999-300-200IS



User's Guide **AT&T** Personal Computer 6300 Written by Agora Resource, Inc. Lexington, MA

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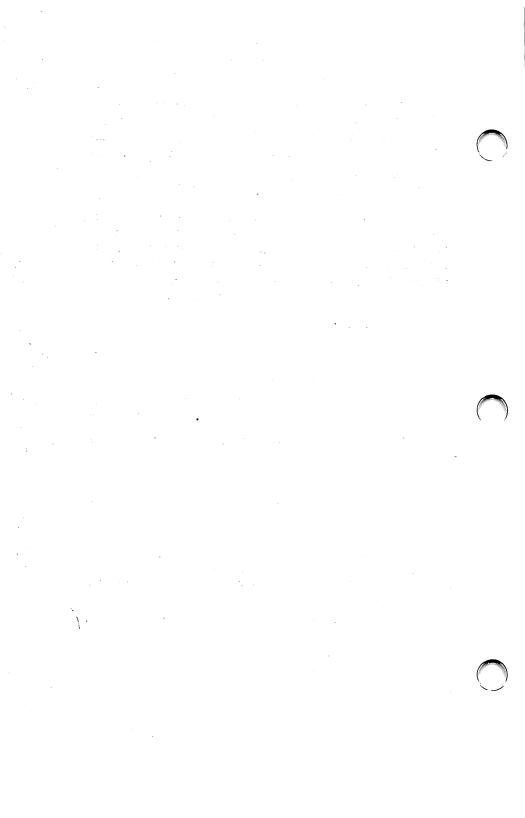
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THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

THIS EQUIPMENT HAS BEEN CERTIFIED TO COMPLY WITH THE LIMITS FOR A CLASS B COMPUTING DEVICE, PURSUANT TO SUBPART J OF PART 15 FCC RULES. ONLY PERIPHERALS (COMPUTER INPUT/OUTPUT DEVICES, TERMINALS, PRINTERS, ETC.) CERTIFIED TO COMPLY WITH THE CLASS B LIMITS MAY BE ATTACHED TO THIS COMPUTER. OPERATION WITH NON-CERTIFIED PERIPHERALS IS LIKELY TO RESULT IN INTER-FERENCE TO RADIO AND TV RECEPTION.

ALL CABLES USED TO CONNECT TO PERIPHERALS MUST BE SHIELDED AND GROUNDED. OPERATION WITH CABLES, CONNECTED TO PERIPHERALS, WHICH ARE NOT SHIELDED AND GROUNDED MAY RESULT IN INTERFERENCE TO RADIO AND TV RECEPTION.



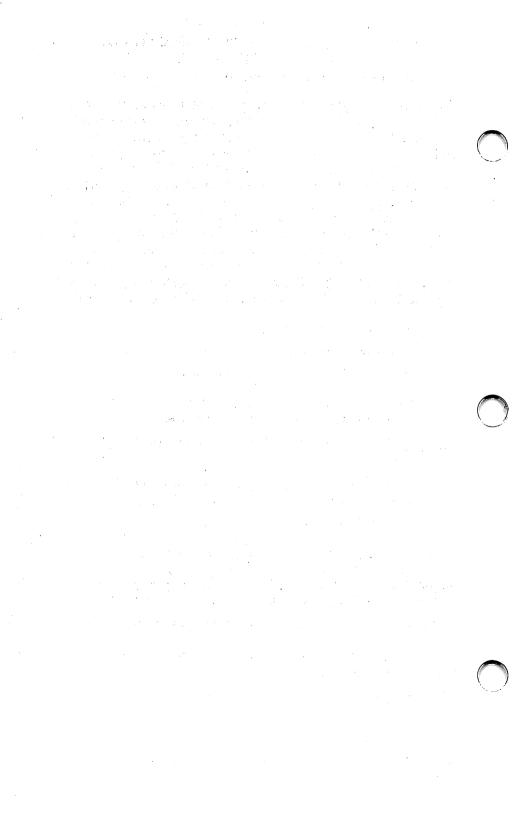
This equipment generates and uses radio frequency energy and if not installed properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type-tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 FCC rules, which are designed to provide reasonable protection against interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If the equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the computer with respect to the receiver.
- Move the computer away from the receiver.
- Plug the computer into a different outlet so that the computer and receiver are on different branch circuits.
- Move the cables connected to the computer to minimize the interference.
- Tighten all screws on cables and the computer housing.
- Install blank panels, originally supplied with the PC, in all unused card slots.

If necessary the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet, prepared by the Federal Communications Commission, helpful:

"How to Identify and Resolve Radio-TV Interference Problems"

This booklet is available from the U. S. Government Printing Office, Washington, D.C. 20402. Stock No. 004-000-00398-5.



The AT&T PC 6300 meets the following environmental and safety specifications.

Physical Characteristics (All Configurations)

	CPU	Monochrome Monitor	Color Monitor	Keyboard
(Approx.) Size: Weight:	15"x16½"x6" 30 lbs	12"x12¼"x12" 17 lbs	14"x14"x14½" 27 lbs	17″x7½″x1″ 4½ lbs

Electrical

100-130; 320 volt amps maximum, 59-61 Hertz Idle power usage under 200 watts Maximum power usage 240 watts

Ambient Temperature

Operating:	+ 10 to + 140 degrees Centigrade
	(+50 to +104 degrees Fahrenheit)
Storage:	-40 to $+60$ degrees Centigrade (-40 to +140 degrees Fahrenheit)

Relative Humidity

Operating: 20% to 80% RH, non-condensing Storage: 5% to 95% RH, non-condensing

Altitude

Operating: Sea Level to 10,000 feet Storage: Sea Level to 30,000 feet

Standards

UL 478 and 114 CSA 154 and 143 FCC Part 15, Subpart J, Class B

Acoustic Noise Level

53 dBA maximum



IMPORTANT SERVICE INFORMATION

Dear Customer:

The following information is provided to allow us to better meet your service needs. This information should be retained and the directions followed as indicated.

In Case of Trouble

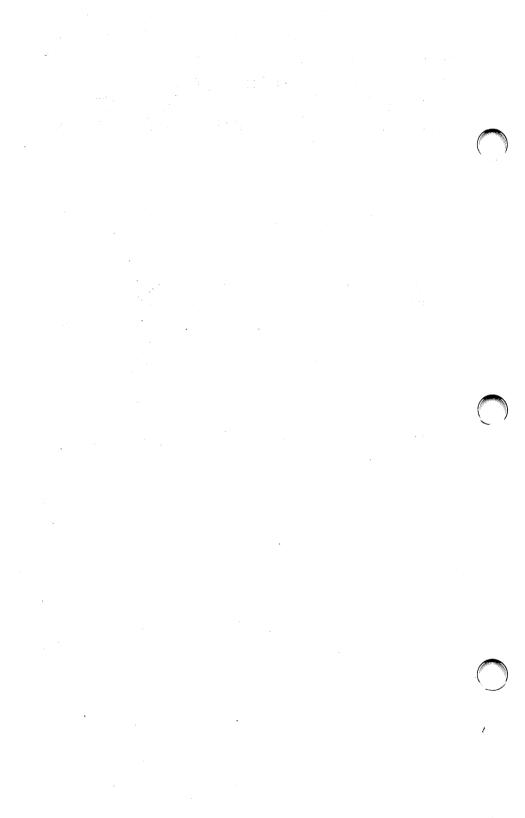
In the event that you have a problem with your unit and want to have it repaired or require maintenance, contact the AT&T Information Systems Service Organization by calling **800-922-0354** (unless special instructions have been provided to you). The individual answering will provide you with specific instructions depending on your individual needs and maintenance contract options.

AT&T Information Systems offers five Equipment Maintenance Agreements/Plans:

- **Business Day Service:** Contracted; five day (M-F) 8 a.m. to 5 p.m., Systems Technician dispatched to customer location, if required, for equipment repair. Time charges apply outside coverage period.
- Around-The-Clock Service: Contracted; 24 hours a day, seven days a week on major failures with Systems Technician dispatched to customer location, if required, for equipment repair.
- **Dedicated Service:** Technician dedicated to specific location in one, two, or three-shift coverage, for 5, 6, or 7 days/week.
- **Per Occurrence:** Non-contracted; technician dispatched to customer location, charged on time-and-material basis. Time only is charged for contracted customers who want service out of contracted hours.
- **Mail-In:** Replacement part(s) will be mailed to the customer. Upon receipt of the replacement part(s), the customer repackages and returns the defective part(s) to AT&T in accordance with the instructions provided by the AT&T Information Systems Services Hotline (1-800-922-0354).

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AT&T Information Systems offers an AT&T Personal Computer 6300 parts catalog, which can be ordered, at no charge, by placing a toll-free call to the National Parts Sales Center (1-800-222-PART). This catalog details the major customer replaceable modules of the AT&T Personal Computer 6300.



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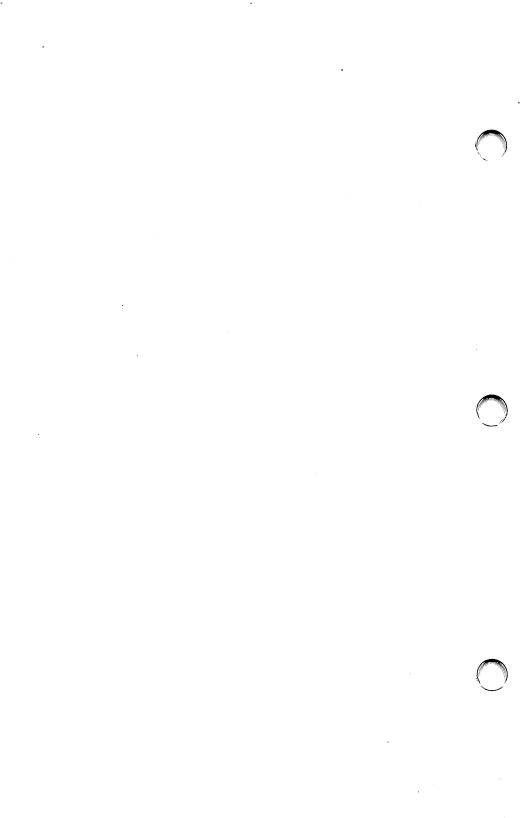


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- Welcome
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Welcome

Your AT&T Personal Computer 6300 enables you to enter a new world of increased productivity, a world where you have the power to handle large, complicated tasks easily and quickly.

Both your AT&T Personal Computer 6300 and the User's Guide are designed to be easy-to-use. Together they provide you with the tools you want and need to get up and running fast.

After using this guide you may choose to either explore MSTM-DOS further in the MS-DOS Guide or begin to run a software application program.

MS[™]-DOS is a registered trademark of Microsoft[®].

Organization of the User's Guide

Your User's Guide is organized into three major parts. Chapter 2, *What Every User Should Know*, covers the parts of your computer, how diskettes work, and how to care for diskettes.

The second part of the manual, *Getting Started*, continues where the Installation Pamphlet left off. It provides hands-on instructions and examples showing you exactly what to do to complete the installation of your computer. *Getting Started* is separated into three independent chapters: one for Single Floppy users, one for Dual Floppy users, and one for Hard Disk users. Use the chapter appropriate for your computer.

The third part of the manual, *What To Do If Something Doesn't Work*, explains how to use the Customer Diagnostics diskette that came with your system to test the parts of your computer in the event of a problem.

What You Will See and What You Should Do

In the examples in this book, the indented text represents what you see on your display screen. The boldface text is what you should type on your keyboard. For example, if you see:

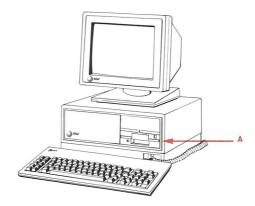
Type:

A>**dir**

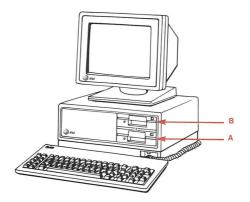
only type the boldfaced **dir**. The A> prompt is shown to help you follow what is happening on your display screen.

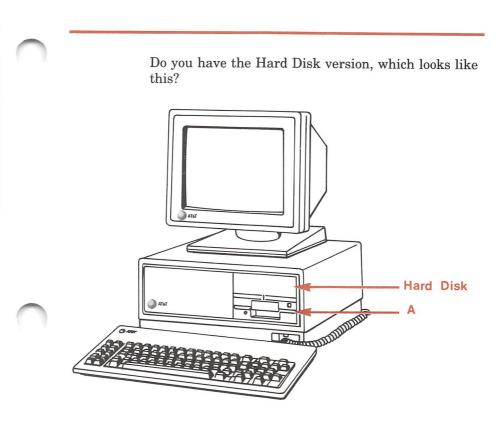
Which computer do you have?

Do you have the Single Floppy version, which looks like this?



Do you have the Dual Floppy version, which looks like this?







