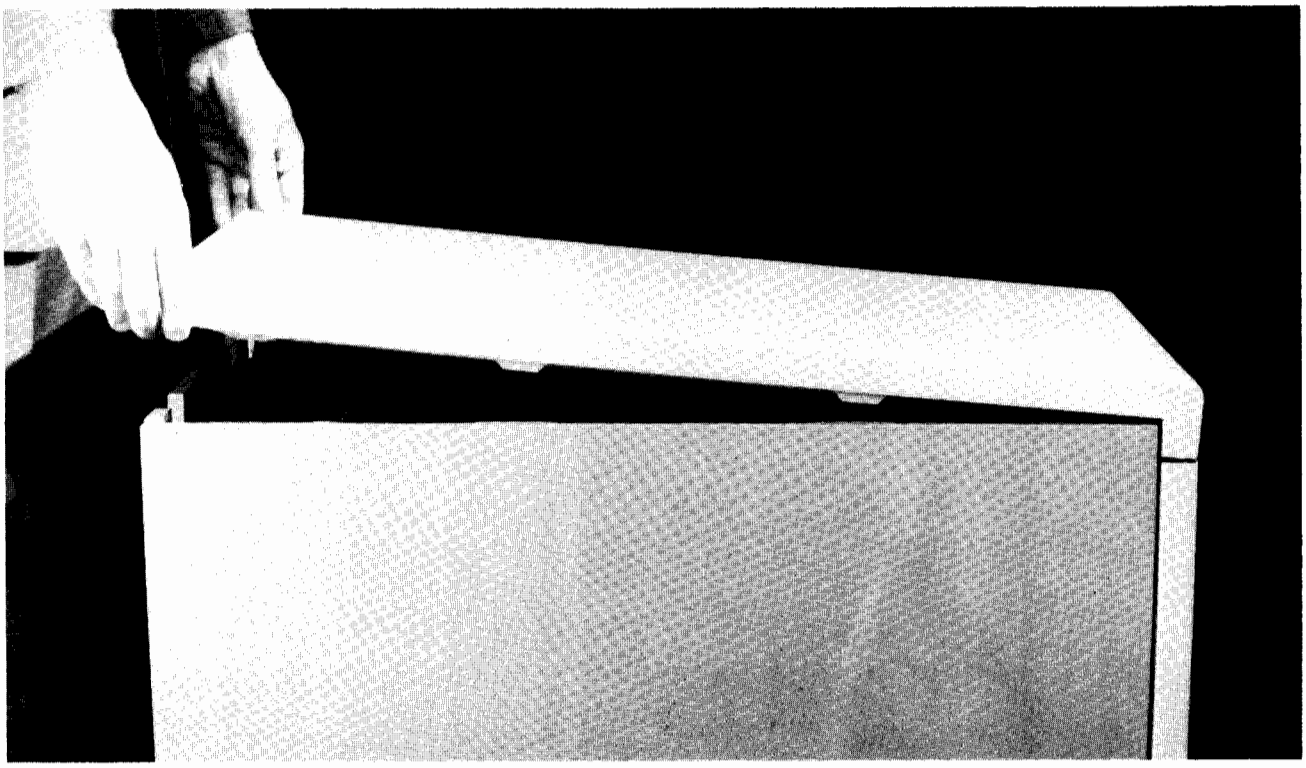
1. Place the cabinet near the place where it is to be used.
2. Lock each front wheel by pushing its wheel lock switch towards the floor. This will immobilize the cabinet.



HP 45065A Mini-Rack Cabinet Front Wheel

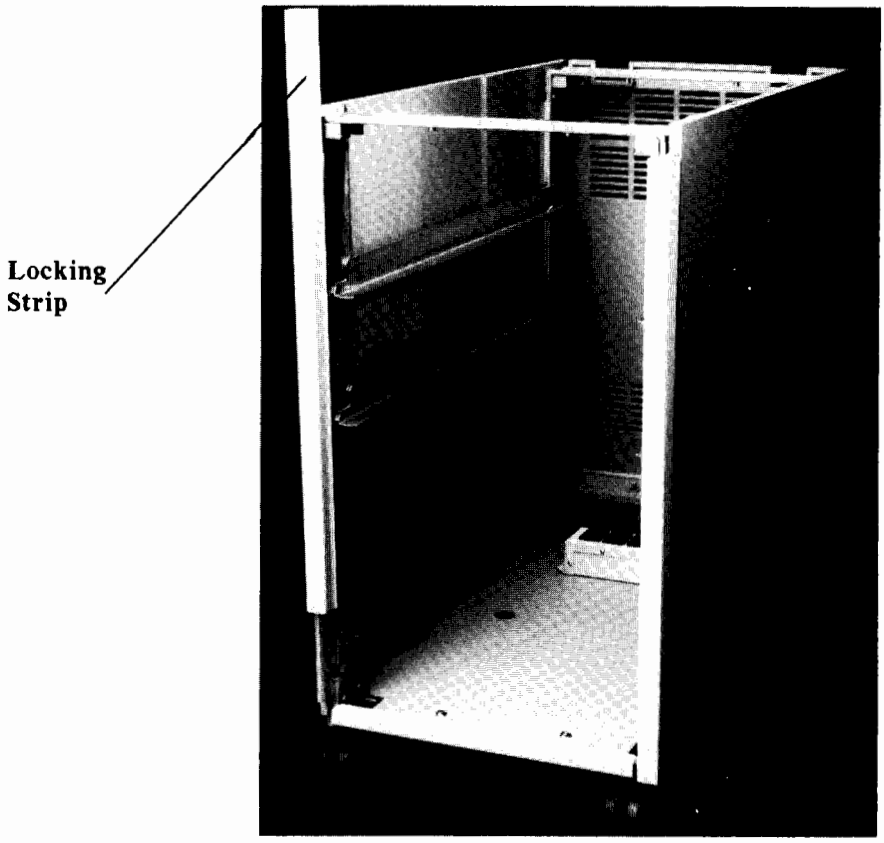
You can unlock each wheel by pushing its wheel lock switch upwards.

3. The top panel is held by two press studs. Lift the rear of the top panel such that the press studs snap away from their sockets. Lift the top panel away from the cabinet.



HP 45065A Mini-Rack Cabinet Side View

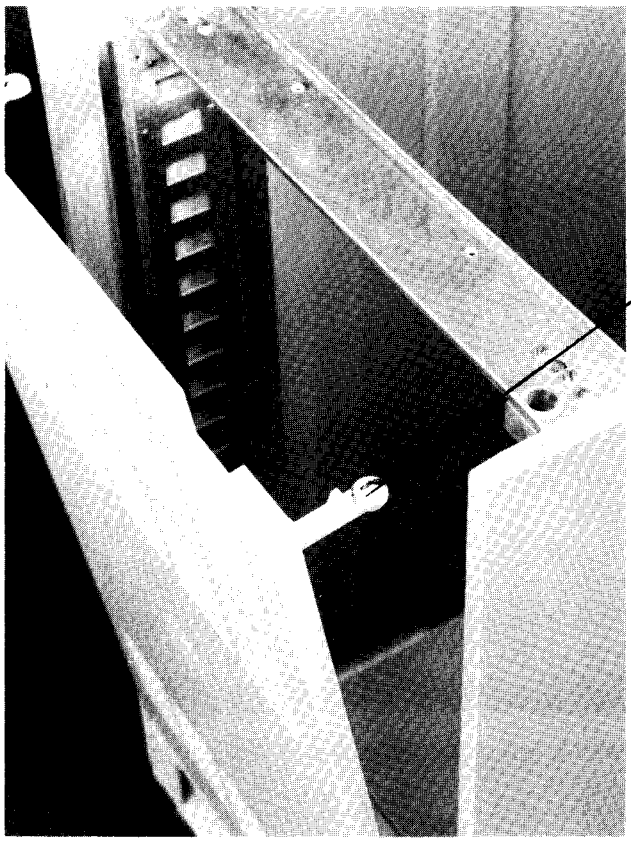
4. Remove one locking strip from the front corner of the cabinet. Slide the strip upwards until it is completely removed from the cabinet.



HP 45065A Mini-Rack Cabinet Front View

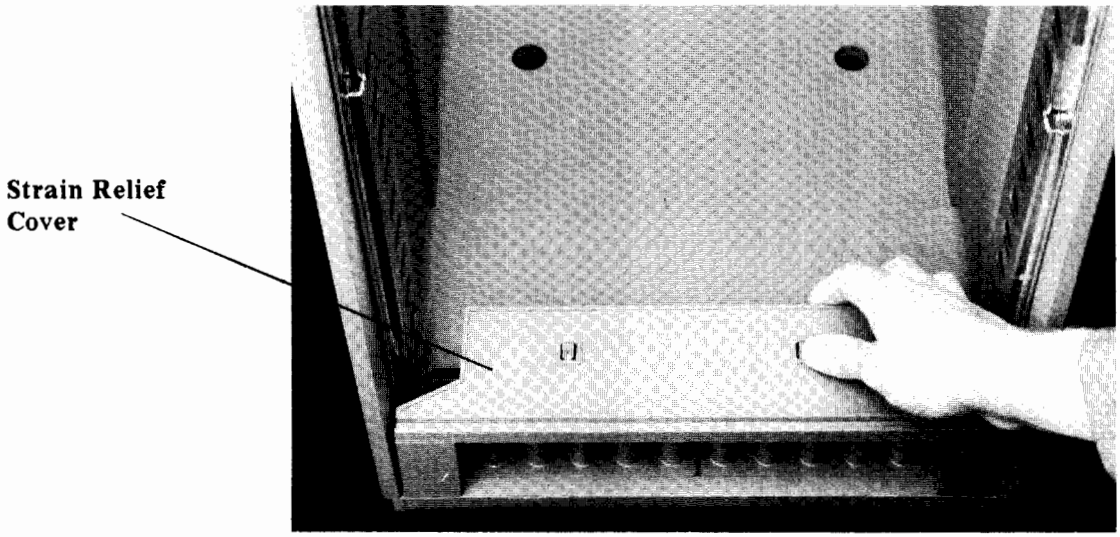
5. Remove the other locking strip in the same way.

6. The rear panel is held by two press studs. Pull the top of the rear panel back such that the press studs snap away from their sockets. Lift the rear panel away from the cabinet.



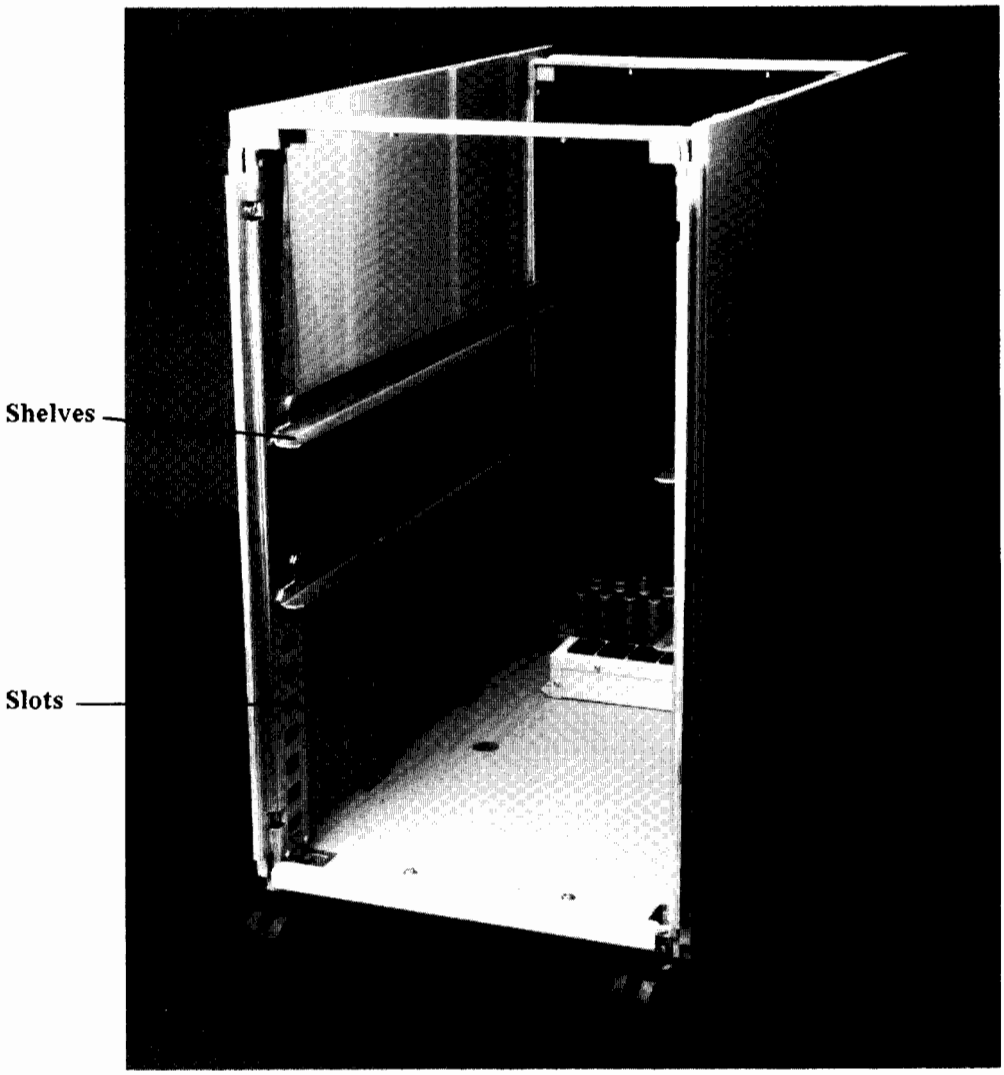
HP 45065A Mini-Rack Cabinet Rear View

7. The cover for the cable strain relief pins is attached by two press studs. Lift the cover such that it snaps away from the press studs.



