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PC APPRENTICE

PERSONAL COMPUTER LEARNING SERIES

INFOSTAR™+



MicroPro®



PRENTICE-HALL/CHAMBERS TUTORIAL WORKBOOK

IBM®

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INFOSTARTM+



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Thomas B. Lukers Ed.D.

A PRENTICE-HALL/CHAMBERS TUTORIAL WORKBOOK

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Preface

ABOUT THIS WORKBOOK

ORGANIZATION

Learning should be fun, particularly when computers and programs like the MicroPro InfoStar+ information management system are used. This workbook combines learning with fun. It contains 15 action-packed *parts* that let you experiment with your computer and software.

PARTS The 15 *parts*, which are made up of *modules*, are intended to cover a single learning session. However, parts may be divided or combined as needed to fit your schedule.

At the beginning of each part, you'll see a "What You Will Learn" page and a list of learning goals. Reviewing this list shows you what the part has in store for you.

MODULES The modules in each part break topics down into small, easy-to-digest pieces. At the beginning of each module, a list of main topics, called *Key Topics*, is provided. This tells you what to watch for as you work your way through the module.

A *Practice Session* in each module lets you use InfoStar+. As you experiment with various commands, you find yourself learning by doing. This is the best way to learn new material. Clear, step-by-step instructions guide you through InfoStar+. Each session includes many illustrations showing computer screens. These let you check if you have followed the instructions.

The end of each module contains a review. The review lets you verify your newly learned skills. If you are able to answer the review questions correctly, you are ready to go to the next module.

WHAT YOU SHOULD KNOW

Do not worry if you have never used a microcomputer. This course teaches microcomputer use from the ground up.

In addition to learning about microcomputer operation and the InfoStar+ system, you will learn many new words and their meanings.

Welcome to the exciting world of microcomputers and InfoStar+. Have fun!

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Part 1

GETTING READY

WHAT YOU WILL LEARN

- What is a computer?
- The basic parts of a microcomputer
- Equipment connection
- What is a floppy disk?
- The parts of a floppy disk
- Handling and storage of floppy disks
- The microcomputer keyboard layout
- Standard typing keys
- Special function keys
- Loading the PC-Disk Operating System (DOS)
- The DOS prompt
- Disk file directory (DIR)
- Disk formatting (FORMAT)
- Making a backup copy (COPY)
- Turning off the microcomputer

Module 1

SETTING UP

KEY TOPICS

- What is a computer?
- A microcomputer's basic parts
- Equipment connection
- What is a floppy disk?
- The parts of a floppy disk or "diskette"
- Handling and storage of floppy disks

PRACTICE SESSION

A computer is an electronic instrument for working with and storing information. A microcomputer is a small computer, sometimes called a "personal computer," because it is small enough to be practical for home or personal use.

Fortunately, you don't need to know very much about how a computer actually works to use one, just as you don't have to be an auto mechanic to drive a car. Like a car owner, there are a few things you should know:

1. The main parts of a microcomputer and a floppy disk.
2. How to connect the microcomputer's parts.
3. How to take care of your floppy disks.

PREPARATION You should have available:

- Equipment ready for connection.
- A floppy disk for examination.

LEARNING ACTIVITY The following learning activity introduces you to your computer and diskette.

A Microcomputer's Basic Parts You are using one of the family of IBM microcomputers.

- IBM PC
- IBM PC XT
- IBM PCjr
- IBM Portable PC
- IBM _____

No matter which one you use, the basic parts are the same.

1. Keyboard — similar to a typewriter keyboard. The keyboard lets you enter instructions and information.
2. Display monitor — a “TV screen” that displays information.
3. Main chassis — this unit contains both (1) the electronics that make up a computer and (2) one or two disk drives.
4. Disk drive(s) — the microcomputer's storage place.