2

What Every User Should Know

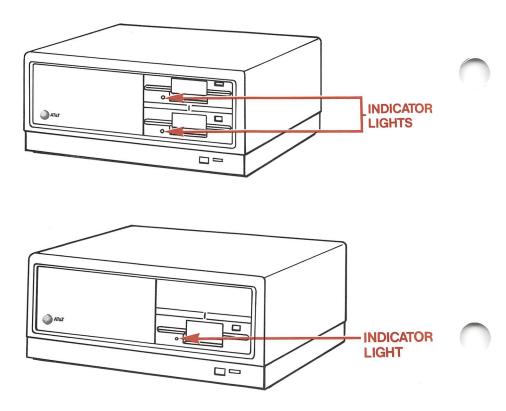
- The parts of your computer
- All about diskettes
- Disk drives
- Hard disks
- All about files

The parts of your computer

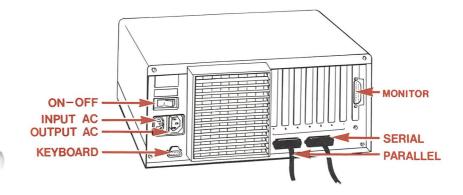
The Main Unit

The main unit of your computer is the large box that contains a single diskette drive, two diskette drives, or a single diskette drive and a hard disk. Besides the drives, it contains the computer's memory and the electronic board that does the processing. This is the heart of your computer.

The diskette drives have a drive door, and an indicator light which lights up when the drive is in use. Some diskette drives have drive door locks.



On the back of the main unit are several connectors often called ports (e.g., parallel port or serial port). These enable you to connect the computer to many other devices such as printers, communications equipment, or other computers.



What Every User Should Know

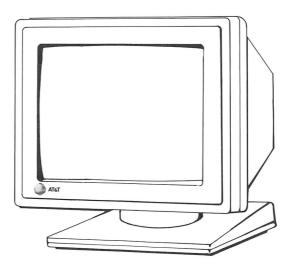
The Display Screen

Your computer comes with a high resolution antiglare display screen capable of displaying text or graphics. The display can be adjusted to suit your individual preference for brightness, contrast, and viewing position.

Adjusting the Display Screen

Your display screen is fully adjustable for viewing comfort. It can be tilted up or down and swivelled left or right to change the viewing angle. The tilt and swivel are controlled by a simple continuous friction joint providing an infinite range of adjustment.

Adjusting the display screen is easy; simply position the screen the way you want it.



To adjust the screen's brightness:

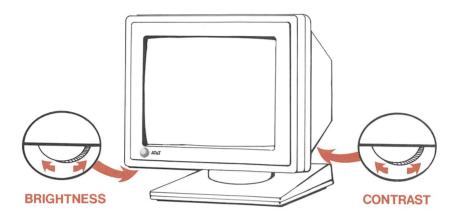
- 1 Facing the screen, reach underneath the screen's case to the knob on the left.
- 2 To increase the brightness, turn the knob forward. To decrease the brightness, turn the knob backward.

At times, text on your screen may be highlighted. The intensity of that highlighting is controlled by the contrast knob found on the lower right side of the monitor.

To adjust the screen's contrast:

- 1 Facing the screen, reach underneath the screen's case to the knob on the right.
- 2 To increase the contrast, turn the knob forward. To decrease the contrast, turn the knob backward.

NOTE: If you have an AT&T color monitor, the controls may be in a different position than you see here. Follow the instructions provided with your color monitor. What Every User Should Know

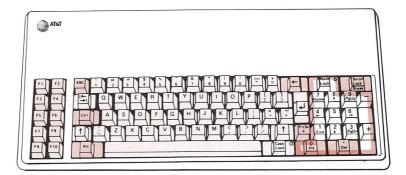


The Keyboard

The keyboard on your computer can be divided into four sections:

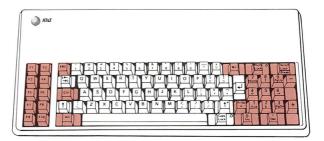
- a typewriter section similar in function to a normal typewriter keyboard
- special feature keys used primarily in conjunction with the typewriter keys
- a numeric keypad similar to the keypad on a calculator and doubling as a cursor control keypad
- a block of ten function keys that can be set up so that with only one keystroke you can perform tasks that would normally require several keystrokes

On the following pages, the function of the keys when using MS-DOS is given. When running your application programs, these keys may perform other functions under the control of those programs.



Typewriter Section Keys

The keys in this section are similar to keys on a normal typewriter.





RETURN performs a function similar to the carriage return key on typewriters. Pressing it lets the computer know that you are finished typing a command. This key is often called the **ENTER** key.



SHIFT pressed in conjunction with typing a letter gives you a capital letter. Pressing **SHIFT** for a key with two symbols gives you the upper symbol on the key. There are two **SHIFT** keys; they both perform the same function.

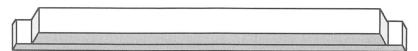


TAB moves the cursor to the right on the screen. It is similar to the tab key on a typewriter.



CAPS LOCK locks the keyboard in the shifted mode. It only affects the letters. You still have to use the shift key to get the upper characters on non-letter keys. When the **CAPS LOCK** is "on" the indicator light on the key is lit.

SPACE BAR inserts spaces into the text.





BACKSPACE moves the cursor to the left one character, erasing the last character typed.

Special Feature Keys

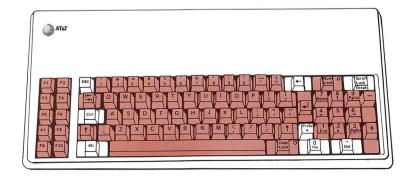
The special feature keys work with the typewriter keys.



ESCAPE cancels the current entry and waits for a new one.



CONTROL is used with other keys to perform a function or command. For example, **CTRL S** will stop text from scrolling off the screen.





ALTERNATE is used with other keys to perform a function or command. Combined with the numeric keypad, it displays special characters on the screen.



DELETE erases the character where the cursor is positioned. It is used with the function keys to edit previously entered commands.



PRINT SCREEN, when not used with one of the **SHIFT** keys, is the same as the * key. When shifted, it sends whatever is displayed on the screen to the printer.



- **SCROLL LOCK** is not used by MS-DOS.
- **INSERT** places the computer in the insert mode. When in the insert mode, whatever you type is inserted into text on the screen at the cursor's position. All data to the right of the cursor will be moved to the right. Pressing the **INS** key a second time turns off the insert mode.

Numeric Keypad

The numeric keypad has two functions depending on whether the **NUM LOCK** key is "on" or "off" or whether you press the **SHIFT** key. When the light is on, the numeric keypad is activated. When the light is off, the cursor keys are activated.



When the **NUM LOCK** key is on, the numeric keypad is operational. The keys labeled 1 - 9 give you the digits on them.

- - With NUM LOCK on:
 - = the decimal point
 - = the digit 0
 - = minus sign
 - = plus sign

A Warning About Numbers

Numbers and the +, -, ., * keys appear both in the typewriter section and the numeric keypad. They can be keyed in from either place. The computer is not concerned where these characters come from, providing that it gets a number or arithmetic operator when one is required.

When using a typewriter, you can use a lowercase l or an uppercase I for the digit one. Similarly, you can use the letter O for the digit zero. If you do this with a computer, the results are unpredictable. Therefore:

ALWAYS USE NUMERIC KEYS FOR ONE AND ZERO.

Cursor Control Keypad

When the **NUM LOCK** key is off, the keypad acts as a cursor control keypad.





- **HOME** is not used by MS-DOS.



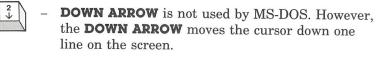
 UP ARROW is not used by MS-DOS. However, the UP ARROW moves the cursor up one line on the screen.



- **LEFT ARROW** moves the cursor one character left, erasing the last character typed.



- **RIGHT ARROW** re-types one character at a time from the previously entered command.





END is not used by MS-DOS. However, **END** moves the cursor to the first character on the last line on the screen.



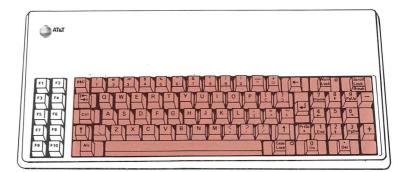
PAGE UP is not used by MS-DOS. However, **PAGE UP** is used by many programs to scroll upward the information on the screen.



PAGE DOWN is not used by MS-DOS. However, **PAGE DOWN** is used by many programs to scroll downward the information on the screen.

Function Keys

The function keys perform different tasks according to the software being used. In different application programs, these keys usually perform different operations. The meaning of the function keys is dependent on the program that you are currently running. For example, in one program **F9** positions the cursor at the beginning of a file and **F10** positions the cursor at the end of the file.



MS-DOS only uses **F1** through **F5**; these keys act as described below:



F1 – Re-types the previously displayed command one character at a time.



F2 - Re-types the previously displayed line up to the first time a character you specify occurs. Type
F2, then the character.



- **F3** Re-displays the previously entered line.
- F4 Deletes the previously typed line from memory up to the first time a character you specify occurs. Type F4 and then the character. Now type F3 to see the remainder of the line.



F5 – Allows you to edit the currently displayed line using the right and left arrow keys and the INS and DEL keys.

Resetting the Computer

You can re-start your computer by pressing the **RESET** button on the front of the computer.

Pressing the **RESET** button stops all computer activity. It has an effect similar to switching the power off and back on again, but is less stressing on the power supply's electronics.

Executing a reset returns the computer to its initial startup status. Any information currently in the computer's memory is lost when reset is executed, so this facility should be used with care.

CTRL/ALT/DEL = Reset the Computer

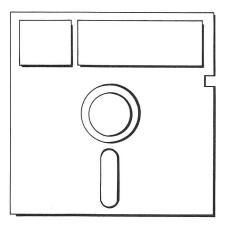
Holding down the **CTRL** key and the **ALT** key simultaneously and then pressing the **DEL** key will also reset the computer. The **RESET** button differs from **CTRL/ALT/DEL** in that **RESET** re-initiates the diagnostic routines, whereas **CTRL/ALT/DEL** does not.



All about diskettes

What Is a Diskette?

Diskettes are flexible magnetic disks used for storing information. The diskettes that your computer uses are 5 1/4 inch and double sided/double density. Each diskette holds about 250 pages of typewritten text.



Why Do I Need Diskettes?

Your computer needs programs in order to work, and programs come on diskettes. Perhaps the most important diskette is the MS-DOS System diskette. Without it your computer won't work because this diskette contains the program, called MS-DOS, that runs the computer.

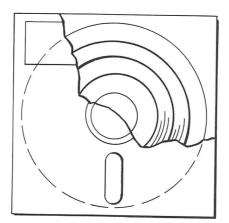
Additionally, application software such as word processing, filing programs, or accounting programs is distributed on diskettes. The most frequent use that you will have for diskettes is to save the data, text, files, etc. that you create. You use diskettes to store your data between sessions on the computer. This is because everytime you turn off your computer, it loses whatever is in its memory.

If you have a hard disk, don't confuse your hard disk with the computer's memory. The hard disk is a storage device; turning the computer off and on will not cause a loss of data saved on the hard disk. What Every User Should Know

How Diskettes Work

Diskettes are magnetic media, like cassette tape, protected inside of a cardboard jacket. The diskette spins inside its jacket similar to a phonograph record. As the diskette spins, the computer can read information from it or write information onto it.

The surface of the diskette is divided into tracks (concentric circles around the center hole) and sectors (parts of a track). The tracks and sectors are numbered. This enables the computer to store information on the diskette at specific locations (e.g., track 3 sector 4 or track 23 sector 7). Later, by going back to the same location the computer can locate the information and read it back into memory.



Information is read from or written onto the diskette through the slot in its jacket. When the computer writes information onto the diskette, it does so in unused space. You can also instruct the computer to write over information that is already on a diskette. You might do this to update an inventory file for instance. Note, however, if you write new information over old information, the old information is erased – you cannot get it back.

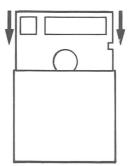
U



Although diskettes are not particularly fragile, careful handling will minimize the risk of damaging them.

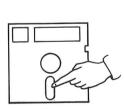
DO:

• Keep diskettes in their envelopes when not in use.



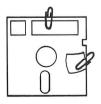
DON'T:

- Don't touch the exposed surface of a diskette. This can scratch its surface.
- Don't expose the diskette to dust or dirt.
- Don't place heavy objects, such as books, on diskettes.
- Don't attach anything to diskettes with paper clips or rubber bands.
- Don't bend diskettes. They are flexible but, if bent too far, the diskette surface can crease permanently.
- Don't expose diskettes to magnetic objects, for example, magnetic screwdrivers.



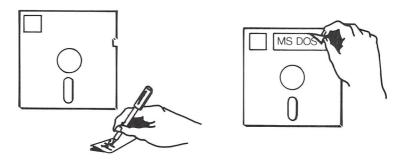






Labeling Diskettes

All diskettes look very much alike. Although you can display a directory of what's on a diskette, it is not always very practical. Imagine the time wasted trying to find a specific file quickly if you have ten unlabeled diskettes on your desk. Labeling your diskettes is like labeling your files. It facilitates finding what you want quickly.