HP 45065A Mini-Rack Cabinet Rear View

8. The mini-rack cabinet is supplied with four sets of two shelves. (Two shelves are shown in the following illustration.) Each shelf rests on two slots; the slots are spaced evenly down the two steel pillars. Lift each shelf away from its slots and remove it from the cabinet.



HP 45065A Mini-Rack Cabinet Front View

INSERTING THE SHELVES

Every component is supported by a set of two shelves. The following table shows the space required by each component. The space required by a component is shown as the number of slots that must be left empty in order to accommodate that component.

Fill the cabinet from top to bottom. The topmost component should be a mass storage device with a removable cartridge tape or microfloppy disc drive.

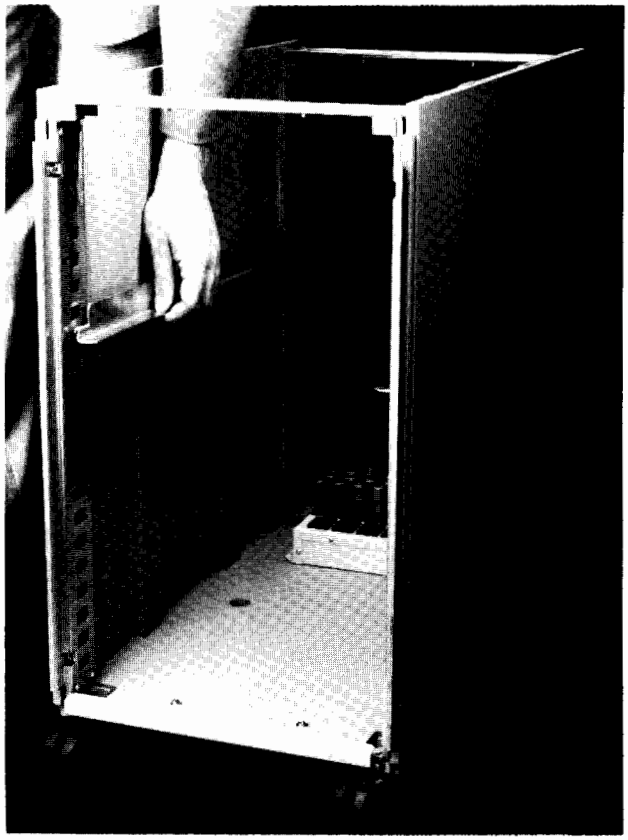
HP 260 System Space Table

Device	Slots Required
HP 260 SPU	5
HP 260 SPU with I/O Extender	10
Discs	
HP 7941A	5
HP 7945A	5
HP 7942A	8
HP 7946A	8
HP 7957A/B	5
HP 7958A/B	5
HP 9133L	5
HP 9133H	5
HP 9134L	5
HP 9134H	5
HP 9153B/C	5
HP 9154B/C	5
Tape	
HP 9144A	5

The HP 45065A mini-rack cabinet has 21 slots.

1. Determine, from the "HP 260 System Space Table", how many empty slots to leave for the topmost mass storage device.

2. Count down the number of slots and insert a set of shelves as soon as the topmost device has enough space. Each shelf has two clips, which must be matched with the slots in the two cabinet pillars. Insert the shelf as shown in the following illustration.



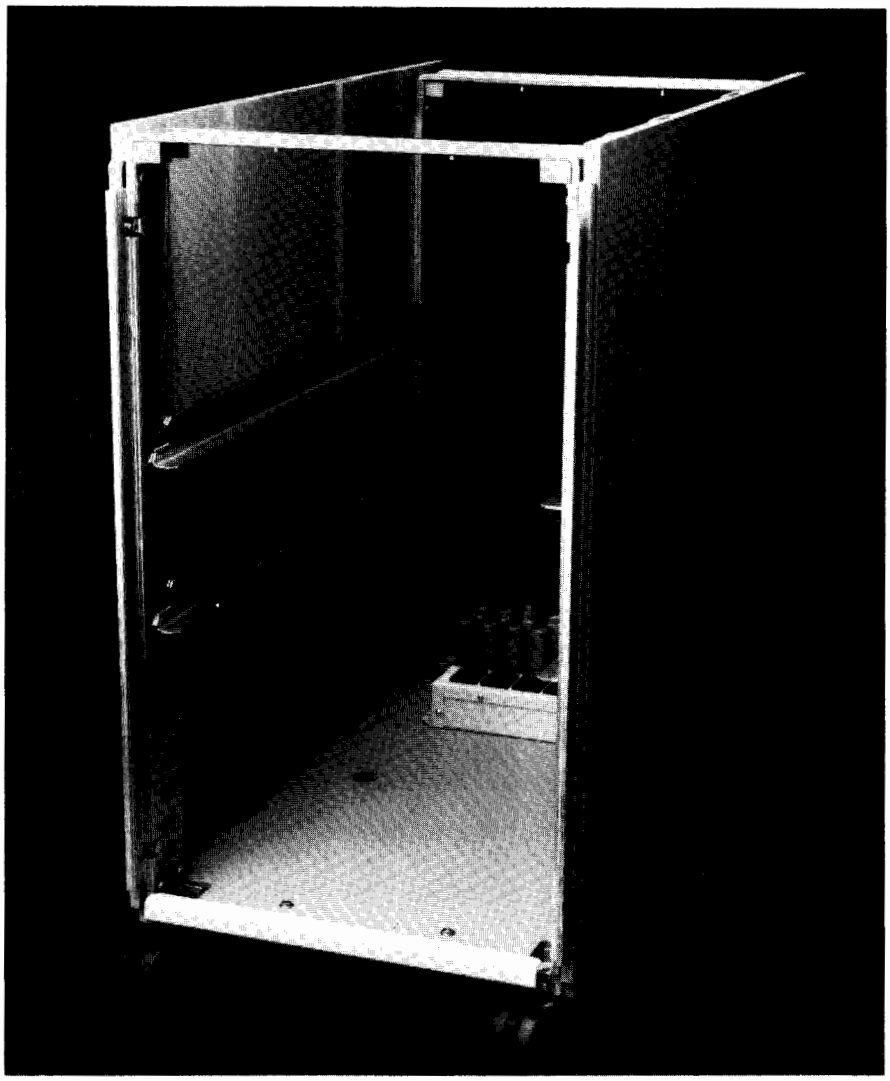
HP 45065A Mini-Rack Cabinet Front View

For example, if your topmost mass storage device is an HP 7946A disc, leave 8 slots empty and insert the first set of shelves in the ninth slot.

NOTE

Make sure that each shelf is level; that is, the shelf rests on two slots on the same level.

3. Count down the number of empty slots required for the SPU. Insert the next set of shelves as soon as the enough slots have been left to accomodate the SPU. Your cabinet should resemble the following illustration.

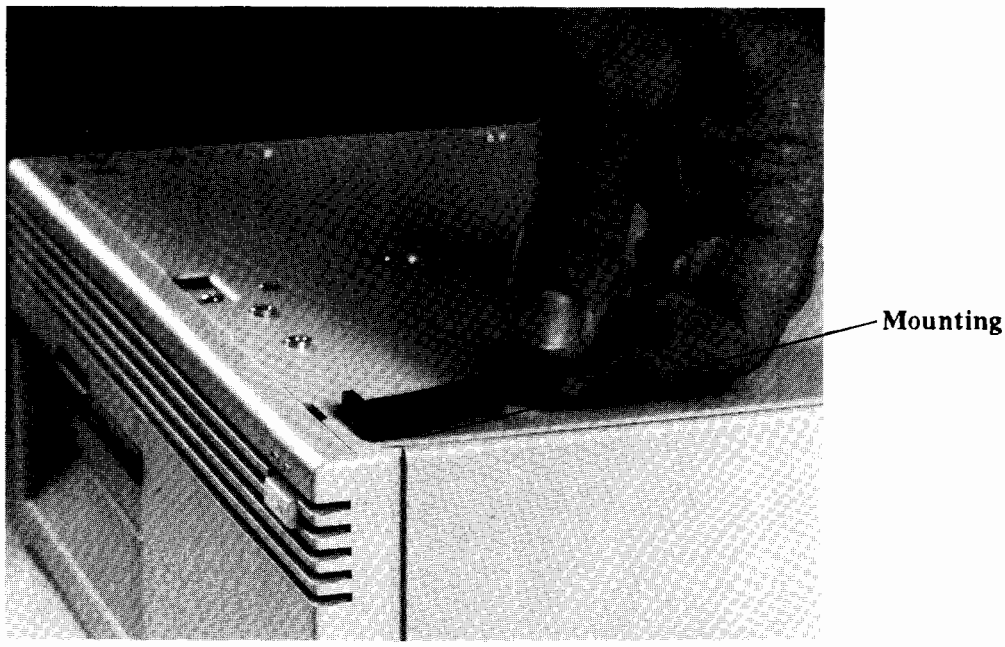


HP 45065A Mini-Rack Cabinet Front View

4. Repeat Step 3 until you have inserted a set of shelves for all your components, or until the cabinet is full. The HP 45065A mini-rack cabinet has 21 slots.

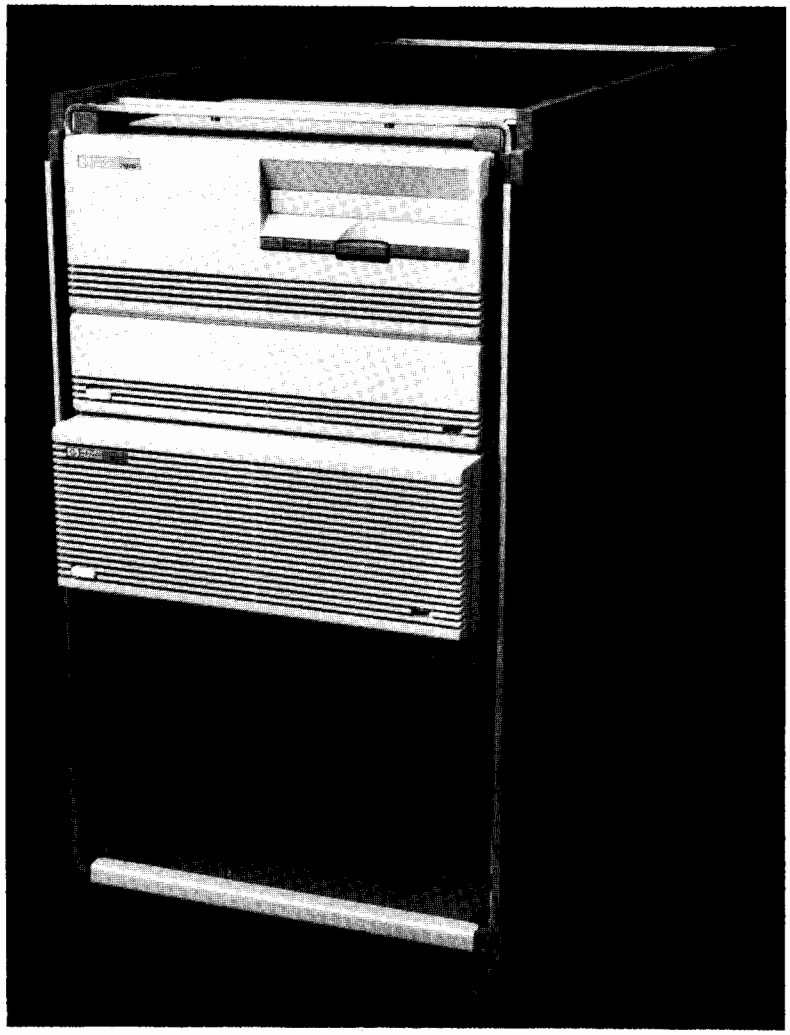
INSTALLING THE COMPONENTS

1. Two protective mountings are supplied at the front of the underside of the SPU and mass storage devices. Remove these mountings by sliding them backwards, as shown in the following ilustration. (Do not worry if the mountings break; they are not needed in the cabinet). Also peel off the two pads at the underside of the rear of each component.



HP 7946A Disc Mounting

2. Slide your system components onto the shelves that you have set for them. Do not slide the components fully into the cabinet; leave about an inch of each component protruding from the front of the cabinet. When you have loaded the topmost mass storage device and the SPU, the cabinet should resemble the following illustration.