IBM Monochrome Display

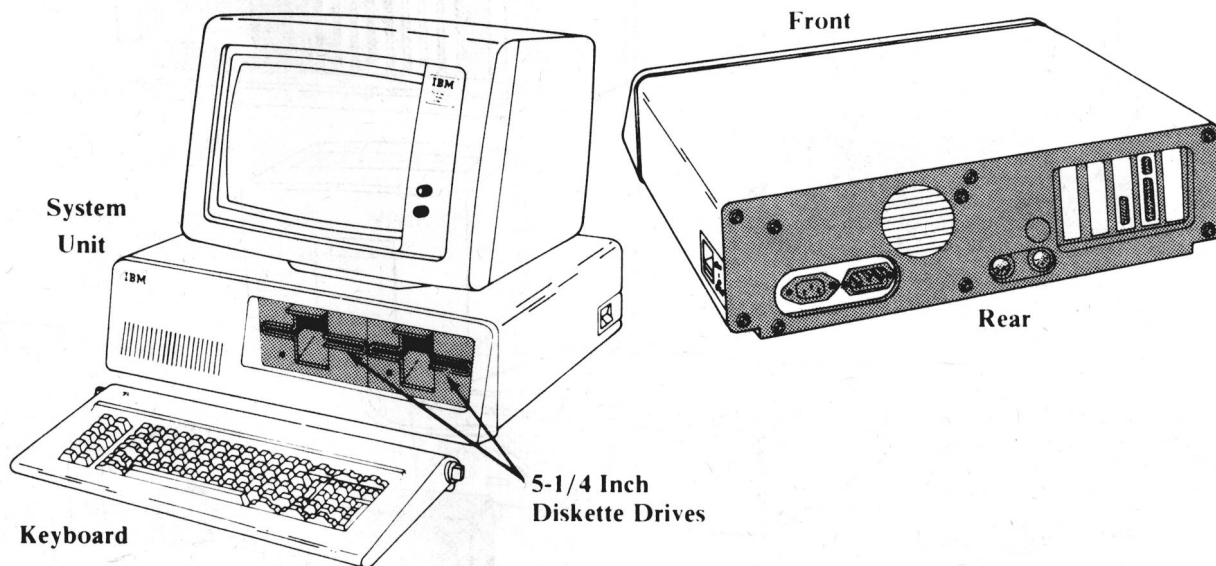


Figure 1-1 A Typical Microcomputer, Simplified Diagram

Equipment Connection Use this checklist to make sure your computer is properly connected.

- ☐ Display monitor cable is securely attached to the main chassis.
- ☐ Keyboard and main chassis are connected by the keyboard cable. (IBM PCjr does not require this connection.)
- ☐ Power switch is in OFF position.
- ☐ Main chassis is plugged into a standard wall outlet by the power cord.
- ☐ The power cord of the display monitor is plugged into either: (1) the power outlet on the rear panel of the main chassis if you have a PC, or (2) a standard wall outlet if you have a PCjr.
- ☐ When all cables and power cords are properly connected, check to see that the disk drive or drives are empty and the load levers are in the up position.