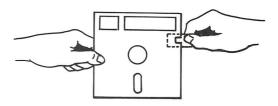
Here are some suggestions about labeling your diskettes:

- Avoid writing on a label that is already attached to a diskette. If you must do so, don't use a pen or pencil with a hard or sharp point which might damage the diskette's surface. Only use felt tipped pens.
- Include on the label the date when the copy was made or updated. This is helpful when reviewing backups or locating the latest version of a file.
- Don't stick labels on top of old labels. Peel off the old one before applying the new one. The best way to remove and apply labels is with the diskette resting on a flat surface and inside its cardboard envelope.

Write-Protecting Diskettes

Protecting your diskettes against unintentional erasure is called write-protection. Write-protection prevents the contents of a diskette from being altered. A write-protected diskette can only be read by the computer. It cannot be written on. This security stops you from inadvertently destroying important information stored on a diskette.

If you want to write-protect a diskette, peel a writeprotect sticker off the sheet supplied with each new carton of diskettes. Then place it over the writeenable notch on the edge of the diskette.



If you want to remove the write-protection, to add or change some information on the diskette, just peel off the write-protect sticker. With the sticker off, the computer can write on the diskette.

Of course, there is no need to write-protect a diskette until it contains some worthwhile information. One diskette that already does is your MS-DOS System diskette. For this reason, if it isn't write-protected already, you should do so now.

Disk drives

Disk Drive Letters

The drives on your computer are assigned letters to identify them.

- The lower diskette drive is drive A.
- The upper diskette drive, if present, is drive B.
- The hard disk drive, if present, is drive C.

The Default Drive

The letter beginning the screen prompt is the current or default drive. This means that unless you tell the computer to look somewhere else for a file or diskette, the computer assumes that the file is on the diskette in the drive with the same letter as the prompt.

For example, when the screen displays the A> prompt, to list the files on the diskette in drive A, type:

A> **DIR**

Then press the **RETURN** key.

Changing the Default Drive

You can change the default drive if you want. To do so, type:

A>**B:**

Then press the **RETURN** key.

Of course, any drive letter can be substituted for the B in the above example. For instance, if you have a hard disk and you want it to be the default drive, type:

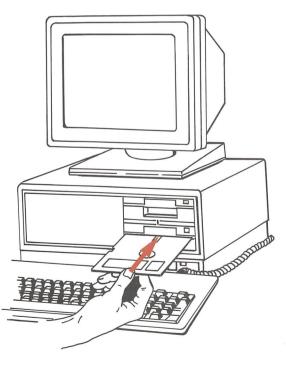
A>**C:**

Then press the **RETURN** key.

How to Insert a Diskette

- **1** Open the diskette drive door.
- 2 Hold the diskette by the side that has the label.
- 3 Gently insert the diskette with its label facing up into the diskette drive. When you hear a click, the diskette is all the way in.
- 4 Close the drive door.

NOTE: If the computer is on, a diskette may safely be inserted into the diskette drive if the drive indicator light is off.



How to Remove a Diskette

1 Be sure the indicator light is off.

NOTE: It is extremely important that you never remove a diskette while it is being read from or written to by the computer. Doing so can destroy the information on the diskette. You can tell if the computer is accessing a diskette by looking at the indicator light on the drive that the diskette is in.

IF THE DRIVE INDICATOR LIGHT IS ON, DO NOT REMOVE THE DISKETTE.

- 2 Lift the drive door. The diskette is automatically pushed out far enough so that it can be easily removed.
- **3** Remove the diskette and insert it into its envelope.



Hard disks

What Is a Hard Disk?

Hard disks (also called "fixed disks") are non-flexible disks used for storing information. The hard disk on your system holds 10 or 20 million characters of storage.

Why You Might Prefer a Hard Disk

Your hard disk is not required for running programs, but with a hard disk you can have fast access to more programs and more data. Most of what you'll learn about using a diskette is applicable to hard disks. The main differences are speed, capacity, and non-removability.

Applications software that you buy, such as word processing or accounting programs, is distributed on diskettes. Most applications software comes with instructions for putting programs on your hard disk. Running programs from a hard disk is faster and easier than running from a diskette. And your hard disk can store much more information than a diskette.

How Hard Disks Work

Hard disks are made up of platters, similar to phonograph albums. Several platters are stacked vertically and sealed inside a dustproof casing. You cannot remove the disk platters from the disk drive the way you can remove a diskette from its drive. The surfaces of the disk platters are divided into tracks and sectors similar to those on a diskette. The computer stores information on disk at a specific location. The computer numbers locations according to platter, track, and sector.

Care of Hard Disk Drives

Because hard disk drives are high speed and high capacity, they are engineered to operate with a very high degree of precision. Although your hard disk can be packed for shipping, it is not made to be moved frequently. If you need to move your computer a short distance, be careful not to bump, drop, or jostle it. If you must ship your computer or transport it in a car, pack it in the boxes it came in.

NOTE: If you move a hard disk system, read the section in the MS-DOS User's Guide on the SHIP command.

Other Facts About Hard Disks

- You do not label hard disks as you do diskettes.
- You do not write-protect hard disks.

All about files

NOTE: This section uses the word "disk" to refer to both diskettes and hard disks.

What Is a File?

Your computer groups related information on a disk into files, similar to the way you put related information into file folders stored in a filing cabinet in your office.

Separating the information into files enables you to quickly retrieve the exact information that you want on a disk without having to retrieve everything on the disk.

Filenames

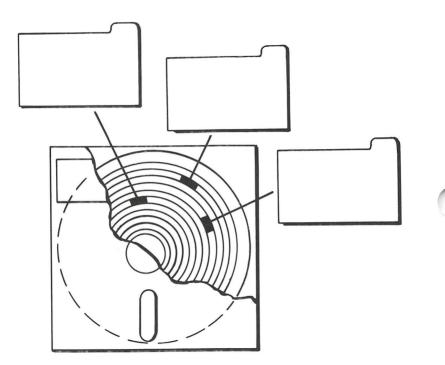
Each file on a disk must be uniquely identified. You wouldn't have two files with the same name in one filing cabinet in your office.

However, on different disks two files can use the same filename. You may have a file in your office with the same name as a file in another company office. The two files may or may not be duplicates of each other.

The filenames that your computer can recognize follow certain rules.

A filename can be up to eight characters long. To this name can be added an extension. Extensions always begin with a period (.) and are followed by 1, 2, or 3 characters.

Filenames can be entered in either upper or lower case, but are always displayed on the screen in upper case.



Valid characters for filenames are:

- the letters A to Z
- the numbers 0 to 9
- the characters ! @ # \$ % & () { } '__

Examples of Valid Filenames

The following four filenames are valid filenames because they are not too long and use valid characters.

REPORT

FOSDICK.LTR

MEMO.JUN

MAYSALES.\$&%

These filenames are invalid filenames. The reasons are listed to the right of each name.

4THQUARTER	Too long (it will be truncated
	to 8 characters)
LETTER/4	Illegal character in the name
NEW MEMO.JUN	Spaces in the name

Types of Files

There are two basic types of files:

- program files
- data files

Program files are files that do something; they perform a task. Data files are files that contain the information (data) used by program files. For example, the file you use for word processing is a program file. The files that run your computer are program files. A list of names and addresses would be a data file. The two types of files are related. The file containing the names and addresses can't do anything by itself. But a program file that is designed to sort a list of names alphabetically can't do so without a list of names.

Program filenames always have a .COM, .EXE, or .BAT filename extension. These three filename extensions are reserved exclusively for program files. Data filenames may or may not have filename extensions.

Getting Started Single Floppy Users

- What you will need
- Inserting a diskette
- Seeing what is on your diskette
- Correcting typing mistakes
- Preparing a new diskette for use
- Copying files
- Starting the computer using the copied diskette
- The benefit of copying your diskettes
- File maintenance
- Points to remember

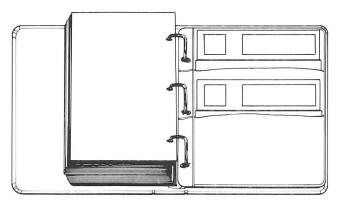
Getting Started Single Floppy Users

What you will need

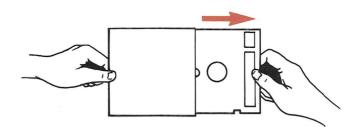
- Your computer completely set up as directed in the Installation Pamphlet
- The MSTM-DOS/GWBASIC System Diskette, which is enclosed in the MSTM-DOS User's Guide
- The MS-DOS Supplemental Programs Diskette
- Two new blank diskettes

Inserting a diskette

1 Take out the diskette labelled "MS-DOS/GWBASIC System Diskette" from its pocket in the back of the MS-DOS User's Guide. Note how the diskette is stored in its envelope, so that you can replace it the same way later.



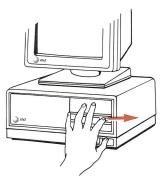
From now on the MS-DOS/GWBASIC System Diskette will be referred to as the MS-DOS System diskette. MS-DOS (DOS means Disk Operating System) is the program that runs your computer. It is read from the MS-DOS System diskette when the computer is turned on. It also contains commands that allow you to perform many tasks with your computer. 2 Remove the MS-DOS System diskette from its protective jacket. This jacket is designed to protect the diskette from dust and dirt.



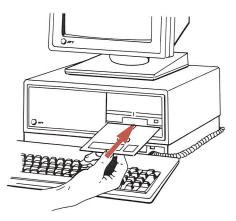
Letters (e.g., A, B, C) are used to identify the diskette drives on your computer. Your computer only has one drive — the A drive.

3 Open the diskette drive door. If your computer is equipped with a diskette drive with a locking door and the door is locked, a red square appears to the right of the lock switch. To open the door, first slide the lock switch to the right.

NOTE: Your computer may be equipped with a diskette drive that does not have a locking door. If your drive doesn't have a lock, continue to step 4.

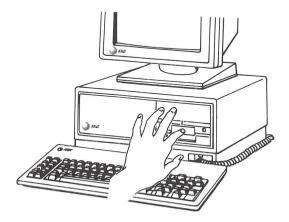


4 Hold the diskette by the side that has the label. Gently insert the diskette with its label facing up into disk drive A.

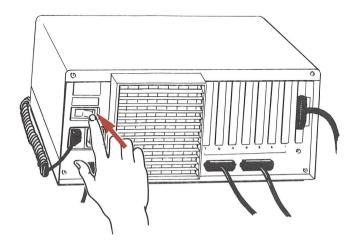


When the diskette is all the way in, you will hear a click.

5 Close the disk drive door.



6 Turn on your computer.



For about five seconds after your computer is turned on, it runs a self-check to make sure that it is working properly.

NOTE: It is extremely important that you never remove a diskette while it is being read from or written to by the computer. Doing so can destroy the information on the diskette. You can tell if the computer is accessing a diskette by looking at the indicator light on the disk drive.

IF THE DRIVE INDICATOR LIGHT IS ON, DO NOT REMOVE THE DISKETTE.

When the self-check is finished, the display on your screen should look similar to this:

Resident Diagnostics Rev 1.0 May 1984				
CPU (i8086) ROM Module DMA Timer DMA Control Interrupts 128 kb RAM RT Clock Floppy (A:)	Pass Pass Pass Pass Pass Pass Pass Ready			
AT&T Personal Computer 6300 Release 2.0 Copyright (c) 1984 by AT&T, all rights reserved				
Compatibility Software Copyright (c) 1984 by Phoenix Software Associates, Ltd.				
Microsoft MS-DOS version 2.11 Copyright 1981, 82, 83 Microsoft Corp.				
Command v. 2.11				
A> A>				

If you don't get this screen or one very similar to it, contact your AT&T Personal Computer Dealer or your AT&T Information Systems Service Hotline.

The A on your display screen is a prompt telling you that the computer is ready, and waiting for you to give it a command. NOTE: On the second and eighth line of your screen, the revision number and date will vary, depending on which version of the diagnostics you have. On the eighth line, the memory size can range from 128 to 640 kb RAM.

Seeing what is on your diskette

Your MS-DOS System diskette contains information. This information is stored in files on the diskette.

In the following example, only type ${\rm dir}.$ The A> prompt is provided to illustrate what appears on your screen.

1 To display on your screen a list of the files on your MS-DOS System diskette, type:

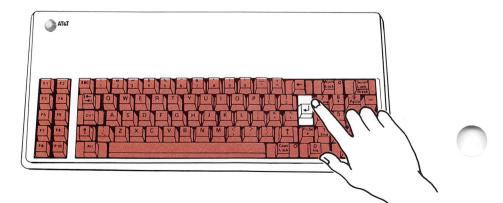
A>**dir**

Dir is short for directory. It displays a list or directory of all the files on a diskette.

2 Since the computer can't tell by itself when you have finished typing a command, it waits until you press the **RETURN** key before reading what you have typed. Therefore, always press **RETURN** to enter what you have typed into the computer.

Press the **RETURN** key now.

The **RETURN** key is the one that looks like this.