HP 45065A Mini-Rack Cabinet Front View

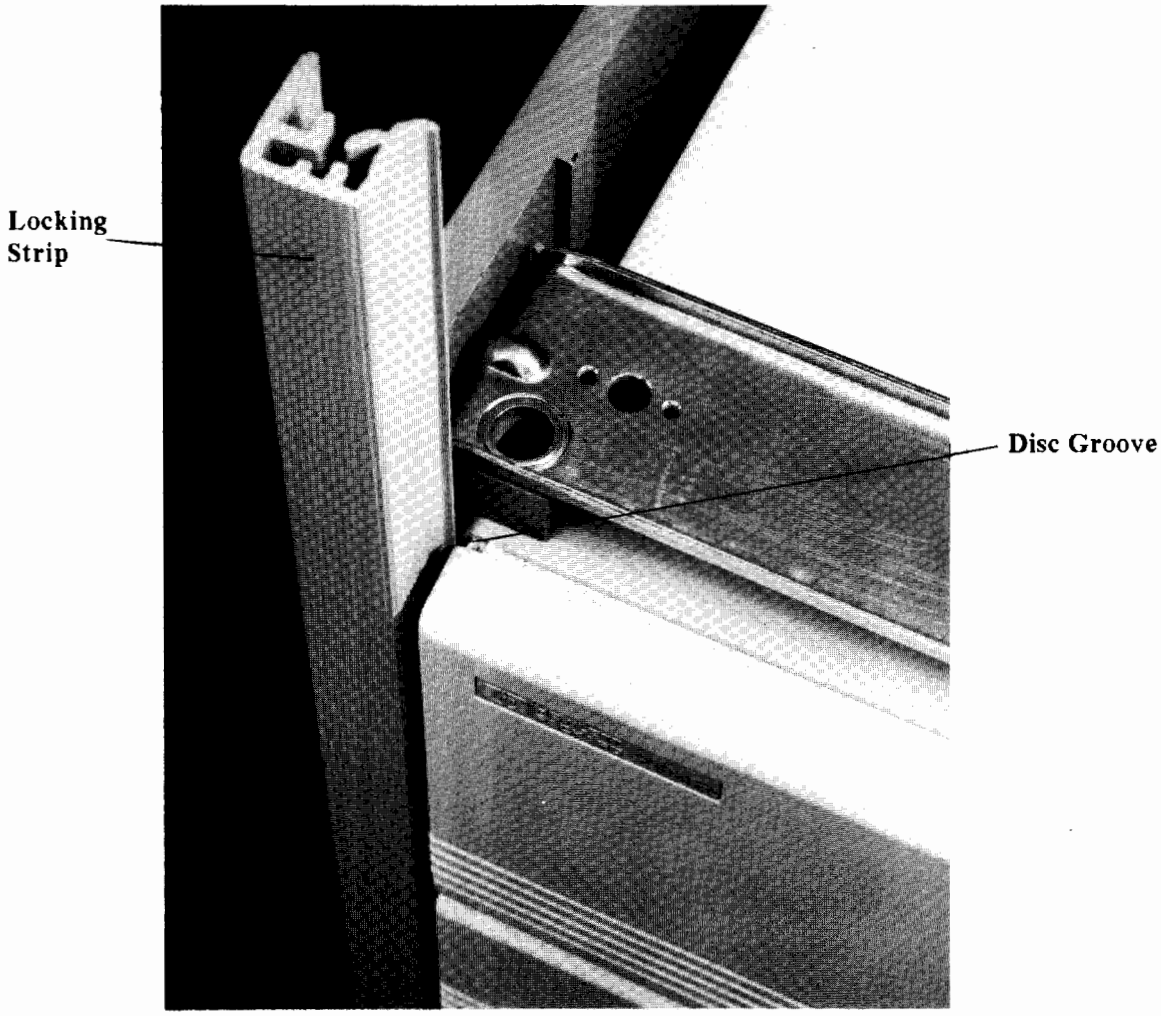
3. Once the components are loaded, you should fill the remaining space in the front of the cabinet with filler panels. The filler panels are held inside the top panel.

4. Unclip the filler panels from beneath the top panel of the cabinet. Snap the panels together until they fill the gap between the base of the cabinet and the lowest component contained within it.

INSERTING THE LOCKING STRIPS

1. Locate one locking strip. Slide the locking strip down one corner of the cabinet until it reaches the topmost mass storage device.

2. Notice the groove which lies down the side of the disc. Gently adjust the disc until the locking strip can slide freely down the groove in the side of the disc. The front of the disc will now be flush with the locking strip.



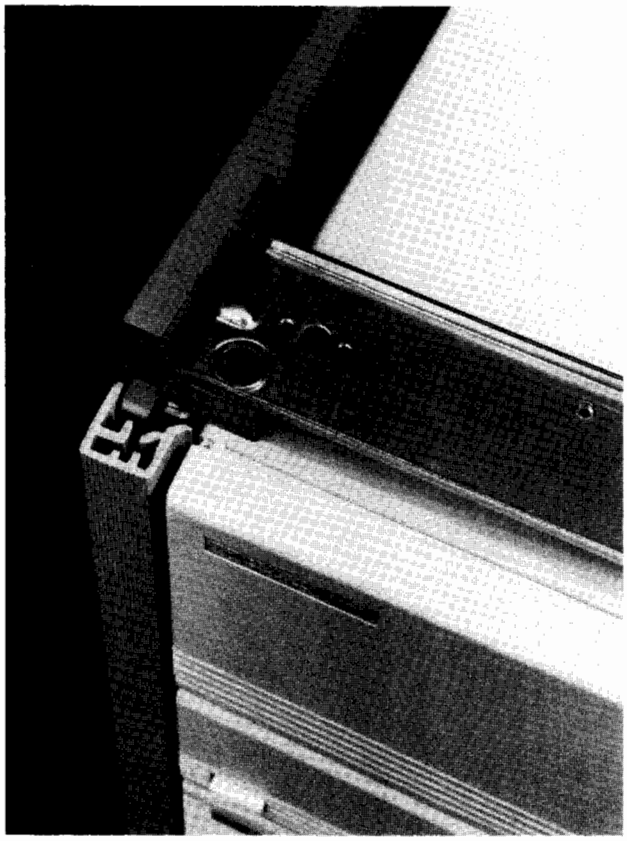
HP 45065A Mini-Rack Cabinet Front Corner

3. Slide the strip down until it rests just above the SPU. Adjust the SPU until the locking strip can slide freely down the groove in the side of the SPU. The front of the SPU will now be flush with the locking strip.

4. Repeat the above step until all your discs are secured by the locking strip.

5. Each filler panel has an groove on either side, similar to the grooves on the sides of the SPU. Adjust the filler panels so that the locking strip can slide down through the filler panel grooves. The filler panels will now be flush with the front of the cabinet.

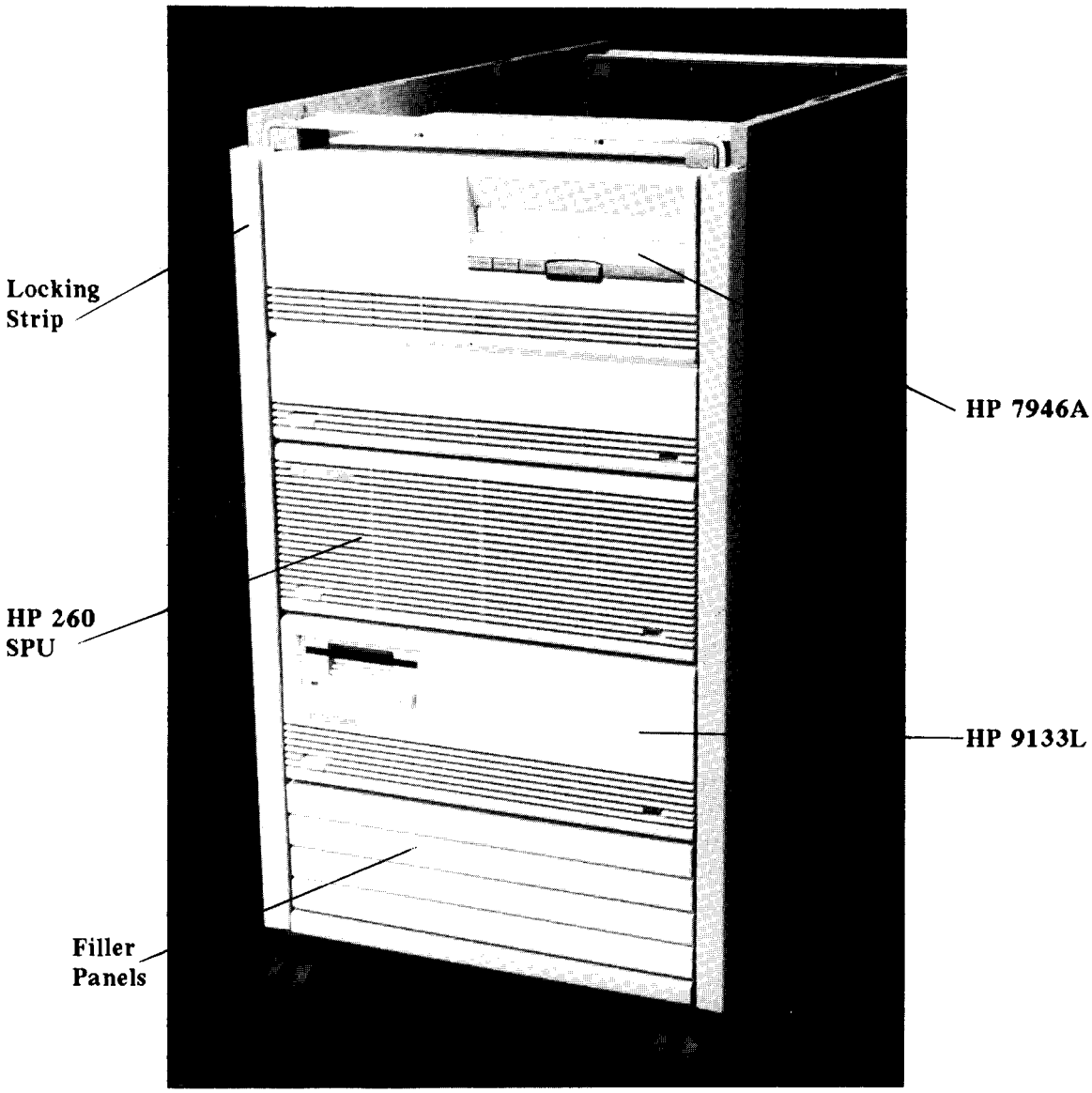
6. Push the locking strip down as far as possible. Make sure that the top of the strip is flush with the cabinet as shown in the following illustration.



HP 45065A Mini-Rack Cabinet Front Corner

7. Repeat Steps 1 to 6 using the other locking strip on the other corner of the cabinet.

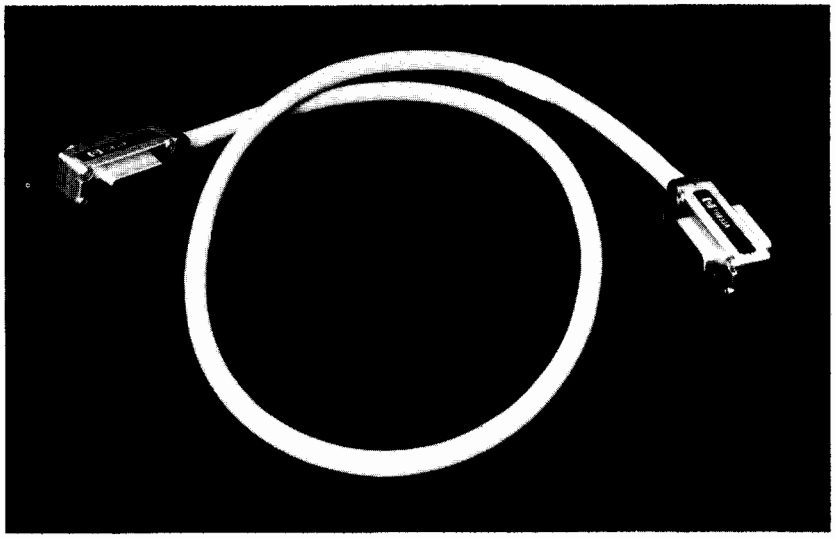
8. When both strips are inserted the cabinet should resemble the illustration below. The illustration shows an HP 45065A mini-rack cabinet containing an HP 7946A disc, an HP 260 SPU, and an HP 9133L disc.