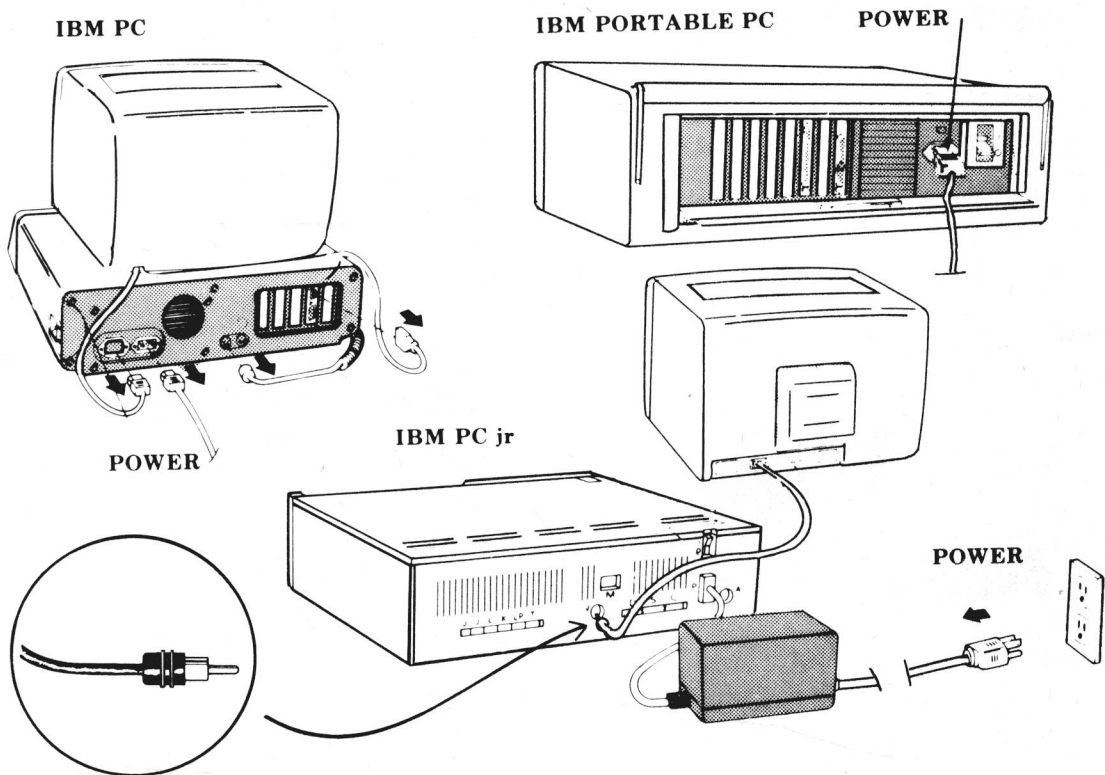


Figure 1-2 Equipment Connection Diagram

The Parts Of a Floppy Disk A computer is like a tape recorder — it needs a “tape” to make it do what it is supposed to do. The computer itself (the electronic instrument and its various parts) is called the *hardware*. The term *software* refers to the programs and instructions that make a computer do the things we want it to do. This software is placed on floppy disks. (A tape might be called the “software” of a tape recorder.) Floppy disks are so important to computers that it is a good idea to know more about them. Figure 1-3 illustrates the parts of a floppy disk.

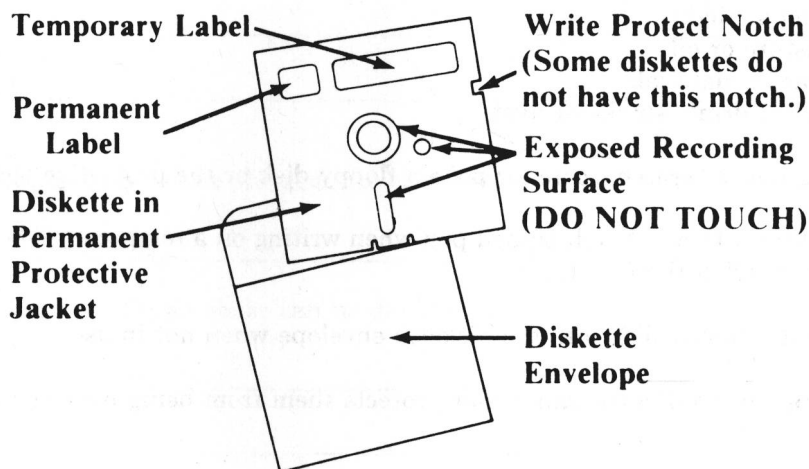


Figure 1-3 The Parts of a Floppy Disk

Look at a floppy disk and make a check mark by the name of each part as you examine it.

- ☐ Write Protect Notch — when this notch is uncovered, you can record new information on a floppy disk (which is called “writing on it”); when this notch is covered with tape, you cannot “write” on the disk.
- ☐ Temporary Label — this label tells the contents of a disk.
- ☐ Permanent Label — this label tells the name of the manufacturer and sometimes other information about the floppy disk. Not all disks have permanent labels.
- ☐ Exposed Recording Surface — the metal-oxide recording surface of the disk. DO NOT TOUCH!
- ☐ Protective Jacket — permanent paper jacket covering the floppy disk.
- ☐ Diskette Envelope (or Sleeve) — paper covering used to store disks when not in use and to protect the exposed recording surfaces.