Your screen should look simi	lar to this:
------------------------------	--------------

COMMAND AUTOEXEC CHKDSK COMP	COM BAT COM COM	15957 1 6408 2713	4-12-84 4-12-84 4-12-84 4-12-84	12:30p 10:16a 10:16a 11:17a	
FC GWBASIC	EXE EXE	2585 65632	4-12-84 4-12-84	11:20a 7:51a	
22 File(s)			144384 bytes free		
A>					

Some of the names and numbers may be different, but the screen should show the same five columns and last line.

NOTE: On the line before the screen prompt, the number of files and free bytes will vary.

Correcting typing mistakes

At some time you will probably make a typing mistake. If you do, don't worry. It's easy to correct. Simply press the **BACKSPACE** key to erase any mistyped characters. Then re-type them correctly. If you do not notice your mistake and press **RETURN**, MS-DOS gives you a bad command diagnostic.



1 Try it now by intentionally mistyping DIR. First type (but do not press **RETURN**):

A>**dri**

- 2 Press the **BACKSPACE** key twice to erase the i and the r.
- 3 Re-type: ir

4 Press the **RETURN** key.

Now you see a new A> prompt, and you can type dir in correctly.

Had you pressed the **RETURN** key before correcting dri, the message shown below would have been displayed:

Bad command or filename

Preparing a new diskette for use

Before you can use a new diskette, it must first be prepared to accept data. This is called formatting the diskette. Formatting a diskette is like putting a file folder frame and empty file folders into a new filing cabinet because it provides a framework for your documents to be stored on the diskette.

As a test, see what happens when you try to use an unformatted diskette.

- **1** Insert a new blank diskette into the disk drive.
- 2 Close the drive door.
- **3** Type the following command:

A>**dir**

4 Press the **RETURN** key.

Since the new diskette is not formatted, your computer cannot read it and displays the message:

Disk error reading drive A Abort, Retry, Ignore?

- 5 To return to the A> prompt, type: **a**
- 6 Remove the unformatted disk from the drive.

The following steps show you how to prepare a new diskette for use.

1 Place your MS-DOS System diskette in the drive and type:

A>format

2 Press the **RETURN** key.

The following message is displayed:

Insert new diskette for drive A: and strike any key when ready

3 Remove your MS-DOS System diskette and insert the diskette to be formatted. Press the **RETURN** key or any other key.

As the diskette is being formatted, your screen displays the message:

Formatting...

When formatting is complete, your screen will display a message similar to this:

Formatting... Format Complete

362496 bytes total disk space 362496 bytes available on disk

```
Format another (Y/N)?
```

Don't be concerned if the numbers on your screen don't exactly match those shown here.

4 Type: n

And the A prompt reappears.

You have successfully formatted the diskette and it is ready for use.

5 Remove the newly formatted diskette and place it in its jacket.

As you use your computer for various applications such as word processing, financial modeling, storing information, etc., you will need to copy files from one diskette to another.

The following example shows you how to do this.

- 1 Insert your MS-DOS System diskette into the drive.
- 2 Copy the files from the MS-DOS System diskette to your newly formatted diskette by typing:

A> diskcopy

The following messages will appear:

Insert source diskette in drive A: Strike any key when ready

3 Since the diskette you want to copy is already in drive A, press the **RETURN** key.

The following messages will appear:

Copying 9 sectors per track, 2 sides Insert target diskette in drive A: Strike any key when ready

- 4 Remove your source diskette from the drive and place the formatted diskette into the drive.
- 5 Press the **RETURN** key.

Copy another (Y/N)?

6 Type N and press **RETURN**.

A>

When the lights on your disk drives go out and the A prompt is displayed, the copy is completed.

To see that the files were copied:

1 Place the new diskette into the drive and type:

A>**dir**

2 Press the **RETURN** key.

Displayed are the names of the files that you just copied from the MS-DOS System diskette. The time and date to the right of each filename are the time and date that the file was created.

3 Now make a copy of your MS-DOS Supplemental Programs Diskette using the same procedure.

Starting the computer using the copied diskette

- 1 Remove the MS-DOS Supplemental Programs diskette from drive A.
- 2 Insert the MS-DOS Supplemental Programs diskette into its envelope.
- **3** Reset your computer by pressing the **RESET** button.
- 4 Insert the copy of your MS-DOS System diskette into the drive and close the disk drive door.

When the A> prompt appears, notice that your screen looks just the same as it did when you started your computer with the original MS-DOS System diskette in drive A. Starting up the computer from the copy of the MS-DOS System diskette illustrates an important point. Since diskettes can wear out or get damaged:

ALWAYS USE WORKING COPIES OF YOUR PROGRAM DISKETTES.

From now on, use only copies of your MS-DOS System diskette like the one that you just made. Put your original diskette away in a safe place and only use it to make new "working" copies when you need them.

You should make working copies of your other diskettes as well and then only use the copies. Doing this insures that you will always have a good original diskette.

Your computer is now ready to use.

File maintenance

Seeing What's On a Diskette

You can display the names of files stored on a diskette by using the DIR (i.e., DIRectory) command. The directory of a diskette is like a table of contents in a book. This command also gives you information about the amount of space occupied by each file and the amount of space still available on the diskette.

To see what is stored on a diskette, type:

A>**dir**

Then press the **RETURN** key.

The display on your screen should look similar to this.

A>dir							
Volume in drive is DOCUMENTS Directory of A:							
COMMAND AUTOEXEC AT&T AT&T MODE	COM BAT DOC BAK COM	15957 128 11008 9716 1882	4-12-84 5-01-84 5-28-84 5-27-84 4-12-84	9:01a 11:34a 2:34p 10:28a 9:00a			
PROPOSAL FOSDICK SALES	DOC LET APR	29056 3607 15877	6-05-84 6-07-84 5-14-84	3:30p 5:00p 10:56a			
SALES SALES SALES	MAY JUN	16384 16384	6-14-84 7-14-84	11:23a 1:43p			
10 File(s) 235,688 bytes free A>							

Some of the names and numbers may be different, but the screen should show the same five columns and last line.

NOTE: On the line before the screen prompt, the number of files and free bytes will vary.

Preparing a New Diskette for Use

Before you can use a new diskette, it must be prepared to accept data. This is called formatting the diskette.

In order for a diskette to be able to start up the computer, it must have special files on it called MS-DOS system files. These files can be put on the diskette either when it is being formatted or by the SYS command. The system files take up about 12% of the storage space on a diskette.

Typically, if a diskette is going to contain a program, you should write the system files on it. However, if the diskette is going to be used only for data, leave the system files off and take advantage of the extra storage space available.

To format the new disk with the system files:

- **1** Insert your MS-DOS System diskette in drive A.
- 2 Type:

A>format /s

Notice the /s (for system) following the command format.

3 Press the **RETURN** key.

The following message is displayed:

Insert new diskette for drive A: and strike any key when ready 4 Insert the new diskette into drive A and press the **RETURN** key or any other key.

As the diskette is being formatted, your screen displays a message similar to the following:

Formatting...

After the lights on the disk drives go out, your screen displays the message:

Formatting...Format Complete System transferred 362496 bytes total disk space 43008 bytes used by system 319488 bytes available on disk

Format another (Y/N)?

The message indicates that 43008 bytes were used by the system files.

5 If you want to format more diskettes, type: **y**

If you are done formatting diskettes, type: **n**

The diskette is ready for use and can be used to start up your computer.

To format the new diskette without the system files:

- 1 Insert your MS-DOS System diskette in drive A.
- 2 Type:

A>**format**

Getting Started Single Floppy Users

This time the **/s** is left off.

3 Press the **RETURN** key.

The following message is displayed:

Insert new diskette for drive A: and strike any key when ready

4 Insert the new diskette into drive A and press the **RETURN** key or any other key.

As the diskette is being formatted, your screen displays the message:

Formatting...

After the lights on the disk drives go out, your screen displays a message similar to:

Formatting...Format Complete

362496 bytes total disk space 362496 bytes available on disk

Format another (Y/N)?

Note that the total capacity of the disk is available for data storage.

5 If you want to format more diskettes, type: **y**

If you are done formatting diskettes, type: **n**

The diskette is ready to receive data.

WARNING: Keep a supply of formatted diskettes readily available. If you need a new diskette while running an applications program, you may not have the opportunity to format one.

Copying Files

As you use your computer, you will need to copy files. There are many reasons for this. Sometimes you may want to make copies of files for someone else to use. Other times you may want an extra copy for safety.

Files are usually copied from one disk to another disk or diskette. But if a new filename is substituted, a copy of a file can be made on the same disk.

1 Type:

A>copy oldname newname

Substitute the current name of the file that you want to rename for **oldname** and the new name for **newname** in the example above.

2 Press the **RETURN** key.

The Value of Copying Diskettes

You should make "duplicates" or extra copies of your important files and keep them in reserve for an emergency.

Then if a file is lost or damaged, you haven't lost any valuable time or information. Just take out your duplicate diskette, make a new copy of it, put the duplicate away again, and then continue with your work.

Many computer users make duplicate copies of files that have been updated at the end of each day.

Copying a Diskette

DISKCOPY is a quick way to duplicate your diskettes. It also formats the diskette for you.

To use DISKCOPY:

1 With the A> prompt displayed, type:

A>diskcopy a:

2 Press the **RETURN** key.

Your screen will display:

Insert source diskette in drive A: Press any key when ready

- **3** Insert the original diskette (source) in drive A.
- 4 Press any key.

This message is displayed:

Copying 9 sectors per track, 2 sides

The diskette is copied into the computer's memory. In about a minute, this message will appear on your screen:

Insert target diskette in drive A: Press any key when ready

- 5 Insert the disk that will become the duplicate copy in drive A.
- 6 Press any key.

The computer now copies from its memory to the duplicate diskette. Depending on how much memory you have on your system, DISKCOPY may prompt you to repeat steps 3 - 6 one time.

When DISKCOPY is finished, the screen displays:

Copy another (Y/N)?

7 If you want to make another copy, type: **Y**

If you are done, type: **n**

Deleting Files

Eventually you will want to erase old unwanted files to free up space for new files on your diskette.

It is a good practice to periodically review your diskettes for old or duplicate files. A diskette with many versions of a file can be confusing.

To delete a file from a diskette:

- 1 Insert the diskette that contains the file to be deleted in drive A.
- 2 With the A>prompt displayed, type:

A>**del filename**

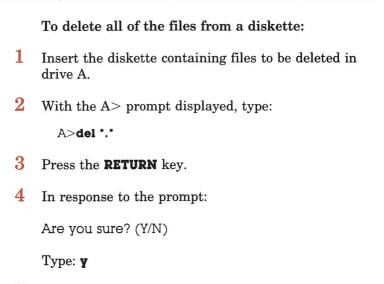
Substitute the name of the file that you want to delete for **filename** in the example above.

3 Press the **RETURN** key.

You can delete all of the files on the diskette with one command. This is a quick way to free up an old diskette for new files, but it can be dangerous.

ONCE INFORMATION IS DELETED USING THIS METHOD, IT CANNOT BE RESTORED. THE IN-FORMATION IS GONE.

If you don't have a copy of this diskette, all the information is lost.



5 Press the **RETURN** key.

Points to remember

- 1. Always insert your diskettes with the label up.
- 2. Always press the **RETURN** key after typing in a command such as DIR or COPY to execute that command.
- 3. Before a new diskette can be used it must be formatted.
- 4. If you want to copy all of the files from one diskette to another, use the command DISKCOPY.

To get some more hands-on practice and to learn more about your computer and what it can do, use the Tutorial Diskette that comes with your AT&T Personal Computer 6300 User's Guide.



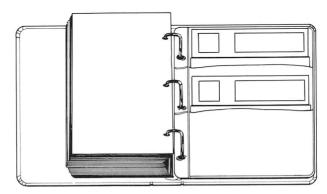
Getting Started Dual Floppy Users

- What you will need
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- Correcting typing mistakes
- Preparing a new diskette for use
- Copying files
- Selecting a different disk drive
- Starting the computer using the copied diskette
- The benefit of copying your diskettes
- File maintenance
- Points to remember

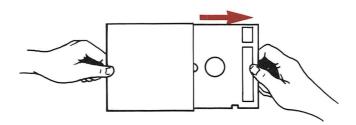
- Your computer completely set up as directed in the Installation Pamphlet
- The MSTM-DOS/GWBASIC System Diskette, which is enclosed in the MSTM-DOS User's Guide
- The MS-DOS Supplemental Programs Diskette
- Two new blank diskettes

Inserting a diskette

1 Take out the diskette labelled "MS-DOS/GWBASIC System Diskette" from its pocket in the back of the MS-DOS User's Guide. Note how the diskette is stored in its envelope, so that you can replace it the same way later.



From now on the MS-DOS/GWBASIC System Diskette will be referred to as the MS-DOS System diskette. MS-DOS (DOS means Disk Operating System) is the program that runs your computer. It is read from the MS-DOS System diskette when the computer is turned on. It also contains commands that allow you to perform many tasks with your computer. 2 Remove the MS-DOS System diskette from its protective jacket. This jacket is designed to protect the diskette from dust and dirt.