HP 45065A Mini-Rack Cabinet Front View

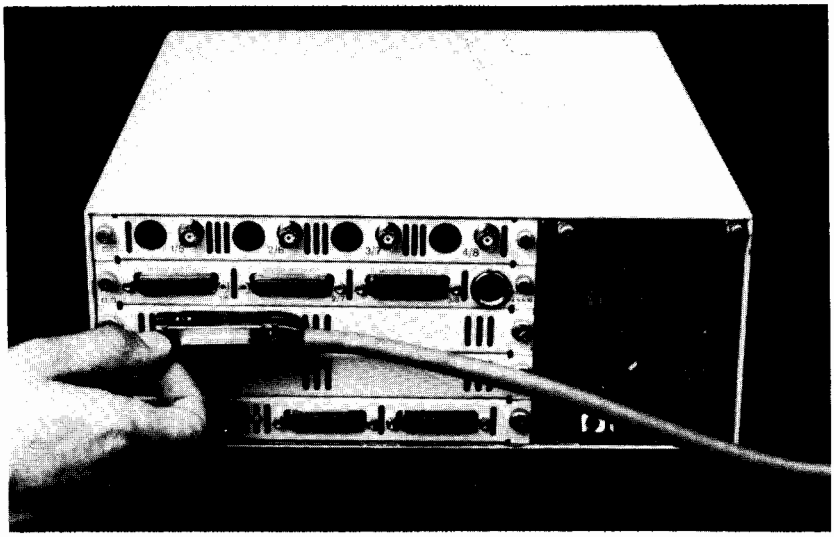
ATTACHING THE HP-IB CABLES

1. Locate your first HP-IB cable.



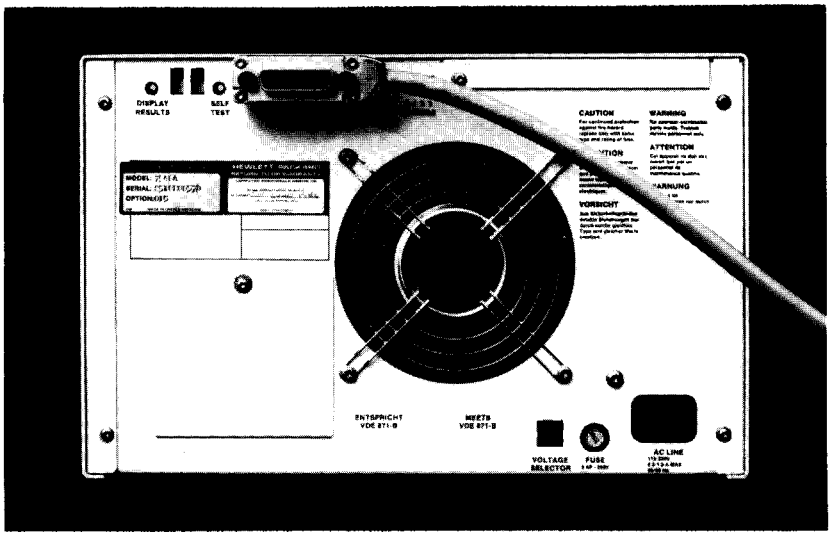
HP-IB Cable

2. Attach one end of the HP-IB cable to the HP-IB connector on the SPU. Using your fingers, tighten the screws at either end of the connector.



HP-IB Cable and SPU HP-IB Connector

3. Attach the free end of the HP-IB cable to the HP-IB connector of the mass storage device at the top of the cabinet. In this illustration, the mass storage device is an HP 7946A. Using your fingers, tighten the screws at either end of the connector.

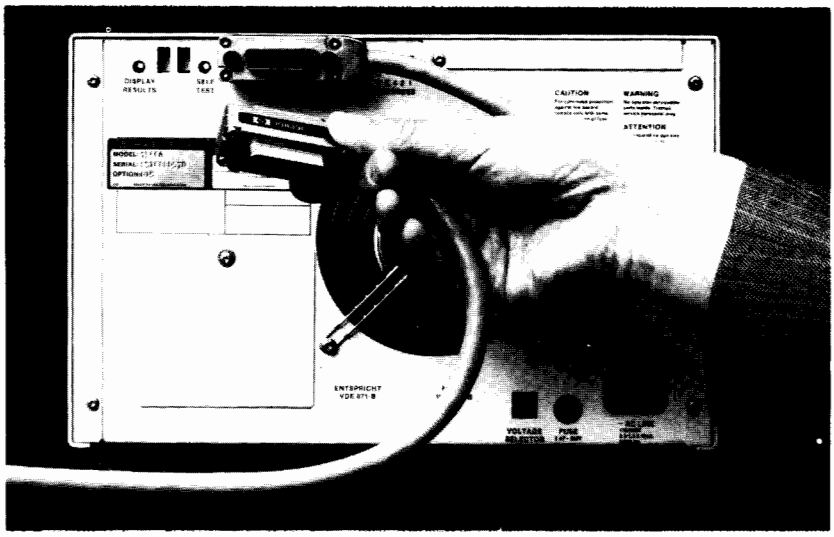


HP-IB Cable and HP 7946A HP-IB Connector

If you have no further mass storage devices, then go to "Attaching The Power Cables".

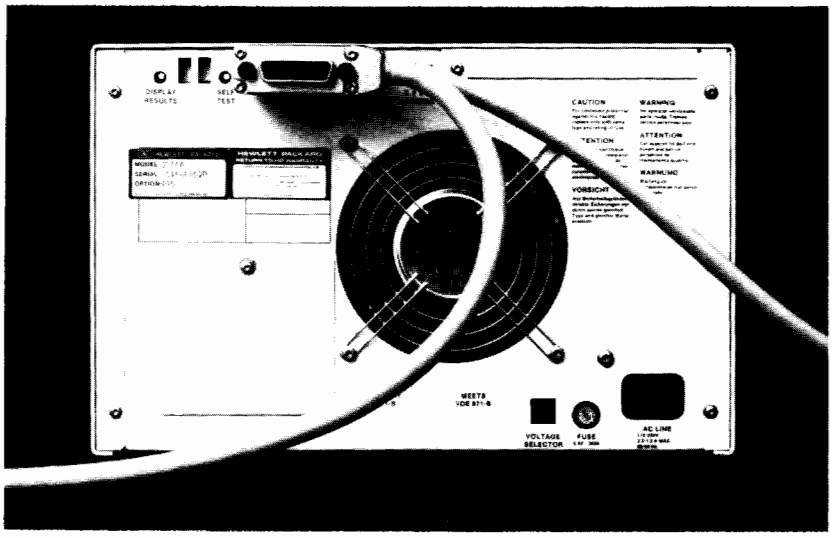
4. Locate your next HP-IB cable.

5. Attach the next HP-IB cable to the rear of the HP-IB connector on the last mass storage device in the chain of HP-IB devices. The illustration below shows how the cables link.



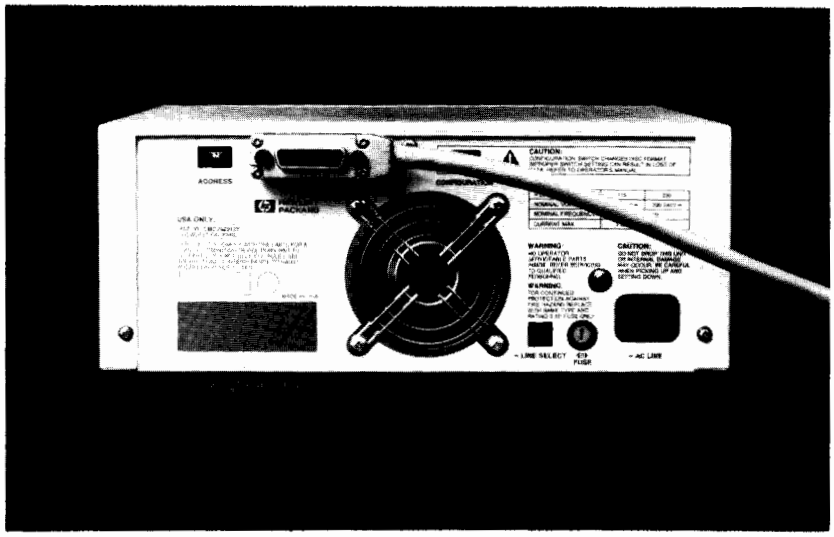
Second HP-IB Cable Connection

6. Using your fingers, tighten the screws at either end of the connector. The connection should resemble the illustration below.



Second HP-IB Cable Connection

7. Attach the free end of the HP-IB cable to the HP-IB connector of the next mass storage device in the cabinet. In this illustration the second disc is an HP 9133L. Using your fingers, tighten the screws at either end of the connector.



HP-IB Cable and Second Disc HP-IB Connector

8. Repeat Steps 4 to 7 for each mass storage device.

NOTE

If you have any HP-IB devices which are outside the cabinet, remember to attach them to the HP-IB chain as well.

ATTACHING THE POWER CABLES

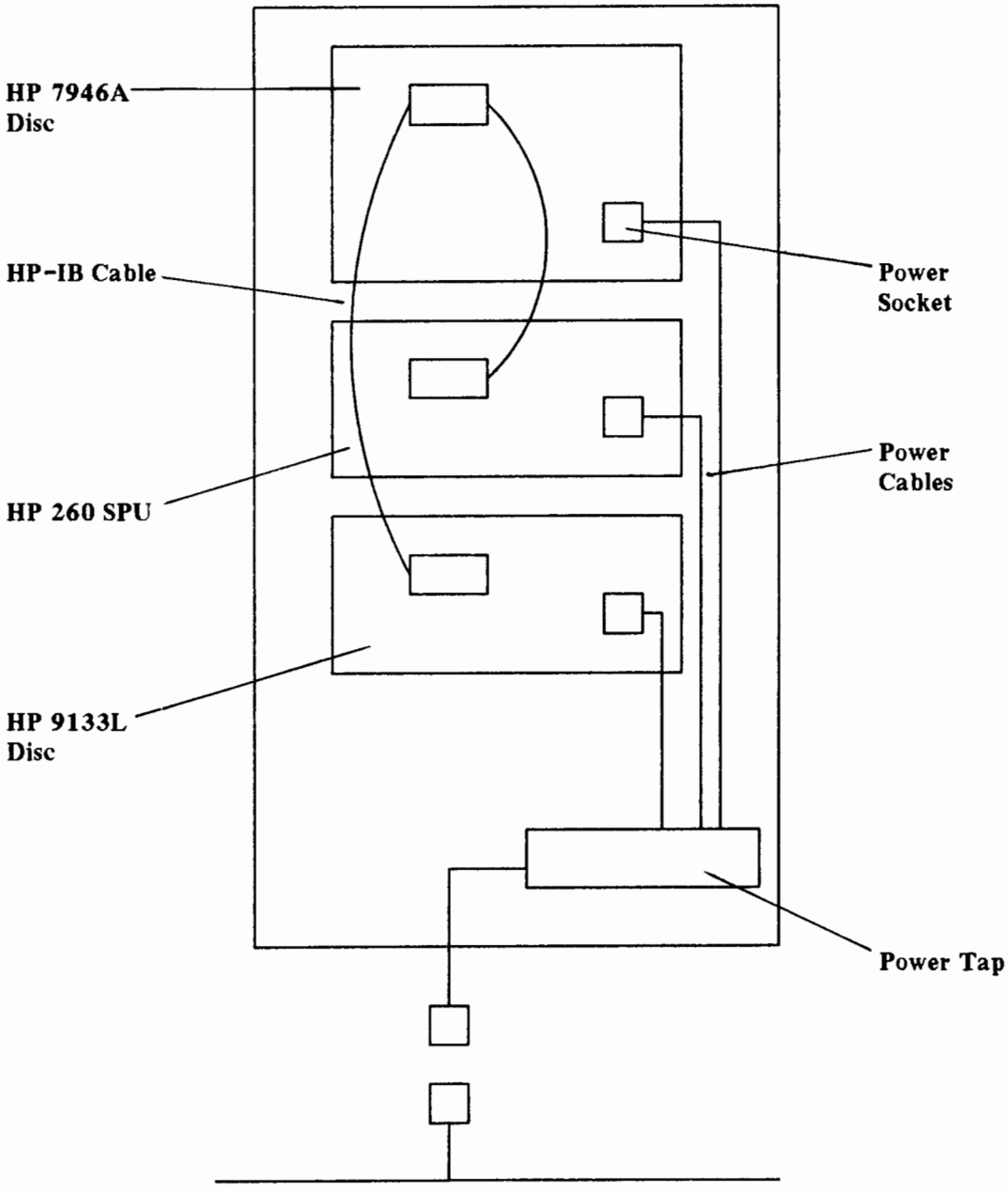
1. Make sure each system component is switched off.

2. The cabinet is supplied with a power distribution system. Unpack the box containing the power cables. Plug one end of a power cable into each component and the other end into a socket in the power tap at the bottom of the cabinet. (The power tap is a small box with five power sockets. One socket is connected to the mains power; the other four sockets distribute that power to the components in the cabinet.) **Do not attach the cable that connects the power tap to the mains power outlet.**

NOTE

All HP-IB devices must be powered from the same dedicated electrical circuit. The requirements for this circuit are supplied in the manual titled "Preparing for Your HP 260", part number 45070-90003.

The following illustration shows the HP-IB and electrical connections for the cabinet. Note the dedicated electrical circuit.