Handling and Storage of Floppy Disks Floppy disks are delicate and should be handled and stored with care. Here are some suggestions:

1. Never touch the exposed surfaces of a floppy disk. Always hold diskettes by the paper jackets.
2. Never expose floppy disks to:
 - a. Magnetic fields (magnets, electric motors, or heavy metal objects.)
 - b. Extreme heat or cold
 - c. Direct sunlight
 - d. Moisture or oil
 - e. Abrasive materials
 - f. Food or drink, smoke or dust
3. Take care not to scratch, score, or poke a floppy disk or the protective jacket.
4. Write lightly with a soft, felt tipped pen when writing on a temporary label. Avoid using a ballpoint or nylon tipped pen.
5. Always put a floppy disk into the diskette envelope when not in use.
6. Store floppy disks in a container that protects them from being bent or folded.

WHAT YOU HAVE LEARNED

You now know how to connect your equipment and handle diskettes, because in this module you learned to:

- Identify the basic parts of a microcomputer
- Connect the equipment
- Identify the parts of a diskette
- Handle and store diskettes

REVIEW

1. Check the IBM microcomputer you are using:
 - ☐ IBM PC XT
 - ☐ IBM PCjr
 - ☐ IBM Portable PC
 - ☐ IBM _____ (name)

2. Name the four basic parts of a microcomputer and tell what each part does.

Name of Part

What It Does

- a. _____
- b. _____
- c. _____
- d. _____

3. Which computer part can be plugged into either the main chassis or a standard wall outlet?

4. List four ways that floppy disks can be damaged.

- a. _____
- b. _____
- c. _____
- d. _____

5. Identify each of the following parts of a floppy disk.

- a. This part prevents information from being recorded _____
- b. This part is used to identify the contents _____
- c. This part should never be touched _____
- d. This should always be used when storing a diskette _____

Module 2

YOUR KEYBOARD

KEY TOPICS

- Keyboard description
- Keyboard layout
- Standard typing keys
- Special control keys
- Numeric keypad

PRACTICE SESSION

Now that your equipment is connected, you are ready to learn about the keyboard.

PREPARATION Check to see that your keyboard is in a position that is comfortable for you. If you wish, you can adjust the tilt of your keyboard. Push and turn the knobs on the sides to raise or lower the tilt of the keyboard. If you have a PCjr, lift the levers on the underside of the keyboard to extend the legs.

LEARNING ACTIVITY

Keyboard Description Your keyboard varies with the computer you use. The following computers, called "PC" in this book, use the same keyboard layout:

- IBM PC
- IBM PC XT
- IBM Portable PC

Another keyboard described is the IBM PCjr keyboard. It will always be called the "PCjr."

Keyboard Layout The keyboard layout of the PC is shown in Figure 2-1. Notice that the keys are identified by name in the figure.