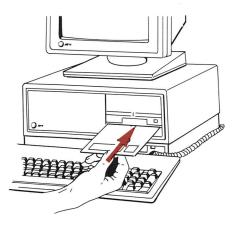
Letters (e.g., A, B, C) are used to identify the diskette drives on your computer. The lower drive is drive A; the upper one is drive B.

3 Open the diskette drive door. If your computer is equipped with diskette drives with locking doors and a door is locked, a red square appears to the right of the lock switch. To open the door, first slide the lock switch to the right.

NOTE: Your computer may be equipped with diskette drives that do not have locking doors. If your drives don't have locks, continue to step 4.

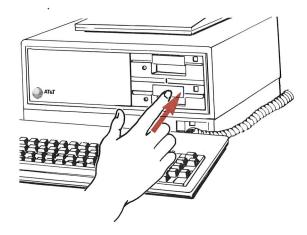


4 Hold the diskette by the side that has the label. Gently insert the diskette with its label facing up into disk drive A. Drive A is the lower one.

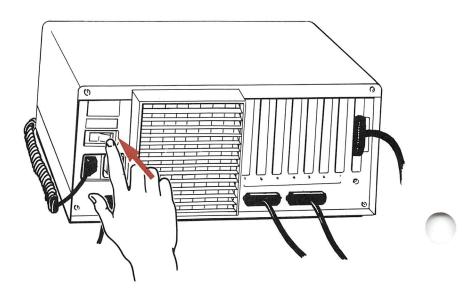


When the diskette is all the way in, you will hear a click.

5 Close the disk drive door.



6 Turn on your computer.



For about five seconds after your computer is turned on, it runs a self-check to make sure that it is working properly.

NOTE: It is extremely important that you never remove a diskette while it is being read from or written to by the computer. Doing so can destroy the information on the diskette. You can tell if the computer is accessing a diskette by looking at the indicator light on the drive that the diskette is in.

IF THE DRIVE INDICATOR LIGHT IS ON, DO NOT REMOVE THE DISKETTE.

When the self-check is finished, the display on your screen should look similar to this:

Resident Diggnostics Rev 1.0 May 1984 CPU (i8086) Pass ROM Module Pass DMA Timer Pass DMA Control Pass Interrupts Pass 128 Kb RAM Pass RT Clock Pass Fixed Disk Not Present Floppy (A:) Readv Primary Boot-strap... AT&T Personal Computer 6300 Release 2.0 Copyright (c) 1984 by AT&T, all rights reserved Compatibility Software Copyright (c) 1984 by Phoenix Software Associates, Ltd. Microsoft MS-DOS version 2.11 Copyright 1981, 82, 83 Microsoft Corp. Command v. 2.11 A>A >

If you don't get this screen or one very similar to it, contact your AT&T Personal Computer Dealer or the AT&T Information Systems Services Hotline.

The A on your display screen is a prompt telling you that the computer is ready, and waiting for you to give it a command.

NOTE: On the second line of your screen, the revision number and the date will vary, depending on which version of the diagnostics you have. On the eighth line, the memory size can range from 128 kb to 640 kb RAM.

Seeing what is on your diskette

Your MS-DOS System diskette contains information. This information is stored in files on the diskette.

In the following example, only type **dir**. The A> prompt is provided to illustrate what appears on your screen.

1 To display on your screen a list of the files on your MS-DOS System diskette, type:

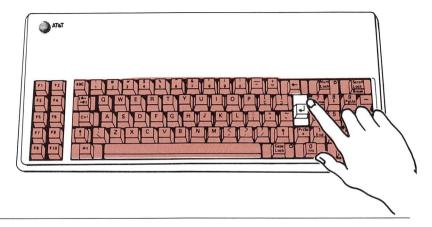
A>**dir**

Dir is short for directory. It displays a list or directory of all the files on a diskette.

2 Since the computer can't tell by itself when you have finished typing a command, it waits until you press the **RETURN** key before reading what you have typed. Therefore, always press **RETURN** to enter what you have typed into the computer.

Press the **RETURN** key now.

The **RETURN** key is the one that looks like this.



Your screen should look similar to this:

FC FDISK FIND FORMAT	EXE COM EXE COM	2585 4640 6331 5776	4-12-84 4-12-84 4-12-84 4-12-84	9:00a 9:00a 9:00a 9:00a	
•					
•					
RESTORE	COM	4043	4-12-84	9:00a	
33 File(s)			150528 bytes free		
A>					

Some of the names and numbers may be different, but the screen should show the same five columns and last line.

NOTE: On the line before the screen prompt, the number of files and free bytes will vary.

Correcting typing mistakes

At some time you will probably make a typing mistake. If you do, don't worry. It's easy to correct. Simply press the **BACKSPACE** key to erase any mistyped characters. Then re-type them correctly. If you do not notice your mistake and press **RETURN**, MS-DOS gives you a bad command diagnostic.



1 Try it now by intentionally mistyping DIR. First type (but do not press **RETURN**):

A>**dri**

- 2 Press the **BACKSPACE** key twice to erase the i and the r.
- 3 Re-type: ir
- 4 Press the **RETURN** key.

Now you see a new A> prompt, and you can type dir in correctly.

Had you pressed the **RETURN** key before correcting dri, the message shown below would have been displayed:

Bad command or filename

Preparing a new diskette for use

Before you can use a new diskette, it must first be prepared to accept data. This is called formatting the diskette. Formatting a diskette is like putting a file folder frame and empty file folders into a new filing cabinet because it provides a framework for your documents to be stored on the diskette.

As a test, see what happens when you try to use an unformatted diskette.

- **1** Insert a new blank diskette into the upper disk drive on your computer. This is called drive B.
- 2 Close the drive door.
- **3** Type the following command, making sure to include the space between the r and b:

A>dir b:

The **b**: tells the computer to use the diskette in drive B. You type a colon (:) by holding down one of the **SHIFT** keys and simultaneously pressing the colon key.

Format from MS. DOS/GW-Basic in A to unformatted disc in B

4 Press the **RETURN** key.

Since the new diskette is not formatted, your computer cannot read it and displays the message:

Disk error reading drive B Abort, Retry, Ignore?

5 To return to the A> prompt, type: a

The following steps show you how to prepare a new diskette for use.

1 Format the new disk in drive B by typing:

A>format b:

2 Press the **RETURN** key.

The following message is displayed:

Insert new diskette for drive B: and strike any key when ready

3 Since the new diskette is already in drive B, press the **RETURN** key or any other key.

As the diskette is being formatted, your screen displays the message:

Formatting...

When formatting is complete, your screen will display a message similar to this:

Formatting... Format Complete

362496 bytes total disk space 362496 bytes available on disk

```
Format another (Y/N)?
```

Don't be concerned if the numbers on your screen don't exactly match those shown here.

4 Type: n

You have successfully formatted the diskette and it is ready for use.

As you use your computer for various applications such as word processing, financial modeling, storing information, etc., you will need to copy files from one diskette to another.

The following example shows you how to do this.

1 Copy the files from the MS-DOS System diskette to your newly formatted diskette by typing:

A> diskcopy a: b:

The following messages will appear:

Insert source diskette in drive A: Insert target diskette in drive B: Strike any key when ready

2 Since the diskette you want to copy is already in drive A, press the **RETURN** key.

The following messages will appear:

Copying 9 sectors per track, 2 sides

3 When the copy is completed, the following message will appear:

Copy another (Y/N)?

4 Type N and press **RETURN**.

A>

When the lights on your disk drives go out and the A prompt is displayed, the copy is completed.

To see that the files were copied:

1 Type:

A>**dir b**:

2 Press the **RETURN** key.

Displayed are the names of the files that you just copied from the MS-DOS System diskette. The time and date to the right of each filename are the time and date that the file was created.

3 Now make a copy of your MS-DOS Supplemental Programs diskette using the same procedure.

Selecting a different disk drive

Have you noticed that each time the computer completes a task (such as DIR or COPY) your computer displays the A > prompt again?

This is because your computer always returns to the disk drive it began on after it completes its task, unless the task was to switch drives.

The letter beginning the screen prompt indicates which drive is the current or default drive. For example, A> means that the default or current drive is A. B> indicates that the default drive is drive B.

Remember, before you turned on the computer, you put the MS-DOS System diskette in drive A. This is because when your computer is turned on, it makes drive A the default drive.

However, you can change the default drive. To do so:

1 Type:

A>**b:**

Don't forget the colon.

2 Press the **RETURN** key.

Your screen looks like this:

A>b: B>

You are now using drive B.

Getting Started Dual Floppy Users

Starting the computer using the copied diskette

- 1 Remove the MS-DOS System diskette from drive A.
- 2 Insert the MS-DOS System diskette into its envelope.
- **3** Remove the copy that you made of the MS-DOS Supplemental Programs diskette from drive B.
- 4 Insert the copy of your MS-DOS System diskette into drive A and close the disk drive door.
- 5 Press the **RESET** button.

When the A prompt appears, notice that your screen looks just the same as it did when you started your computer with the original MS-DOS System diskette in drive A.

The benefit of copying your diskettes

Starting up the computer from the copy of the MS-DOS System diskette illustrates an important point. Since diskettes can wear out or get damaged:

ALWAYS USE WORKING COPIES OF YOUR PROGRAM DISKETTES.

From now on, use only copies of your MS-DOS System diskette like the one that you just made. Put your original diskette away in a safe place and only use it to make new "working" copies when you need them.

You should make working copies of your other diskettes as well and then only use the copies. Doing this insures that you will always have a good original diskette.

Your computer is now ready to use.

Seeing What's On a Diskette

You can display the names of files stored on a diskette using the DIR (i.e., Directory) command. The directory of a diskette is like a table of contents in a book. This command also gives you information about the amount of space occupied by each file and the amount of space still available on the diskette.

To see what is stored on a diskette, type:

A>**dir**

Then press the **RETURN** key.

The display on your screen should look similar to this.

```
A>dir
Volume in drive is DOCUMENTS Directory of A:
COMMAND
                COM
                         15957
                                 4-12-84
                                            9:01a
AUTOEXEC
                BAT
                            128
                                 5-01-84
                                            11:34a
AT&T
                DOC
                         11008
                                 5-28-84
                                             2:34p
                                 5-27-84
AT&T
                BAK
                          9716
                                            10:28a
MODE
                COM
                          1882
                                 4-12-84
                                            9:00a
PROPOSAL
                DOC
                         29056
                                 6-05-84
                                            3:30p
FOSDICK
                LET
                          3607
                                 6-07-84
                                            5:00p
SALES
                         15877
                APR
                                 5-14-84
                                           10:56a
SALES
                MAY
                         16384
                                 6-14-84
                                           11:23a
SALES
                JUN
                         16384
                                 7-14-84
                                             1:43p
       10 File(s)
                                235,688 bytes free
A>
```

Some of the names and numbers may be different, but the screen should show the same five columns and last line.

NOTE: On the line before the screen prompt, the number of files and free bytes will vary.

Preparing a New Diskette for Use

Before you can use a new diskette, it must be prepared to accept data. This is called formatting the diskette.

In order for a diskette to be able to start up the computer, it must have special files on it called MS-DOS system files. These files can be put on the diskette either when it is being formatted or by the SYS command. The system files take up about 12% of the storage space on a diskette.

Typically, if a diskette is going to contain a program, you should write the system files on it. However, if the diskette is going to be used only for data, leave the system files off and take advantage of the extra storage space available.

To format the new disk with the system files:

- 1 Insert your MS-DOS System diskette in drive A.
- 2 Type:

A>format /s

Notice the **/s** (for system) following the command format.

3 Press the **RETURN** key.

The following message is displayed:

Insert new diskette for drive A: and strike any key when ready 4 Insert the new diskette into drive A and press the **RETURN** key or any other key.

As the diskette is being formatted, your screen displays a message similar to the following:

Formatting...

After the lights on the disk drives go out, your screen displays the message:

Formatting...Format Complete System transferred 362496 bytes total disk space 43008 bytes used by system 319488 bytes available on disk

Format another (Y/N)?

The message indicates that 43008 bytes were used by the system files.

5 If you want to format more diskettes, type: **y**

If you are done formatting diskettes, type: n

The diskette is ready for use and can be used to start up your computer.

To format the new diskette without the system files:

- **1** Insert your MS-DOS System diskette in drive A.
- 2 Type:

A>format

This time the **/s** is left off.

3 Press the **RETURN** key.

The following message is displayed:

Insert new diskette for drive A: and strike any key when ready

4 Insert the new diskette into drive A and press the **RETURN** key or any other key.

As the diskette is being formatted, your screen displays the message:

Formatting...

After the lights on the disk drives go out, your screen displays a message similar to:

Formatting...Format Complete

362496 bytes total disk space 362496 bytes available on disk

Format another (Y/N)?

Note that the total capacity of the disk is available for data storage.

5 If you want to format more diskettes, type: **y**

If you are done formatting diskettes, type: **n**

The diskette is ready to receive data.