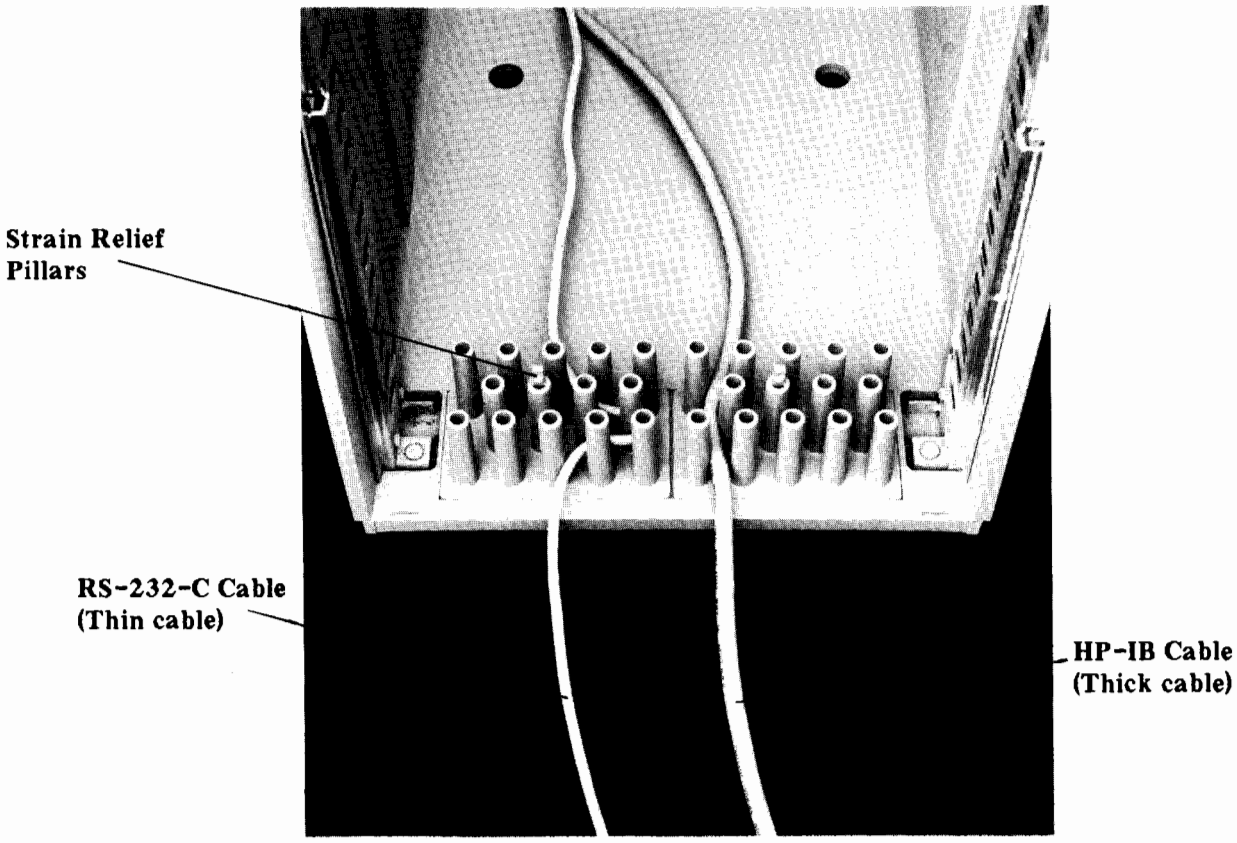
Dedicated Electrical Circuit

You must attach all the other peripherals to the SPU before securing the cables and re-assembling the cabinet. Turn to the section titled "Installing Workstations and Terminals", and complete your system installation. (You will be directed back to this appendix when the cabinet must be re-assembled).

SECURING THE CABLES

The HP 45065A mini-rack cabinet has strain relief pillars which, when properly used, ensure that strains on cables do not affect the connection between the cable and the components within the cabinet.

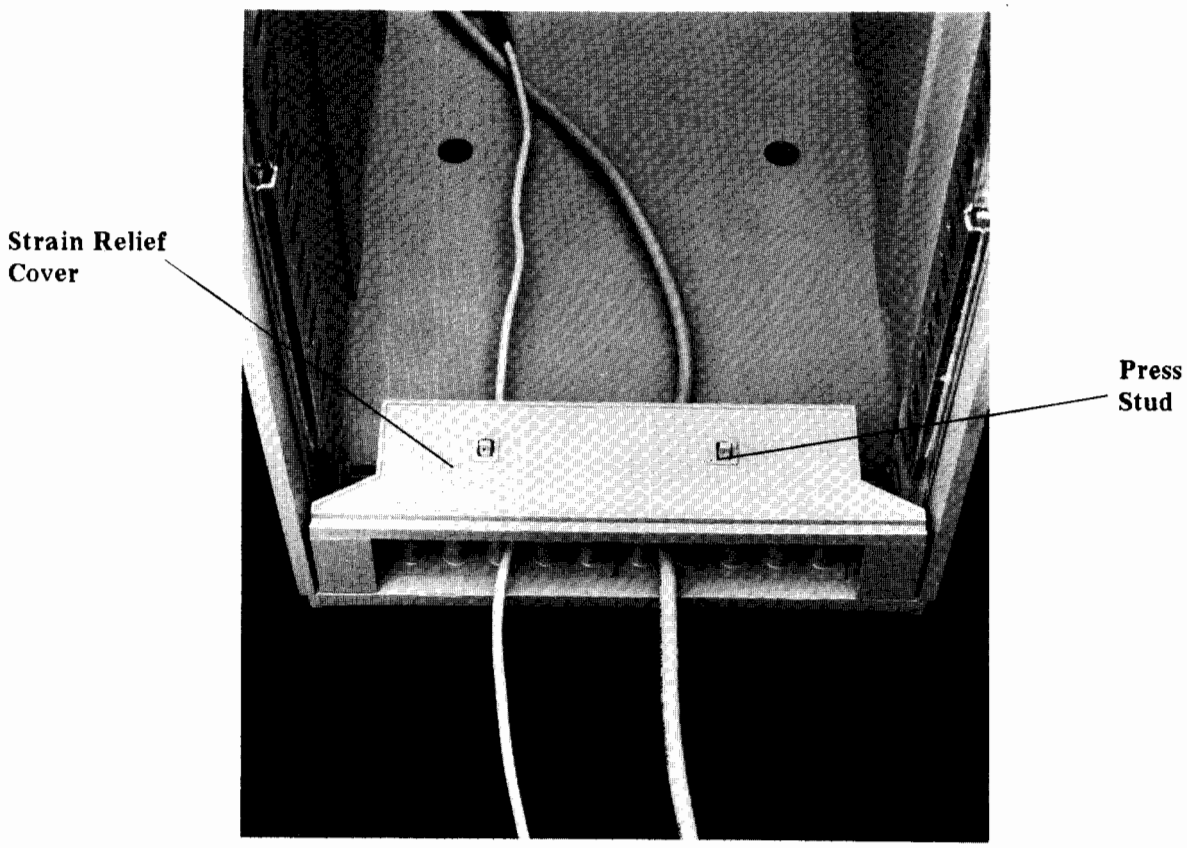
1. Wind each cable through the pillars in accordance with the illustration below. Each cable should be secured, that is, tension on a cable outside the cabinet must not be present on the cable once the cable is past the strain relief pillars.



HP 45065A Mini-Rack Cabinet Rear View

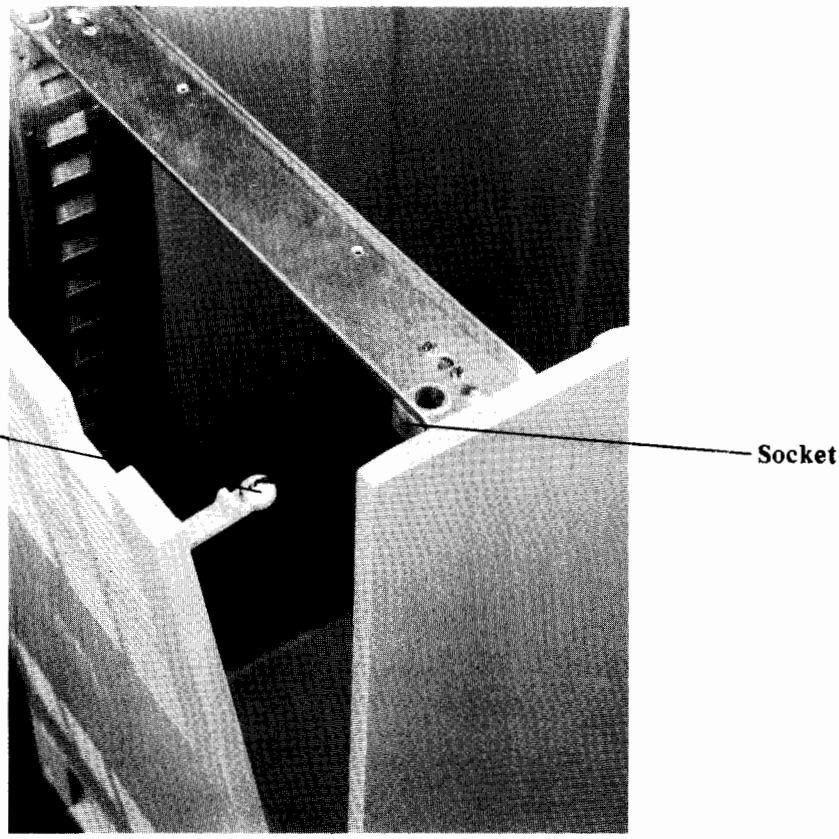
RE-ASSEMBLING THE CABINET

1. Place the strain relief cover over the strain relief pillars such that the strain relief cover snaps onto the two press studs in the center of the strain relief pillars.



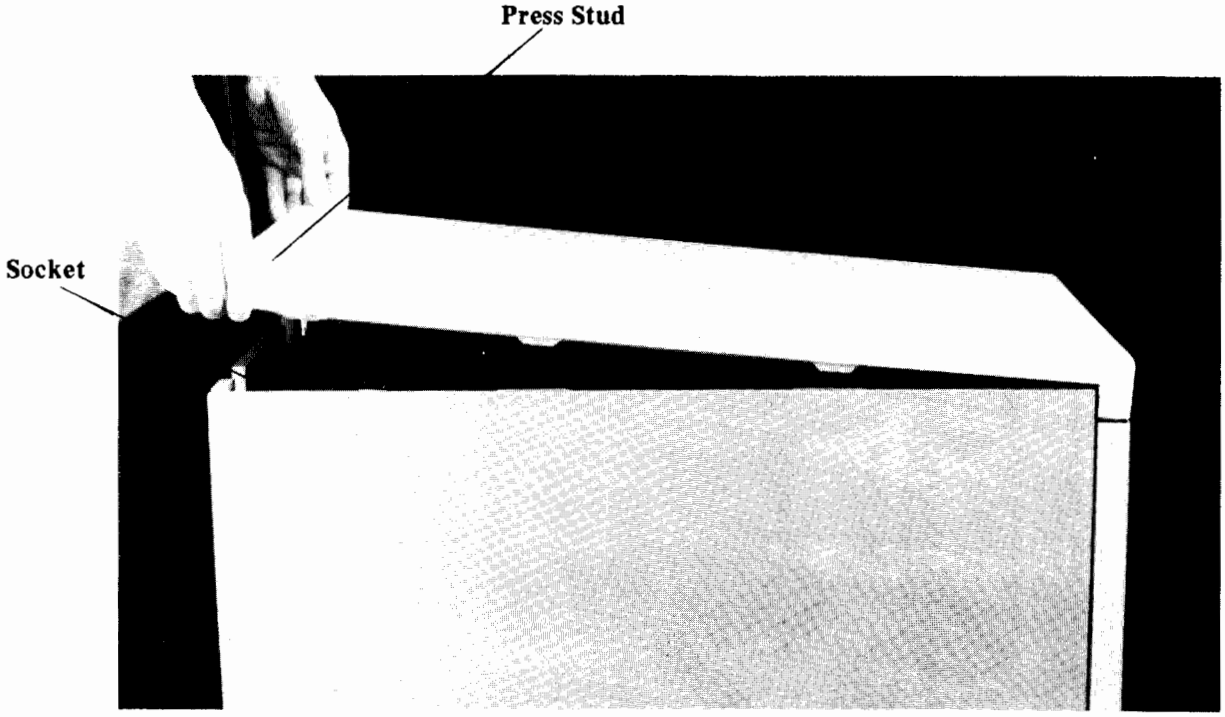
HP 45065A Mini-Rack Cabinet Rear View

2. Insert the base of the rear panel in the slot at the back of the strain relief cover. Lift the top of the panel until it meets the cabinet. Push the rear panel such that the two press studs snap into the sockets on the body of the mini-rack cabinet.



HP 45065A Mini-Rack Cabinet Rear View

3. Hold the top panel in both hands, and place the front of it such that it hooks over the lip on the front of the cabinet. Gently lower the panel as shown in the illustration until it rests on the top of the cabinet. Push the rear of the top panel such that the press studs snap into the sockets in the cabinet body.