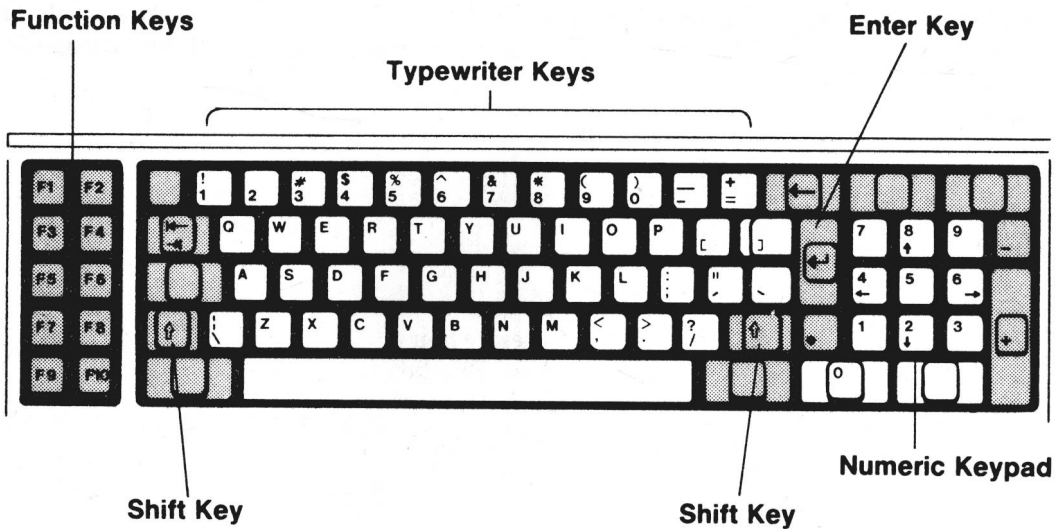


Figure 2-1 PC Keyboard Layout

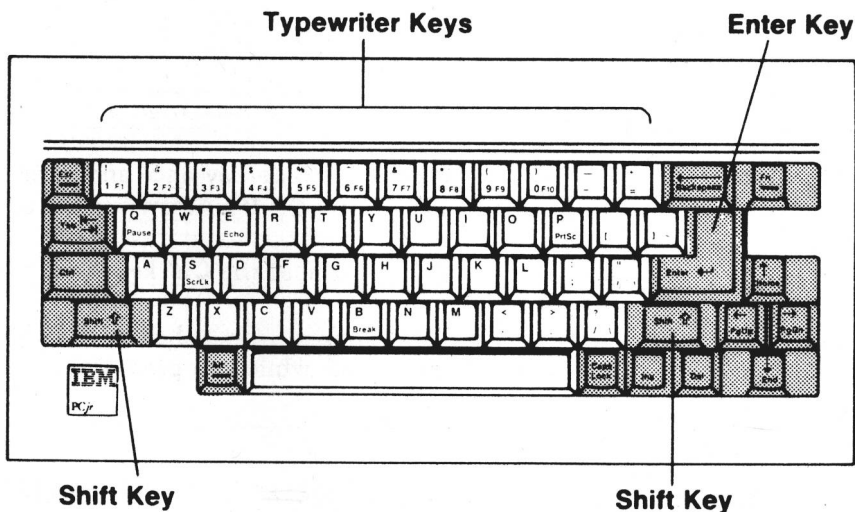


Figure 2-2 PCjr Keyboard Layout

Standard Typing Keys The standard typing keys are the same as those used on a typewriter. These include letter and number keys, the **Tab** key, and the **Shift** keys. Your **Shift** keys are used to type capital letters and the symbols above the upper row of number keys, just as on a typewriter. The **Caps Lock** key lets you type in capital letters without pressing a **Shift** key. When the **Caps Lock** is on, pressing **Shift** produces lowercase characters.

There are also a few special character keys available to you on the computer keyboard. These symbols are contained in the following list. Make a check by each as you find it on the keyboard.

Check	Special Key	Symbol
<input type="checkbox"/>	Vertical Bar	
<input type="checkbox"/>	Back Slash	\
<input type="checkbox"/>	Tilde	~
<input type="checkbox"/>	Grave	`
<input type="checkbox"/>	Greater Than	>
<input type="checkbox"/>	Less Than	<
<input type="checkbox"/>	Open Bracket	[
<input type="checkbox"/>	Close Bracket]
<input type="checkbox"/>	Open Brace	{
<input type="checkbox"/>	Close Brace	}



SPECIAL KEY COMBINATIONS Sometimes, combinations of keystrokes are used to perform special tasks. Table 2-1 shows how to interpret the instructions you see.

Table 2-1

Example	Interpretation
Press Home = Up Arrow	Press the Home key once and release. Then press the Up Arrow key once.
Press Ctrl-B	Press and hold the Ctrl key while you type B .
Press Ctrl/Alt-Del	Press and hold both the Ctrl and Alt keys at the same time, while you press Del once.

Numeric Keypad The numeric keypad provides another set of number keys similar to an adding machine or calculator. The **Num Lock** key (Numeral Lock) works like the **Caps Lock** key. Press the **Num Lock** key once to turn it on. Press it again to turn it off.

Control Keys Control keys send codes to the computer. These codes are frequently used by programs to perform special operations.

The  key is used like a carriage return key on a typewriter. It is pressed to end a line or complete a command. When you see **Enter** or **Return** written in this workbook, press the  key.