NOTE: You may format a diskette in the B drive. To do this, type A>**FORMAT B:** /**S**

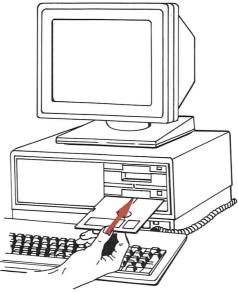
WARNING: Keep a supply of formatted diskettes readily available. If you need a new diskette while running an applications program, you may not have the opportunity to format one.

Copying Files

As you use your computer, you will need to copy files. There are many reasons for this. Sometimes you may want to make copies of files for someone else to use. Other times it may be to have an extra copy for safety.

To copy a file from one diskette to another:

1 Place the original diskette in drive A (the lower drive).



- 2 Place the formatted diskette that the file will be copied to in drive B (the upper drive).
- 3 Type:

A>copy filename b:

Substitute the name of the file that you want to copy for **filename**.

4 Press the **RETURN** key.

When the A> returns, the file has been copied onto the diskette in drive B.

NOTE: You don't always have to copy from A to B. You can copy from B to A.

To make a copy of a file on the same diskette:

Files are usually copied from one diskette to another. But if a new filename is substituted, a copy of a file can be made on the same diskette.

- **1** Place the diskette in drive A (the lower drive).
- 2 Type:

A>copy oldname newname

Substitute the current name of the file that you want to rename for **oldname** and the new name for **newname** in the example above.

3 Press the **RETURN** key.

A copy of the file with the new filename is copied onto the diskette in the drive A. The original file is still intact.

The Value of Copying Diskettes

You should make duplicates of your diskettes that contain important information and keep them in reserve for an emergency.

Then if a diskette is lost or damaged, you haven't lost any valuable time or information. Just take out your duplicate diskette, make a new copy of it, put the duplicate away again, and then continue with your work.

Many computer users make duplicate copies of files that have been updated at the end of each day.

Copying a Diskette

There are two ways that you can copy diskettes. The first uses the DISKCOPY command. The second uses the COPY command discussed above. If you have a hard disk, the BACKUP command is also available to you.

Copying a Diskette Using DISKCOPY

DISKCOPY is a quick way to make duplicates of your diskettes. It also formats the diskette for you.

To use DISKCOPY:

- **1** Insert the MS-DOS System diskette in drive A and turn on the computer.
- 2 With the A> prompt displayed, type:

A>diskcopy a: b:

- 3 Press the **RETURN** key.
- 4 In response to the prompt:

Insert source disk in drive A Insert target disk in drive B Strike any key when ready

Remove the MS-DOS System diskette from drive A.

Insert the original diskette (source) in drive A, and the diskette that will become the backup copy (target) in drive B. 5 Press the **RETURN** key or any other key.

The following message is displayed:

Copying 2 side(s), 9 sectors per track

When DISKCOPY is finished, the screen will display the message:

Copy complete Copy another diskette (Y/N)?

6 If you want to make another copy, type: **Y**

If you are done, type: **n**

Copying a Diskette Using COPY

To make a duplicate of a diskette using COPY:

- **1** Insert the MS-DOS System diskette in drive A and turn on the computer.
- 2 When the A> prompt is displayed, insert the original diskette in drive A.
- 3 Insert the diskette that the file will be copied to in drive B.

4 Type:

A>copy a:*.* b:

5 Press the **RETURN** key.

As each file is copied from the diskette in drive A to the diskette in drive B, its filename is displayed on the screen.

When the A > prompt is displayed, the copy is complete.

The Difference Between DISKCOPY and COPY

Although both DISKCOPY and COPY copy your diskettes, there is an important difference. DISK-COPY copies a diskette from beginning to end without regard to what is on the diskette. It produces a mirror image of the original diskette.

COPY, when used with the *.* form, copies all the files on a diskette file by file.

To illustrate what happens, consider a file named REPORT.

If you add more information to REPORT, the file needs more room on the diskette. MS-DOS begins writing REPORT on the diskette in the same space from which it was read. However, since REPORT will no longer fit in the same amount of space (the file is larger than it used to be), the revised version of RE-PORT must be broken up on the diskette. REPORT is written back onto the diskette in the original space until the original space is full and then the remaining data is written in the next available space on the diskette. As you can see, after a while your files can have parts spread over the entire diskette. There is nothing wrong with this, but it is inefficient.

You might think of the difference as piecing together a report with parts inserted randomly in different file folders versus finding the report complete in one file folder.

DISKCOPY transfers the files to the new diskette just as broken up as they are on the original diskette. COPY, on the other hand, copies each file individually. It locates all of the separate parts of each file and then writes them as one continuous file. Thus your disk is reorganized for you automatically when you use COPY to back up your diskettes and is therefore the recommended procedure.

Deleting Files

Eventually you will want to erase old unwanted files to free up space for new files on a diskette.

It is a good idea to periodically review your diskettes for old or duplicate files. A diskette with many versions of a file can be confusing.

To delete a file from a diskette:

- 1 Insert the diskette that contains the file to be deleted in drive A.
- 2 With the A> prompt displayed, type:

A>**del filename**

Substitute the name of the file that you want to delete, and the extension, if there is one, for **filename** in the example above.

3 Press the **RETURN** key.

You can delete all of the files on a diskette with one command. This is a quick way to free up an old diskette for new files, but it can be dangerous.

ONCE INFORMATION IS DELETED USING THIS METHOD, IT CANNOT BE RESTORED. THE IN-FORMATION IS GONE.

If you don't have a backup of this diskette, all of the information is lost.

To delete all of the files from a diskette:

- **1** Insert the diskette containing the files to be deleted in drive A.
- 2 With the A> prompt displayed, type:

A>**del *.***

- **3** Press the **RETURN** key.
- 4 In response to the prompt:

Are you sure (y/n)

Туре: ү

5 Press the **RETURN** key.

- 1. Always insert your diskettes with the label up.
- 2. Drive A is the lower disk drive.
- 3. Drive B is the upper disk drive.
- 4. Always press the **RETURN** key after typing in a command such as DIR or COPY to execute that command.
- 5. Before a new diskette can be used it must be formatted.
- 6. If you want to copy all of the files from one diskette to another, use the *.* option.

To get some more hands-on practice and to learn more about your computer and what it can do, use the Tutorial Diskette that comes with this guide.

Getting Started Hard Disk Users

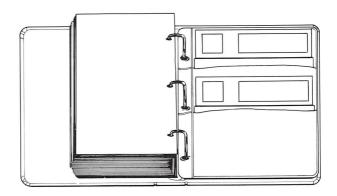
- What you will need
- Inserting a diskette
- Seeing what is on your diskette
- Correcting typing mistakes
- Preparing your hard disk for use
- Starting up your computer from the hard disk
- Selecting a different disk drive
- Copying files
- The benefit of copying your diskettes
- File maintenance
- Points to remember

What you will need

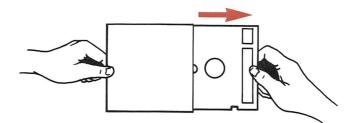
- Your computer completely set up as directed in the Installation Pamphlet
- The MSTM-DOS/GWBASIC System diskette which is enclosed in the MSTM-DOS User's Guide
- The MS-DOS Supplemental Programs diskette

Inserting a diskette

1 Take out the diskette labelled "MS-DOS/GWBASIC System diskette" from its pocket in the back of the MS-DOS User's Guide. Note how it is stored in its jacket so that you can replace it the same way later.



MS-DOS (DOS means Disk Operating System) is the program that runs your computer. It is read from the MS-DOS System diskette when the computer is turned on. It also contains commands that allow you to perform many tasks with your computer. 2 Remove the MS-DOS System diskette from its protective jacket. The jacket is designed to protect the diskette from dust and dirt.



Letters (e.g., A, B, C) are used to identify the disk drives on your computer. The diskette drive on your computer is disk drive A. The hard disk drive is drive C.

3 Open the diskette drive door.

If your computer is equipped with a diskette drive with a locking door and the door is locked, a red square appears to the right of the lockswitch. To open the door, first slide the lockswitch to the right.

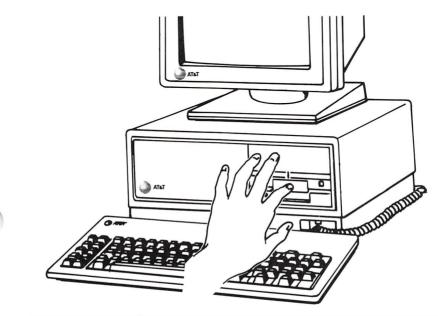


4 Holding the diskette by the side that has the label, gently insert it with its label facing up into your computer's diskette drive.

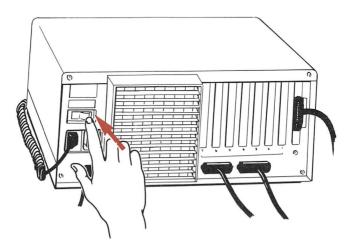


When the diskette is all the way in, you will hear a click.

5 Close the diskette drive door.



6 Turn on your computer.



For about 5 seconds after you turn your computer on, it runs a self-check to make sure that it is working properly.

NOTE: It is extremely important that you never remove a diskette while it is being read from or written to by the computer. Doing so can destroy the information on the diskette. You can tell if the computer is accessing a diskette by looking at the indicator light on the drive that the diskette is in.

IF THE DRIVE INDICATOR LIGHT IS ON, DO NOT REMOVE THE DISKETTE.

When the self-check is done, the results on your screen should look similar to this:

Resident Diagnostics Rev 1.0 May 1984			
CPU (i8086)	Pass		
ROM Module	Pass		
DMA Timer	Pass		
DMA Control	Pass		
Interrupts	Pass		
256Kb RAM	Pass		
RT Clock	Pass		
Fixed Disk	l Ready		
Floppy (A:)	Ready		

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Compatibility Software Copyright (c) 1984 by Phoenix Software Associates, Ltd.

Microsoft MS-DOS Version 2.11 Copyright 1981, 82, 83 Microsoft Corp.

Command v. 2.11

A> A>

NOTE: On the second line of your screen, the revision number and the date will vary, depending on which version of the diagnostics you have. On the eighth line, the memory size can range from 128 kb to 640 kb RAM.

If you don't see a screen like this or very similar to it, contact your AT&T Personal Computer Dealer or the AT&T Information Systems Service Hotline.

The A> on your display screen is a prompt telling you that the computer is ready, and waiting for you to give it a command.

Seeing what is on your diskette

Your MS-DOS System diskette contains information. This information is stored on the diskette in files.

In the following example, only type **dir**. The A> prompt is provided to illustrate what appears on your screen.

1 To display on your screen a list of the files on your MS-DOS System diskette, type:

A>**dir**

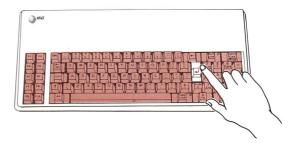
Dir is short for directory. It displays a list or directory of all the files on a diskette.

Since the computer can't tell by itself when you have finished typing a command, it waits until you press the **RETURN** key before reading what you have typed. Therefore, always press **RETURN** to enter what you have typed into the computer.

2 Press the **RETURN** key now.

The **RETURN** key is the one that looks like this.

* Illustration of keyboard with finger extending over **RETURN** key, the **RETURN** key is highlighted)*



Your screen should look similar to this:

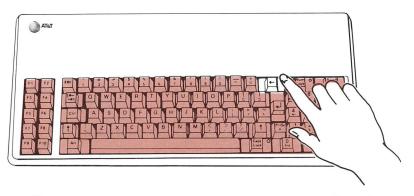
FC FDISK FIND FORMAT	EXE COM EXE COM	2585 4640 6331 5776	4-12-84 4-12-84 4-12-84 4-12-84	9:00a 9:00a 9:00a 9:00a	
RESTORE	COM	4043	4-12-84	9:00a	
	33 File(s)		150528 bytes free		
A>					

Some of the names and numbers may be different, but the screen should show the same five columns and last line.

NOTE: On the lines before the screen prompt, the number of files and free bytes will vary.

Correcting typing mistakes

Sometime you will probably make a typing mistake. If you do, don't worry, it is easy to correct. Simply press the **BACKSPACE** key to erase the mistake. Then re-type it correctly. If you do not notice your mistake and press **RETURN**, MS-DOS gives a bad command diagnostic.



1 Try it now by intentionally mistyping DIR. Type (but do not press **RETURN**):

A>**dri**

- 2 Press the **BACKSPACE** key twice to erase the i and the r.
- 3 Re-type: ir
- 4 Press the **RETURN** key.

Had you pressed the **RETURN** key before correcting dri, the following message would have been displayed:

Bad command or filename

Preparing your hard disk for use

Before you can use your hard disk, it must first be prepared to accept data. This is called formatting the disk. Formatting the disk is like putting a file folder frame and empty file folders into a new filing cabinet because it provides a framework for your documents to be stored on the hard disk.

This initial one-time preparation is done in two steps and takes about 1 minute. Step 1 is to partition the hard disk. Step 2 is to format it.

The following steps show you how to prepare your hard disk for use.