HP 45065A Mini-Rack Cabinet Side View

4. Continue with the section titled "Starting Up Your HP 260.

ATTACHING EXTRA MASS STORAGE DEVICES

APPENDIX

E

This appendix describes how to attach additional mass storage devices to your HP 260. Use this appendix to install extra mass storage devices either inside or outside the HP 45065A mini-rack cabinet.

Some detailed instructions (such as stripping the cabinet, and setting the HP-IB addresses) are not duplicated in this appendix.

NOTE

The HP 260 can support up to four mass storage devices.

GETTING STARTED

1. Make sure that no one is using the HP 260 system and switch it off. **Unplug the SPU, I/O Extender (if fitted) and each HP-IB device from the mains power outlet.**

2. Place your new mass storage device where it is to be installed.

Set The HP-IB Addresses

Determine the HP-IB address number of your mass storage device from the following table.

If Your System Already Has ...	Set the HP-IB Address of Your New Mass Storage Device to ...
One mass storage device	4
Two mass storage devices	3
Three mass storage devices	2

1. Determine the HP-IB address number from the table. For example, if you are installing your third mass storage device then its HP-IB address must be three. Refer to the section titled "Installing the SPU and Mass Storage Devices" to set the HP-IB address.

2. If you do not want to install the device in the mini-rack cabinet then go to "Attaching the HP-IB Cables".

HP 260 System Space Table

HP 260	Slots Required
HP 260 SPU	5
HP 260 SPU with I/O Extender	10
Discs	
HP 7941A	5
HP 7945A	5
HP 7942A	8
HP 7946A	8
HP 7957A/B	5
HP 7958A/B	5
HP 9133H	5
HP 9134H	5
HP 9133L	5
HP 9134L	5
HP 9153B/C	5
HP 9154B/C	5
Tape	
HP 9144A	5

3. Leave sufficient slots so that the device will fit in the cabinet and insert a set of shelves. For example, an HP 9133L disc requires five slots. When adding an HP 9133L disc insert a set of shelves on the sixth slot below the previous device.

NOTE

If there are insufficient slots below the lowest device in the cabinet then the mass storage device will have to be installed outside the cabinet. The HP 45065A mini-rack cabinet has 21 slots.

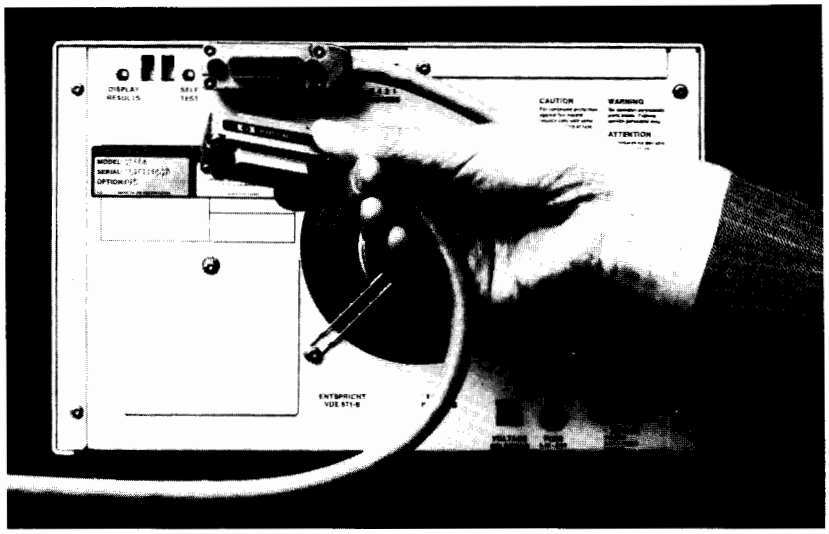
4. Slide the component onto the shelf.

5. Repeat Steps 2 to 4 for each additional device to be inserted in the cabinet.

Attaching the HP-IB and Power Cables

1. Attach one end of the HP-IB cable to the rear of the last mass storage device in the chain of HP-IB devices.

2. Using your fingers, tighten the screws at either side of the HP-IB connector.



HP 7946A Disc Rear View

3. Attach the free end of the HP-IB cable to the HP-IB connector of the new mass storage device.

4. Using your fingers, tighten the screws at either side of the HP-IB connector.

5. Repeat steps 1 to 4 for each additional device.

NOTE

The chained connection of all HP-IB devices must be preserved. (This chained connection is illustrated at the end of this appendix.) The simplest way to preserve the chained connection is to attach the HP-IB cable of each new mass storage device to the HP-IB connector of the last HP-IB device currently in the chain. If an HP-IB printer is installed, this may not be possible. In this case perform the following instructions.

- Uncouple the HP-IB cable that connects the HP-IB printer to the last mass storage device in the chain.
- Attach the new mass storage device's HP-IB cable to the HP-IB connector of the last mass storage device in the chain.
- Re-couple the HP-IB cable of the HP-IB printer to the HP-IB connector of the new mass storage device.

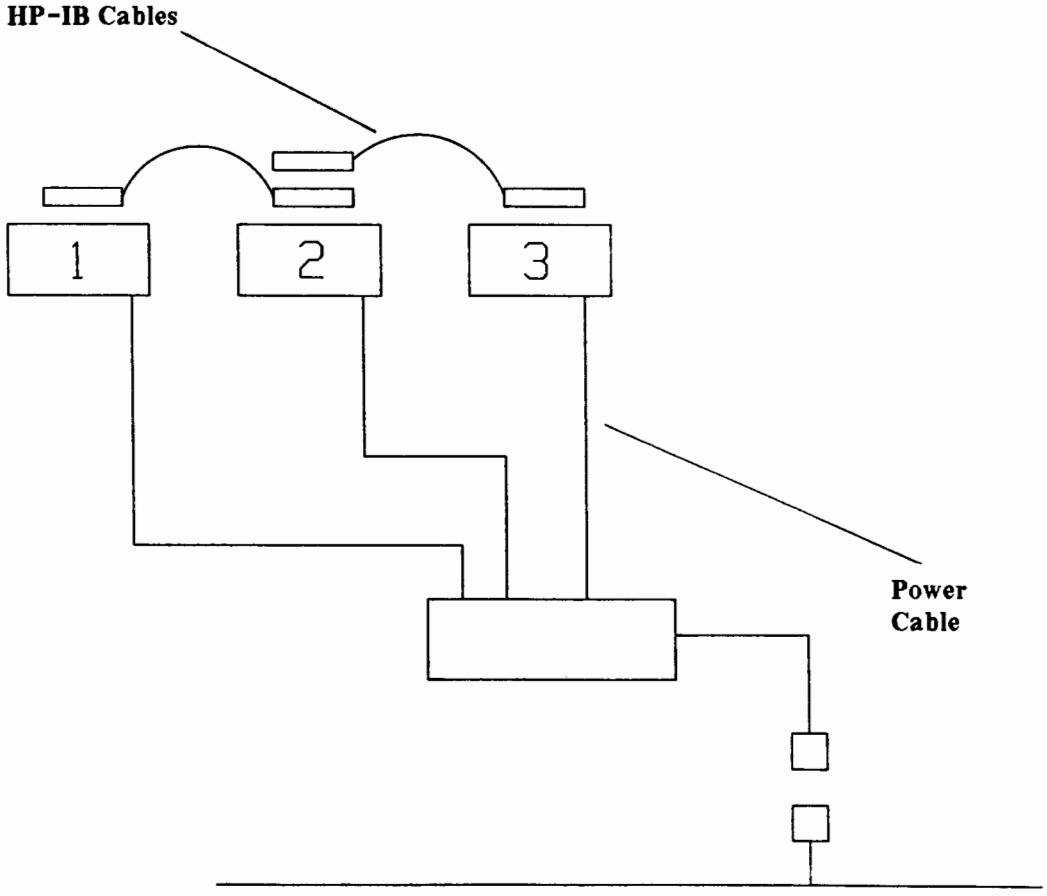
6. If you have inserted the mass storage devices in the mini-rack cabinet then refer to the appendix entitled "Building Your Mini-Rack Cabinet" to re-assemble the cabinet.

7. When all your mass storage devices have been attached then plug them into the mains power outlet.

NOTE

All HP-IB devices must be powered from the same dedicated electrical circuit. The requirements for this circuit are supplied in the manual titled "Preparing for Your HP 260", part number HP 45070-90003.

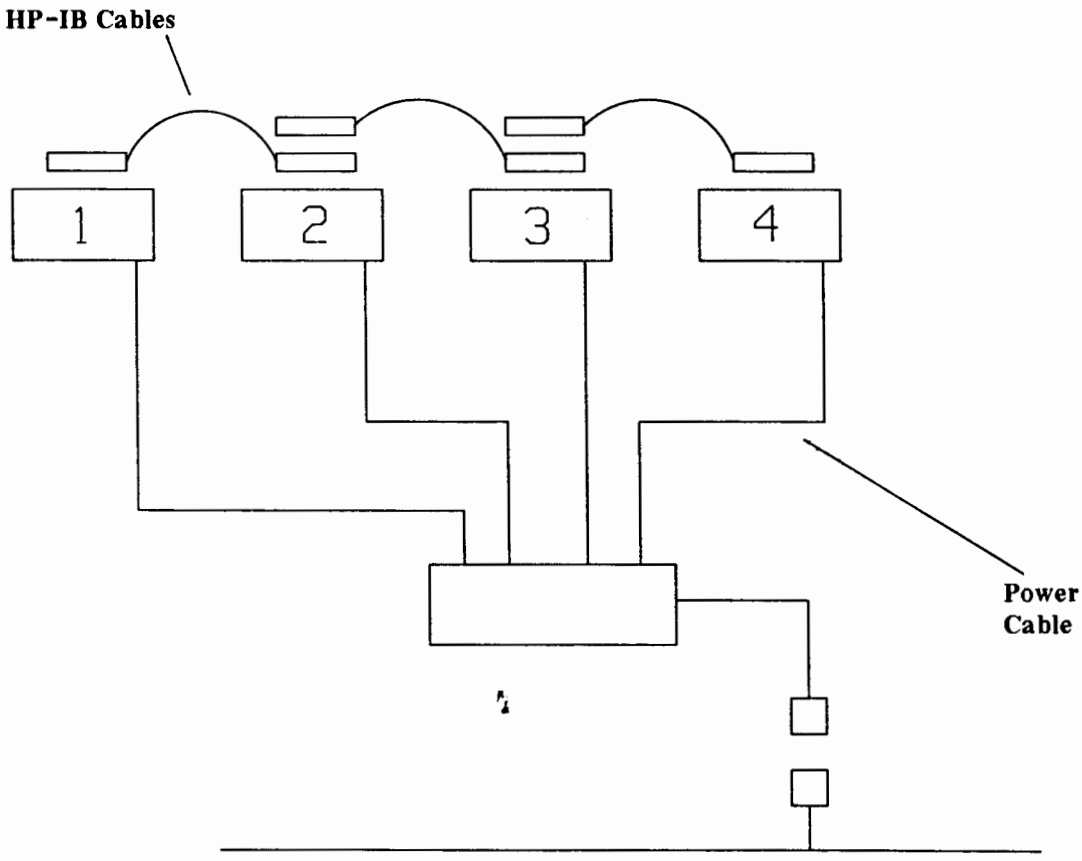
The following illustration shows the chained connection of HP-IB devices, and how that chain must be preserved. Note the dedicated electrical circuit.



Dedicated Electrical Circuit

HP-IB Connection and System Dedicated Circuit Before New Mass Storage Device

Label	HP-IB Device
1	HP 260 SPU
2	First mass storage device
3	Second mass storage device



Dedicated Electrical Circuit

HP-IB Connnection and System Dedicated Circuit
After New Mass Storage Device

Label	HP-IB Device
1	HP 260 SPU
2	First mass storage device
3	Second mass storage device
4	Third (NEW) mass storage device

8. Refer to the manual titled "Operating and Managing Your HP 260" to switch on the system again.

ADDING SERIAL PERIPHERALS TO AN EXISTING SYSTEM

APPENDIX F

This appendix provides a general guideline to attach new serial peripherals to an existing HP 260 system. The procedure to attach a serial peripheral to an existing system is similar to when installing serial peripherals for the first time. Only the order of operation is different.

Consult the Sections titled "Installing Workstations and Terminals", "Installing Serial Peripherals" and "Configuring Your HP 260" for further information.

1. Obtain the configuration values for your peripheral from the Serial Configuration Table.

2. Run the CONFIG utility and select the **Asynchronous Port Configuration** program.

3. Configure the HP 260 port to which you want to attach the peripheral. **Record the configuration value and the port configured on the Serial Configuration Worksheet.**

4. Save the new configuration.

5. If the peripheral requires a DROM, select the **DROM edit** program and set the required DROM to load automatically.

6. Save the new configuration and exit the CONFIG utility.

7. **Check that nobody is using the HP 260** and switch it off. Unplug the SPU and I/O Extender from the mains power outlet.