Partitioning Your Hard Disk

Partitioning the hard disk is like installing the frame that holds file folders in the filing cabinet's drawers.

1 To partition the hard disk, type:

A>**fdisk**

2 Press the **RETURN** key.

The screen below is displayed.

Fixed Disk Setup Program				
FDISK Options				
Choose one of the following:				
 Create MS-DOS Partition Change Active Partition Delete MS-DOS Partition Display Partition Data 				
Enter Choice:(1)				
Press Esc to return to MS-DOS ()				
Option 1 has been pre-selected. To create the partition, press the RETURN key.				
If you wanted to select a different option, you would first type its number and then press RETURN .				

In response to the prompt:

3

Do you want to use the entire fixed disk for MS-DOS (Y/N)..... (Y)

4 Select Yes by pressing the **RETURN** key.

The screen displays the message:

Total fixed disk space is 306 cyls. The current active partition is 1 $\,$

NOTE: If you have a 20 MB hard disk, total fixed disk space is 611 cyls (cylinders).

The entire fixed disk is now allocated for MS-DOS operations.

When the FDISK options menu reappears, the following prompt will appear at the bottom of the screen:

Press ESC to return to MS-DOS

5 Press the ESC key.

The screen displays:

System will now reboot Insert MS-DOS diskette in drive A: Press any key when ready ...

6 Insert your MS-DOS System diskette in drive A and press any key.

The system restarts and runs diagnostics. After a moment, the screen displays the A> prompt.

Now, to the second part of this one-time preparation.

Formatting Your Hard Disk

Formatting the hard disk is like hanging empty file folders in the folder frame.

For convenience, you can set up your hard disk so that when you turn on your computer, it starts up using the hard disk instead of the MS-DOS System diskette. **1** To do this type:

A>format /s c:

2 Press the **RETURN** key.

This message is displayed:

. . !!! WARNING !!!

You are formatting the hard disk

THIS WILL DESTROY ALL DATA ON THE HARD DISK

Enter Y to continue, any other key will cancel the request to format.

Do you wish to format the hard disk?

3 Type: ¥

The following message is displayed:

Press any key to begin formatting C:

4 Press the **RETURN** key or any other key.

Your screen displays the message:

Formatting...

After a few minutes, your screen looks like this:

```
Formatting...Format Complete
System transferred
10592256 bytes total disk space
42496 bytes used by system
10549760 bytes available on disk
A>
```

Don't be concerned if the numbers on your screen don't exactly match the numbers shown above. They will vary depending on the specific disk installed in your computer.

You have successfully completed the preparation process. Your hard disk is ready for use.

Starting up your computer from the hard disk

Remember, before you turned on your computer, you put the MS-DOS System diskette in drive A. This is because when your computer is turned on, it first looks for the programs it needs to run on drive A.

Since you formatted your hard disk using the /s option, you can start up your computer directly from the hard disk.

- 1 Leave the diskette drive door OPEN.
- 2 Press the **RESET** button.

Notice that your screen looks much the same as it did when you first turned on your computer with the MS-DOS System diskette in drive A. However, the prompt is now C instead of A.

Now that your hard disk is set up, the computer will switch to drive C if it doesn't find the MS-DOS programs it needs in drive A. When you start up the computer using the hard disk, the C drive becomes the default drive.

Selecting a different disk drive

The letter beginning the screen prompt indicates which drive is the current drive. For example, A> means that the current drive is A. C> indicates that the current drive is drive C.

You can change from one drive to another whenever you want. To do so:

1 Type:

С>**а:**

Don't forget the colon.

2 Press the **RETURN** key.

Your screen looks like this:

 $C>\alpha$: A>

You are now on drive A.

Unless you change drives, your computer always returns to the drive it was using after it completes a task. As you use your computer for various applications such as word processing, financial modeling, storing information, etc. you will need to copy files from one diskette to another.

For convenience and safety, you should copy all of the files from your MS-DOS System diskette to the hard disk. The following example shows you how to do this.

- 1 Place the MS-DOS System diskette in drive A.
- 2 Close the drive door.
- **3** Copy the files from the MS-DOS System diskette to the hard disk by typing:

A>copy a:*.* c:

The *.* copies all of the files from your MS-DOS System diskette to the hard disk without your having to separately type in each file's name.

4 Press the **RETURN** key.

As each file is being copied from the diskette in drive A to the hard disk, the name of that file is displayed on your screen, similar to the following:

```
A>copy a:*.* c:
A:COMMAND.COM
A:ANSI.SYS
A:ASSIGN.COM
A:RESTORE.COM
33 File(s) copied
A>
```

NOTE: The number of files copied will vary.

- 5 When the light on drive A goes out and the A> prompt is displayed, remove the MS-DOS System diskette from drive A.
- 6 Insert the MS-DOS System diskette into its envelope.

Since there are several useful programs on your MS-DOS Supplemental Programs diskette, you should also copy the files from this diskette over to the hard disk.

- 7 Insert the Supplemental Programs diskette into drive A.
- 8 Type:

C>copy a:*.* c:

9 Copy the diskette by pressing the **RETURN** key.

The files on the Supplemental Programs diskette are copied onto the hard disk.

10 To verify that the files were copied, check the directory of drive C against that of drive A. Type:

C>**dir a:**

11 Press the **RETURN** key.

12 Type:

C > dir

13 Press the **RETURN** key.

The directory of drive C lists the files copied from both the MS-DOS System diskette and the MS-DOS Supplemental Programs diskette.

The benefit of copying your diskettes

Since diskettes can wear out or get damaged:

ALWAYS USE WORKING COPIES OF YOUR PROGRAM DISKETTES.

From now on, use only copies of your programs. Put the originals away in a safe place and only use them to make new "working" copies when you need them.

Using only working copies of your program diskettes insures that you will always have good original program diskettes.

It is best to put your original MS-DOS System diskette away in a safe place and use the hard disk to start your computer each time.

Your computer is now ready to use.

You can copy many of your application programs onto your hard disk just as you did your MS-DOS System diskette and then run them all from the hard disk. This is not only safer than using your original diskettes, but your hard disk can read and write information faster than a diskette. NOTE: This section assumes that the hard disk (C) is the default drive.

Seeing What's on a Hard Disk or Diskette

You can display the names of files stored on a disk or diskette by using the DIR (i.e., DIRectory) command. The directory of a disk or diskette is like a table of contents in a book. This command also gives you information about the amount of space occupied by each file and the amount of space still available on the hard disk or diskette.

To see what is stored on a diskette, type:

C>**dir a**:

Then press the **RETURN** key.

To see what is on the hard disk, type:

C>**dir**

Preparing a New Diskette for Use

Before you can use a new diskette, it must be prepared to accept data. This is called formatting the diskette.

WARNING: BE CAREFUL TO FOLLOW THESE INSTRUCTIONS EXACTLY. OTHERWISE, YOU COULD LOSE ALL THE INFORMATION ON YOUR HARD DISK. In order for a diskette to be able to start up the computer, it must have special files on it called MS-DOS system files. These files can be put on the diskette either when it is being formatted or by the SYS command. The system files take up about 12% of the storage space on a diskette.

Typically, if a diskette is going to contain a program, you should write the system files on it. However, if the diskette is going to be used only for data, leave the system files off and take advantage of the extra storage space available.

To format the new disk with the system files:

- 1 Insert your MS-DOS System diskette in drive A.
- **2** Type:

A>format /s

Notice the **/s** (for system) following the command format.

3 Press the **RETURN** key.

The following message is displayed:

Insert new diskette for drive A: and strike any key when ready

4 Insert the new diskette into drive A and press the **RETURN** key or any other key.

As the diskette is being formatted, your screen displays a message similar to the following:

Formatting...

After the lights on the disk drives go out, your screen displays the message:

Formatting...Format Complete System transferred 362496 bytes total disk space 43008 bytes used by system 319488 bytes available on disk

Format another (Y/N)?

The message indicates that 43008 bytes were used by the system files.

5 If you want to format more diskettes, type: **y**

If you are done formatting diskettes, type: **n**

The diskette is ready for use and can be used to start up your computer.

To format the new diskette without the system files:

1 Insert your MS-DOS System diskette in drive A.

2 Type:

A>format

This time the /s is left off.

3 Press the **RETURN** key.

The following message is displayed:

Insert new diskette for drive A: and strike any key when ready

4 Insert the new diskette into drive A and press the **RETURN** key or any other key.

As the diskette is being formatted, your screen displays the message:

Formatting...

After the lights on the disk drives go out, your screen displays a message similar to:

Formatting...Format Complete

362496 bytes total disk space 362496 bytes available on disk

Format another (Y/N)?

Note that the total capacity of the disk is available for data storage.

5 If you want to format more diskettes, type: **y**

If you are done formatting diskettes, type: n

The diskette is ready to receive data.

WARNING: Keep a supply of formatted diskettes readily available. If you need a new diskette when running an applications program, you may not have the opportunity to format one.

Copying Files

As you use your computer, you will need to copy files. There are many reasons for this. Sometimes you may want to make copies of files for someone else to use. Other times you may want an extra copy for safety.

To copy a file from the hard disk to a diskette:

- 1 Place the diskette that the file will be copied to in drive A.
- 2 Type:

C>copy filename a:

Substitute the name of the file that you want to copy for **filename**.

3 Press the **RETURN** key.

When the C> returns, the file has been copied to the diskette in drive A.

NOTE: You don't always have to copy from C to A. You can also copy from A to C.

To make another copy of a file on the hard disk:

Files are usually copied from one disk to another disk or diskette. But if a new filename is substituted, a copy of a file can be made on the same disk. 1 Type:

C>copy oldname newname

Substitute the current name of the file that you want to rename for **oldname** and the new name for **newname** in the example above.

2 Press the **RETURN** key.

The Value of Copying Your Diskettes

You should make "duplicate" or extra copies of your important files and keep them in reserve for an emergency.

Then if a file is lost or damaged, you haven't lost any valuable time or information. Just take out your working copy, make a copy of it, put the duplicate away again, and then continue with your work.

Many computer users make duplicate copies of files that have been updated at the end of each day.

Making a Copy of a Diskette

DISKCOPY is a quick way to duplicate your diskettes. It also formats the diskette for you.

To use DISKCOPY:

1 With the C> prompt displayed, type:

C>diskcopy a:

2 Press the **RETURN** key.

Your screen will display:

Insert source diskette in drive A:

Press any key when ready

3 Insert the original diskette (source) in drive A.

4 Press any key.

This message is displayed:

Copying 9 sectors per track, 2 sides

The diskette is copied into the computer's memory. In about a minute, this message will appear on your screen:

Insert target diskette in drive A:

Press any key when ready

- 5 Insert the disk that will become the duplicate copy in drive A.
- 6 Press any key.

The computer now copies from its memory to the working copy. Depending on how much memory you have on your system, DISKCOPY may prompt you to repeat steps 3 - 6 one time.

When DISKCOPY is finished, the screen displays:

Copy another (Y/N) ?

7 If you want to make another copy, type: **y** If you are done, type: **n**

Backing Up Your Hard Disk

It is very important to have a procedure for backing up your hard disk. The BACKUP command gives you several options from which to select. Which procedure you choose depends on what type of work you are doing on your system.

Please read your MS-DOS User's Guide for information on backing up your hard disk.

NOTE: You cannot use DISKCOPY to back up your hard disk.

Deleting Files

Eventually you will want to erase old unwanted files to free up space for new files on your disk or diskette.

It is a good practice to periodically review your diskettes for old or duplicate files. A diskette with many versions of a file can be confusing.

To delete a file from a diskette:

- **1** Insert the diskette that contains the file to be deleted in drive A.
- 2 With the C> prompt displayed, type:

C>del a:filename

Substitute the name of the file that you want to delete for **filename**.

3 Press the **RETURN** key.

You can delete all the files on the diskette with one command. This is a quick way to free up an old diskette for new files, but it can be dangerous.

ONCE INFORMATION IS DELETED USING THIS METHOD, IT CANNOT BE RESTORED. THE IN-FORMATION IS GONE.

If you don't have a copy of this diskette, all the information is lost. To delete all the files from a diskette:

- **1** Insert the diskette containing files to be deleted in drive A.
- 2 With the C> prompt displayed, type:

C>del a:*.*

- **3** Press the **RETURN** key.
- 4 In response to the prompt:

Are you sure? (Y/N)

Type: **y**

5 Press the **RETURN** key.

WARNING: NEVER USE THIS METHOD TO DE-LETE FILES FROM YOUR HARD DISK.

Deleting a File from the Hard Disk To delete a file from your hard disk:

1 With the C> prompt displayed, type:

C>del filename

Substitute the name of the file that you want to delete for **filename**.

2 Press the **RETURN** key.

- 1. Always insert your diskettes with the label up.
- 2. Always press the **RETURN** key after typing in a command such as DIR or COPY to execute the command.
- 3. When specifying a drive letter, don't forget to include the colon (e.g., A: or C:).
- 4. When starting the computer from the hard disk, leave the diskette drive door open.
- 5. If you want to copy all of the files on a diskette, use the *.* option.