8. Attach one end of the serial cable to the serial port on the peripheral

9. Attach the other end of the serial cable to the serial port configured in Step 3.

10. Plug in and switch on the peripheral. Refer to the peripheral manual to configure the peripheral, taking the values from the Serial Configuration Worksheet.

11. Plug in the SPU and I/O Extender and switch on the system again. The new configuration will be automatically loaded.

ATTACHING EXTRA I/O OR MEMORY BOARDS

APPENDIX G

This appendix describes how to expand the memory or I/O capacity of your HP 260 system by installing printed circuit boards.

CAUTION

Printed circuit boards are delicate and very sensitive to electrostatic discharge. Handle them with care, and always follow the instructions concerning their use and storage.

Guidelines for Handling I/O and Memory Boards

- If grips or handles are provided, always hold I/O or memory boards by those grips.
- Never touch pins, conductors or chips.
- Never walk around while holding boards.
- Keep the boards within their static-restistant bags for as long as possible.

INSTALLING EXTRA I/O BOARDS

Follow these instructions to add extra video, ASI, or INP (Intelligent Network Processor) boards.

NOTE

The HP 260 supports up to two ASI boards, up to two Video boards, and one INP board.

This appendix describes how to install the INP board. Refer to the "DSN/INP" reference manual for information on INP configuration.

Getting Started

1. Check that no-one else is using the system and then switch off the the SPU, and I/O Extender (if fitted).
2. **Unplug the SPU and I/O Extender from the mains power outlet.**
3. Make sure that the rear of the SPU is easily accessible.

Preparing the I/O Board

1. Find the lowest empty slot in the SPU or I/O Extender. You can use any slot except the lowest two slots in the SPU.

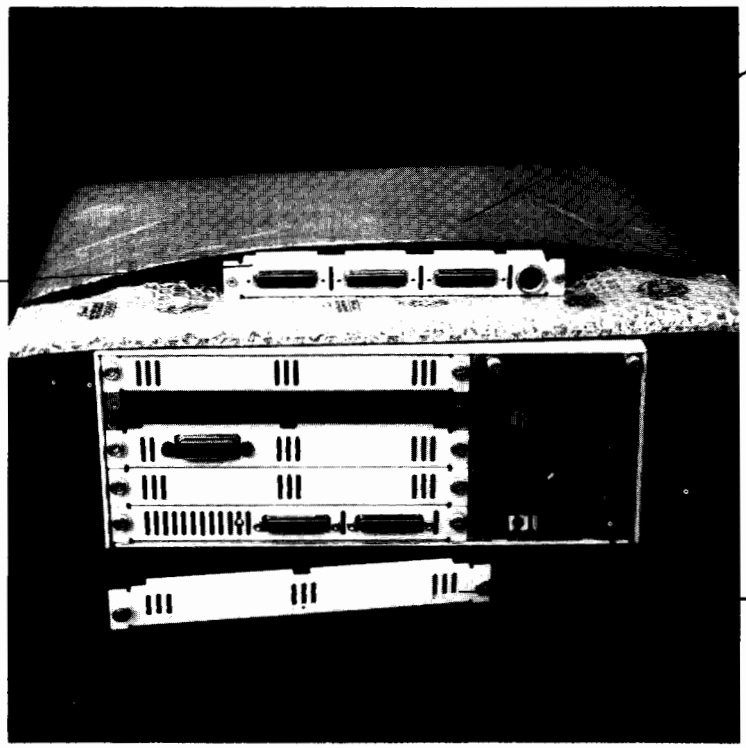
   If there are no slots left in the SPU then an I/O Extender must be fitted. This job can only be performed by a Hewlett-Packard Customer Engineer. Contact Hewlett-Packard to obtain the I/O Extender and arrange for its installation.

2. Unscrew the screw at each side of the slot cover and remove the slot cover.

3. Locate your new I/O board. Remove its case, **but not the static-protection bag.**

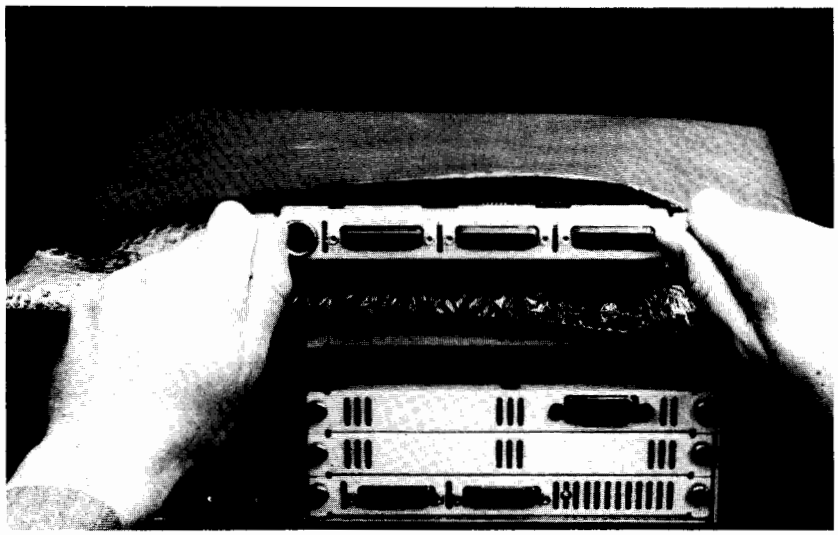
4. Place the new I/O board on the top of the SPU.

5. Undo the static-protection bag.



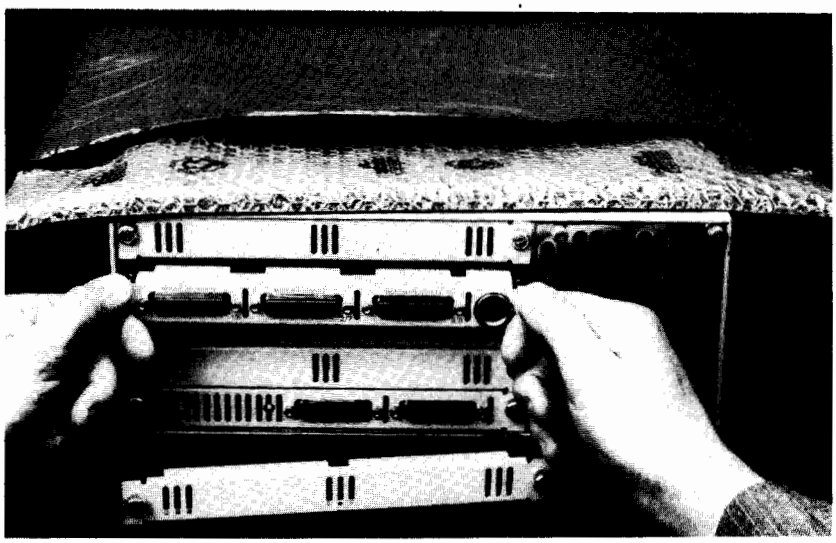
HP 260 SPU Rear View

6. Hold the screws on either side of the board,



HP 260 SPU Rear View

7. Holding the screws on each side of the board, remove the board from the static-protection bag and slide the board into the slot.

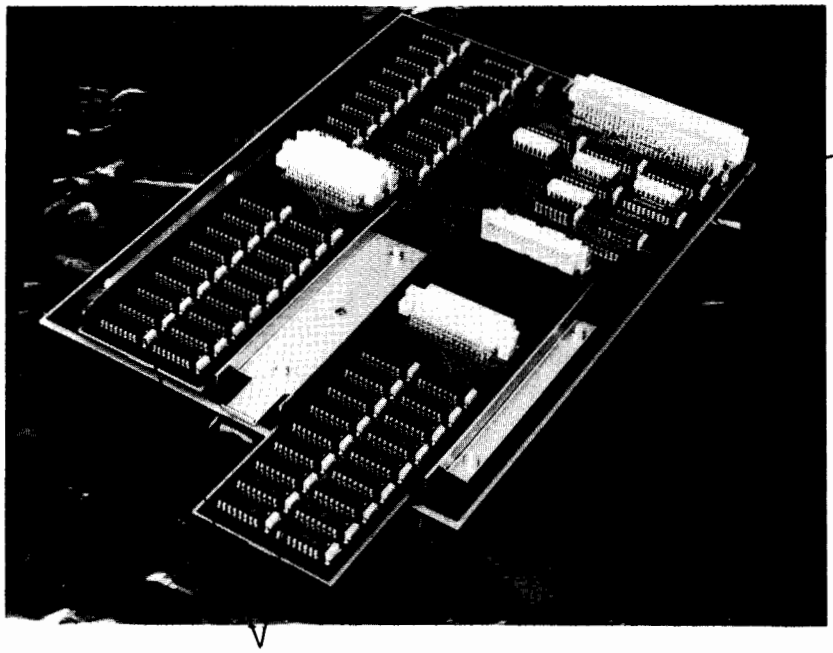


HP 260 SPU Rear View

8. Secure the board in the slot by tightening the two screws at either end of the board cover.

INSTALLING EXTRA MEMORY BOARDS

Your HP 260 has two types of memory board, illustrated below.



Primary and Secondary Memory Boards

- The larger, primary board plugs into the SPU backplane, and is inserted first. This board holds 0.5 Mbyte of random-access memory. Only one primary board can be used.
- The smaller, secondary boards plug into the primary board. Up to two secondary boards may be attached; each one holds 0.5 Mbyte of random-access memory.

Getting Started

1. Check that no-one else is using the system and then switch off the the SPU, and I/O Extender (if fitted).

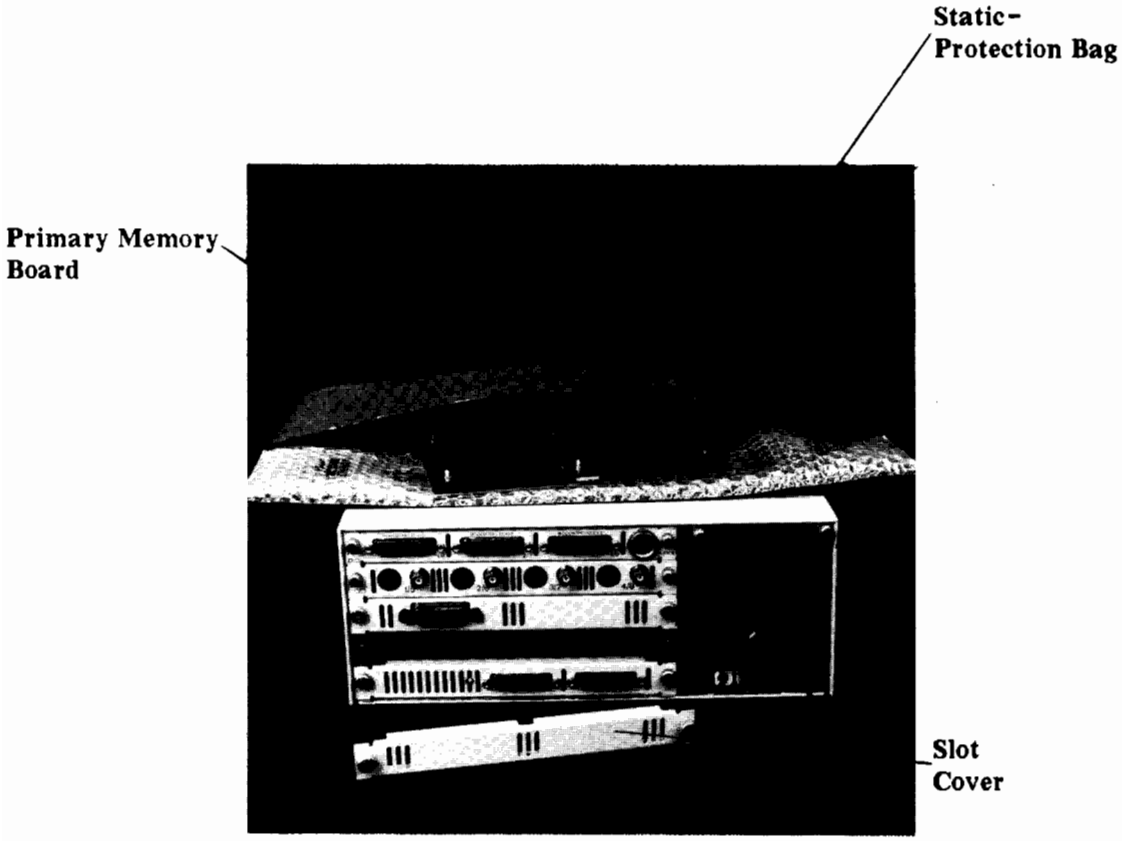
2. **Unplug the SPU and I/O Extender from the mains power outlet.**

3. Make sure that the rear of the SPU is easily accessible.

Installing the Primary Memory Board

SPU slot two is reserved for memory boards. (Slot two is the slot directly above the CPU board.)

1. Unscrew the screws at each side of the slot cover.
2. Locate your primary memory board. Remove its case, **but not the static-protection bag.**
3. Place the primary memory board on the top of the SPU.
4. Undo the static-protection bag.



HP 260 SPU Rear View

5. Holding the board at each corner, lift it out of the bag. In the same movement, insert it in slot number two.

HP 260 SPU Rear View

6. Replace the slot cover. Use your fingers to tighten the two screws at either side of the cover to secure the primary memory board.

Installing Secondary Memory Boards

1. Remove the cover from slot number two at the back of the SPU. This is the slot directly above the SPU.

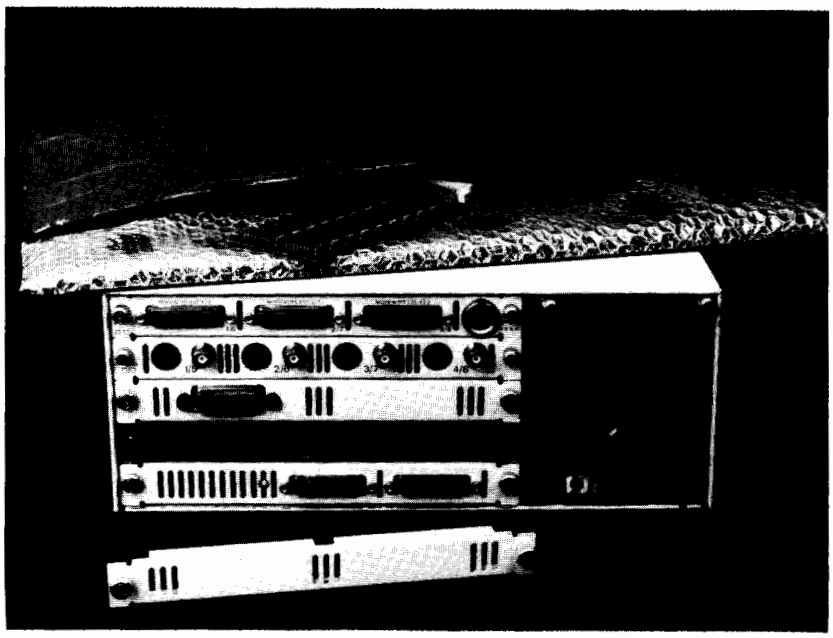
NOTE

Secondary memory boards can only be installed onto a primary board. If no primary board is present, you must insert a primary memory board before installing a secondary board.

If you have one secondary memory board, you must install it on the right hand side of the primary board.

2. Locate your secondary memory board. Remove its case, **but not the static-protection bag.**

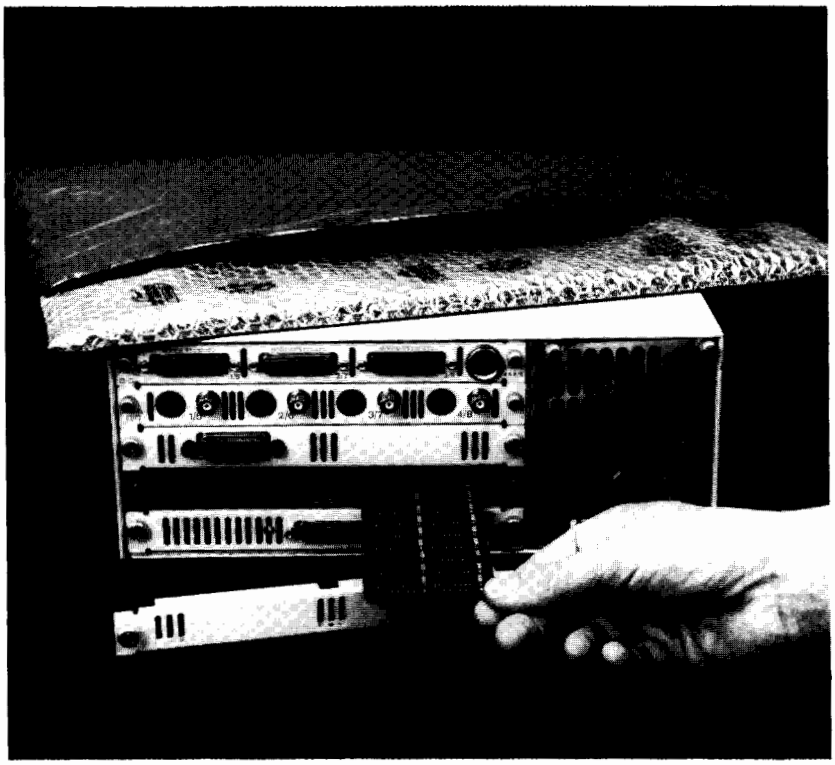
3. Place the board, in its static protection bag, on the top of the SPU.



HP 260 SPU Rear View

4. Undo the static-protection bag.

5. Holding the board at each corner, lift it out of the bag and slide it onto the primary memory board.



Secondary Memory Board on right-hand side

HP 260 Rear View

6. Replace the slot cover. Tighten the two screws at either side of the slot cover to secure the secondary memory board.

CONFIGURING THE HP 2334A

APPENDIX H

NOTE

The HP 2334A must be prepared, installed, and configured by a Hewlett-Packard Customer Engineer.

This appendix describes the configuration parameters required when attaching an HP 2334A Multimux to the HP 260. Refer to the HP 2334A Reference Manual for information on how to configure the HP 2334A.

CONFIGURING THE HP 260 FOR THE HP 2334A

1. Run the HP 260 "CONFIG" utility and select the **Asynchronous Port Configuration** program.
2. Select the I/O port to which the HP 2334A Multimux is attached.
3. Configure this I/O port with the following values.

CONFIG field label	Value
Class	Terminal
Speed	9600
Type	2392
SwConf	MoSwEU

CONFIGURING THE HP 2334A

You must create two "User-Defined Profiles". Refer to the HP 2334A Reference Manual for information on creating a User-Defined Profile and assigning profiles to ports.

Profile 62

User-Defined Profile 62 must have the following parameter values.

1:0
2:0
3:127
4:1
5:1
6:0
7:0
8:0
9:0
10:0
11:14
12:0
13:0
14:0
15:0
16:8
17:24
18:0

0:13
1:0
2:0
3:0
4:0
5:0
6:0
7:128
8:0
9:0
10:0
11:0
12:0
13:0
14:4
15:0
16:0
17:0
18:0
19:128
20:0
21:0
22:64
23:1
24:122
25:0

Assign profile 62 to the HP 2334A asynchronous port connected to the HP 260.

Profile 122

Profile 122 must have the following parameter values.

1:1
2:0
3:0
4:1
5:1
6:5
7:1
8:0
9:0
10:0
11:14
12:0
13:0
14:0
15:0
16:8
17:24
18:0

0:13
1:0
2:0
3:0
4:0
5:0
6:0
7:128
8:0
9:0
10:0
11:0
12:0
13:3
14:0
15:0
16:0
17:0
18:63
19:255
20:0
21:0
22:64
23:1
24:0
25:0

HP-IB PRINTERS AND THE HP 7912P DISC

APPENDIX

I

This appendix contains information for your Hewlett-Packard Customer Engineer during installation of any HP-IB printer or the HP 7912P disc. Consult the printer or disc documentation for full information on configuration methods.

HP-IB Printers

The HP 260 supports up to two HP-IB printers. When attaching an HP-IB printer to the HP 260, make sure that:

- Each HP-IB printer is powered from the system's dedicated electrical circuit.
- The HP-IB address of the first HP-IB printer is zero, and the HP-IB address of the second HP-IB printer is one.
- Each printer's HP-IB cable is not longer than two meters (six feet approx).
- HP 2394A printers require these additional parameter values:

Secondary Commands	ON
Listen Always	OFF
Service Request	OFF

HP 7912P

Make sure that:

- The HP 7912P disc is powered from the system's dedicated electrical circuit.
- The HP-IB address of the HP 7912P disc is either five, four, three, or two, depending upon the number of mass storage devices linked to the HP 260. The HP-IB address number must be unique. Refer to the section titled "Installing the SPU and Mass Storage Devices" or the appendix titled "Attaching New Mass Storage Devices" to determine the correct address.
- Each disc's HP-IB cable is not longer than one meter (three feet approx).

GLOSSARY

APPENDIX
J

Applications software - Computer programs written to solve specific problems, for example inventory control or accounts receivable.

ASI Board - (Asynchronous Serial Interface Board). A printed circuit board holding five ports for asynchronous serial communication.

Backups - Duplicate programs and data kept on removable media.

Baud rate - The rate per second at which bits of data (including start and stop bits) are transferred.

Bit - An abbreviation for binary digit, or unit of information that can be either 0 or 1.

Channel - See **Video Channel**.

Configuration - Setting data rates and parameters on either a peripheral or the HP 260 so that data is received in the form that it is sent.

CPU - Central Processor Unit. This performs the HP 260 computational functions.

CPU board - The printed circuit board that holds the CPU, plus 0.5 Mbytes of RAM memory and two Integrated Serial Ports.

Cursor - The flashing underscore which appears on the display to point out the next character position.

Disc - A storage device on which information is recorded magnetically.

Disc drive - A storage device containing fixed or removable discs.

Display - A television-like screen used for outputting data, messages, and other information to the operator.

DROM - (Disc Resident Optional Module). DROMs are optional additions to the operating system held on mass storage. They can be loaded with the operating system at power-on to extend the functionality of the operating system.

Error message - A number or English phrase describing an error that has occurred during execution. An error number refers to a detailed description of the problem. (Error Messages are described in the manual titled "Operating and Managing Your HP 260".

Fixed disc - A disc that cannot be removed from its disc drive. Fixed discs are faster and more capacious than removable discs.

Hardware - The physical equipment making up your computer system.

Hardware error - An error associated with a mechanical failure of a component of your system.

HP-IB - (Hewlett-Packard Inteface Bus) The HP-IB is a fast parallel data transfer system for communication between the SPU, mass storage devices, and HP-IB printers.

HP-IB device - Any device that communicates using the HP-IB.

HP-IB printer - Any printer that communicates using the HP-IB.

Initialization - A process that prepares a mass storage medium for the storage of data.

I/O - (Input/Output). The transfer of data between the SPU and peripherals.

I/O Board - Either an ASI board, Video MUX board, or INP board.

I/O Extender - An optional component that fits on top of the SPU and allows extra I/O boards to be installed.

INP - (Intelligent Network Processor). The HP 260's synchronous serial communication method.

Integrated Serial Ports - The two asynchronous serial ports on the SPU board.

Keyboard - A set of keys used to input information and program lines. It typically consists of a typewriter block, data entry pad, halt and execute keys, special function keys, and display editing keys.

Mass storage device - A device used to store programs and data. A mass storage device can be either a fixed disc drive, flexible disc drive, or tape or cartridge drive.

Medium - The material on which data is recorded (for example, disc or tape).

Microfloppy disc - A 3.5" removable disc, sometimes called "Microdisc".

Modem - (MOdulator/DEModulator). A device capable of coding (and decoding) digital computer signals into a form capable of transmission over telephone lines.

Monitor - Workstation display; often used to refer to the HP 45263D Video Workstation.

Operating system - The software that controls the operation of your computer.

Peripherals - Devices used for I/O operations which are supported for use with the HP 260, for example mass storage devices and printers.

Port - An outlet for serial communication.

Principal workstation - The workstation where loading and System Error information is displayed.

Processor board - A synonym for CPU board

Program - A sequence of instructions or statements that a computer interprets and executes.

Removable medium - A mass storage medium that can be removed (for example, cartridge tape or microfloppy disc)

RS-232-C, RS-422 - Protocols for asynchronous serial communication.

Run-Only programs - Programs that can be run but not edited. Normally they are useful utility programs supplied by Hewlett-Packard.

Self-test - A test that the system performs on itself, usually each time the power is switched on.

Serial peripherals - all peripherals that communicate serially. That is, plotters, printers, terminals and some workstations.

SPU - (System Processor Unit). The component which contains the I/O boards, the memory boards and the CPU board.

Softkeys - Special function keys that are defined to execute special instructions or any defined series of keystrokes.

Softkey label - A label defining a softkey's function. Softkey labels are displayed at the base of a workstation screen.

Software - Programs or other instructions for your HP 260.

Software error - A logical or syntactical error encountered in software.

Special function keys (SFK) - user definable keys on your HP 260. Each key can be dynamically defined as a typing or programming aid; also known as softkeys.

Speed - See baud rate.

System disc - The fixed disc on which the operating system is kept.

System software The operating system, DROMs, Run-Only programs and utilities supplied by Hewlett-Packard.

Task - Primary tasks have a workstation and user interaction, secondary tasks can operate in the background. All tasks require a 64Kbyte memory partition.

Terminal - A device capable of entering or displaying information when requested by a program.

Utility programs - Programs supplied by Hewlett-Packard, for example to copy files or perform back-ups.

Video Board - A printed circuit board containing the Video MUX interface. (Also called Video MUX board).

Video Channel - The outlet for video communication to one video workstation.

Video MUX Interface - An I/O board used to communicate with up to four video workstations.

Video Workstation - A workstation using the video MUX interface. (Product number HP 45263D)

Workstation - A device capable of running and editing programs and executing commands.