To get some more hands-on practice and to learn more about your computer and what it can do, use the Tutorial diskette that comes with this guide.

6

What to Do If Something Doesn't Work

- Introduction
- What is "diagnostics"?
- How to use diagnostics
- Automatic vs. nonautomatic mode
- Testing options
- What each test does
- Selecting a test

Your computer is engineered to work trouble free, but at some point a problem may still occur. For example, consider the following:

One day while a program that you use regularly is running, a disk error message is displayed. There are many possible causes, the most obvious being a damaged diskette or a faulty drive. If the program works successfully when run from another copy of the original diskette, the problem is almost surely a damaged diskette. If, however, the error recurs when a backup diskette is used, a faulty drive is the probable cause. Note that this is a probable cause — not a certainty.

To help isolate the cause of hardware problems, a set of diagnostic routines is provided.

This section provides an overview of the diagnostic routines.

What is "diagnostics"?

"Diagnostics" is the name of a collection of diagnostic routines that are used to test the correct functioning of the various components of the AT&T Personal Computer 6300. The program is supplied on the diskette labeled CUSTOMER TEST DIAGNOSTIC DISK-ETTE that comes with your computer. It contains routines to test the following components.

- Main Board
- Computer's Memory
- Keyboard
- Display
- Parallel Interface
- Serial Interface
- Disk Drives

After each test is run, a TEST RESULTS summary screen is displayed.

The easy-to-use program lists testing options in a menu, and instructions are displayed on the screen.

What to Do If Something Doesn't Work

How to use diagnostics

Diagnostics should be used whenever a faulty component is suspected. Messages issued by Diagnostics are self-explanatory, and the information you collect — and pass along — by running the package can reduce repair time.

All of the tests follow similar procedures. Once you have learned to run one test, you can run them all. The following is a guide to using Diagnostics. It does not cover every test, but instead provides instructions for a sample test that will enable you to choose and run whichever test you wish.

In order to work through these tests, you will need to know the following information about your computer:

- the amount of memory that your computer has
- whether you have 1 or 2 diskette drives
- if you have a hard disk
- if a printer is connected to the computer's parallel port
- if a printer is connected to the computer's serial port
- whether you have a monochrome or color video display

To start, reboot your system, using the MS-DOS System diskette.

- 1 Insert the diskette labeled CUSTOMER TEST DIAG-NOSTICS into drive A.
- 2 Type: customer
- **3** Press the **RETURN** key.

The screen shown below is displayed:

```
***CUSTOMER TEST PROGRAM***
VERSION 2.03
= = >TO EXIT CUSTOMER TEST PROGRAM DURING
TESTING, PRESS THE 'ctrl-break' KEYS
DO YOU WISH TO RUN THE TESTS IN AUTOMATIC
MODE?
(y = YES, n = NO)
```

Automatic vs. nonautomatic mode

The automatic mode checks your computer's parts one at a time, according to a prearranged checklist. Any errors detected are displayed on the screen.

In nonautomatic mode, you can either run a specific test once or repeatedly test any combination of your computer's components. Detected errors are displayed on the screen.

If you are concerned only about the functioning of a specific component, select the nonautomatic mode and run the appropriate test.

You select a mode by entering a \mathbf{y} for automatic mode or an \mathbf{n} for nonautomatic mode.

- **1** Type: **N** for nonautomatic.
- 2 Press the **RETURN** key.

Testing options

Selecting the nonautomatic mode displays the following screen. Automatic mode skips over it.

TESTING OPTIONS

0 – EXECUTE TESTS ONCE

1 – FORMAT SCRATCH DISKETTE

3 – EXIT DIAGNOSTICS PROGRAM

```
ENTER DESIRED ACTION-
```

The first option enables you to run tests one time.

The diskette test requires a scratch, formatted diskette for each of your disk drives. Option 1 lets you prepare a diskette to use in the test.

To format a scratch diskette,

1 Type: 1

2 Press the **RETURN** key.

A screen like the one below is displayed:

SELECT DISKETTE DRIVE:

0 - drive A'1 - drive B'

ENTER DESIRED ACTION -

Type the number that corresponds to the drive in which you will insert the diskette to be formatted.

3 For this example, type: 0

This screen will be displayed:

SELECT DISKETTE DRIVE:

```
0 – drive `A'
1 – drive `B'
```

ENTER DESIRED ACTION - 0

INSERT DISKETTE IN DRIVE A:

PRESS 'ENTER' KEY TO CONTINUE -

ENTER is another name for the **RETURN** key.

- **4** Insert a diskette into drive A.
- 5 Press **RETURN**.

The screen then displays:

FORMATTING

It takes about 2 minutes to format the diskette. When the diskette has been formatted, you'll see:

FORMATTING....FORMAT COMPLETE

PRESS 'ENTER' KEY TO CONTINUE

6 Press the **RETURN** key.

You will see the following screen again:

*** CUSTOMER TEST PROGRAM *** VERSION 2.03

= = > TO EXIT CUSTOMER TEST PROGRAM DURING TESTING, PRESS THE `ctrl-break' KEYS

DO YOU WISH TO RUN THE TESTS IN AUTOMATIC MODE? (y = YES, n = NO)

- 7 Type: N.
- 8 Press the **RETURN** key.

Now you will see the TESTING OPTIONS menu again:

TESTING OPTIONS

- 0 EXECUTE TESTS ONCE
- 1 FORMAT SCRATCH DISKETTE
- 2 EXIT DIAGNOSTICS PROGRAM

ENTER DESIRED ACTION -

To run test(s) once,

- **1** TYPE: **0**
- 2 Press the **RETURN** key.

A list of your computer's hardware is displayed.

THE INSTALLED HARDWARE IS:
1 - MAIN BOARD
3 - 384 KB MEMORY

III MEMORY SIZE SWITCHES USED TO DETERMINE MEMORY SIZE
(MAKE SURE THAT MEMORY SIZE SWITCHES ARE SET CORRECTLY)

4 - 83 KEY KEYBOARD
5 - MONOCHROME VIDEO SYSTEM
6 - 1 PARALLEL PORT(S)
7 - 1 SERIAL PORT(S) (USING 8250)
8 - 1 48 TPI FLOPPY DISK DRIVE(S)
9 - 10 MB HDU DRIVE AND CONTROLLER

IS THE LIST OF HARDWARE CORRECT?

(y = YES, n = NO)

NOTE: Check the list to verify that it matches your computer system. The list will vary according to the set up that you have. For example, the amount of memory indicated in option 3 should correspond to the amount of memory in your computer. You may have either a 10 MB or 20 MB hard disk drive.

If the list is incorrect,

- 1 Type: n
- 2 Press the **RETURN** key.

The message shown below is displayed:

ERROR - HARDWARE DOES NOT AGREE WITH CONFIGURATION TESTS => Record any difference(s) between the list of hardware on the screen and the hardware that should be listed. PROGRAM TERMINATED !!!

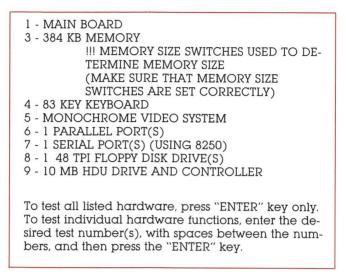
Write down any differences and contact your AT&T Personal Computer Dealer or your AT&T Information Systems Services Hotline.

If the list is correct,

1 Type: **y**

2 Press the **RETURN** key.

A screen similar to the one on the next page is displayed. It is similar to the previous one and is used to select the test(s) that you want to run.



ENTER is another name for the **RETURN** key.

What each test does

1 – MAIN BOARD Test

The term Main Board refers to the main electronic board inside your computer. This test verifies that the computer's main circuit board is working correctly.

NOTE: There is no test 2.

3 - MEMORY Test

This test checks your computer's memory. The number indicating the amount of memory in your computer may be different than the amount shown on the screen sample above. The number on your screen should correspond to the amount of memory in your computer.

4 – KEYBOARD Test

The Keyboard Test, using a facsimile of the keyboard drawn on the display screen, enables you to verify the proper functioning of each key. Your computer has the 83-key keyboard.

5 – MONOCHROME VIDEO SYSTEM Test

The Video System Test runs through a complete check out of the video display. It tests graphic and text characters, and 40- and 80-column mode.

6 – PARALLEL PORT Test

The Parallel Port Test verifies that the parallel port is working correctly.

7 – SERIAL PORT Test

The Serial Port Test verifies that the serial port is working correctly.

8 – FLOPPY DISK DRIVES Test

The Disk Drives Test verifies that your computer's drive(s) are functioning correctly. It takes about 5 minutes for each drive tested.

To perform this test, you will need a formatted blank diskette for each drive to be tested.

9 – HARD DISK DRIVE AND CONTROLLER Test

This test verifies that your computer's hard disk drive is functioning correctly.

The hard disk does not have to be newly formatted, nor need it be blank. On the hard disk, the test routines use a reserved area of the disk; no programs or data files will be damaged. It takes several minutes to test the hard disk. Proceed with your diagnostic testing as you normally would. When the test(s) are finished, a screen such as this appears:

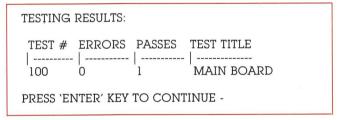
```
Tests completed. Number of test loops run = 1
Total errors during testing = 0
```

```
Press 'ENTER' to continue.
```

Press the **RETURN** key.

Remember that **ENTER** is just another name for the **RETURN** key.

A test results summary is displayed on the screen.



Press the **RETURN** key.

This screen appears again:

```
*** CUSTOMER TEST PROGRAM ***
VERSION 2.03
= => TO EXIT CUSTOMER TEST PROGRAM DURING
TESTING, PRESS THE `ctrl-break' KEYS
DO YOU WISH TO RUN THE TESTS IN AUTOMATIC
MODE?
(y = YES, n = NO)
```

- 1 Type: n
- 2 Press the **RETURN** key.

This menu appears again.

TESTING OPTIONS

- 0 EXECUTE TESTS ONCE
- 1 FORMAT SCRATCH DISKETTE
- 2 EXIT DIAGNOSTICS PROGRAM

ENTER DESIRED ACTION -

- **1** To return to MS-DOS, type: **2**.
- 2 Press the **RETURN** key.

Selecting a test

You select which test(s) you want to run from the menu screen shown below:

- 1 MAIN BOARD
- 3 128 KB MEMORY
- 4 KEYBOARD
- 5 MONOCHROME VIDEO SYSTEM
- 6 1 PARALLEL PORT
- 7 1 SERIAL PORT (USING 8250)
- 8 48 TPI FLOPPY DISK DRIVES
- 9 10 MB HDU DRIVE AND CONTROLLER

To test all listed hardware, press the **RETURN** key only. To test individual hardware functions, enter the desired test number(s), with spaces between the numbers, and then press the **RETURN** key.

Although there are some differences between the testing procedures for each test, they are all very similar. As an example of how to run a test, the Main Board will be tested.

Sample test procedure:

1 To select the Main Board test,

Type: 1

If you wanted to run more than one test, you would enter the numbers of each test separated by a space. For example, 1 4 6 7.

2 Press the **RETURN** key.

In response to the prompt:

```
PAUSE ON ERROR? (y = YES, n = NO)
ENTER DESIRED ACTION -
```

3 Type: n

If you want the test to stop if an error is detected, enter a $\underline{\mathbf{y}}$. By selecting \mathbf{n} , the test proceeds uninterrupted. In either case, all errors detected by Diagnostics are indicated on the TEST RESULTS summary screen.

4 Press the **RETURN** key.

The test is run. Depending on the test that is running, additional messages or instructions may appear on your screen. Just follow the directions.

Upon completion of the Main Board test, the computer beeps and the message below flashes briefly on the screen:

```
TEST 100 - MAIN BOARD
0 ERRORS IN MAIN BOARD TESTS (LOOP #1)
```

Then the message:

```
Tests completed. Number of test loops run = 1
Total errors during testing = 0
```

PRESS "ENTER" KEY TO CONTINUE -

5 Press the **RETURN** key.

Remember that **ENTER** is just another name for the **RETURN** key.

A test results summary is displayed on the screen.

TESTING RESULTS: TEST # ERRORS PASSES TEST TITLE |-------100 0 1 MAIN BOARD PRESS 'ENTER' KEY TO CONTINUE -

To return to the initial diagnostics screen:

6 Press the **RETURN** key.

If an error occurs, run the test(s) a second time. If the error occurs again, write it down and contact your AT&T Personal Computer Dealer or your AT&T Information Systems Services Hotline.

If you want to test another component, repeat the previous steps, substituting the appropriate test number when the test menu is displayed. \bigcirc

A Installing Additional Hardware in Your System

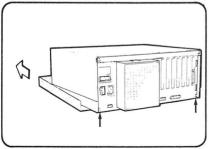
In the future, you may want to purchase additional hardware to use with your PC 6300. For example, you may add extra memory or a color monitor. If you do add equipment, you may need to perform some special procedures to install the new hardware. This appendix explains the steps you take to install some of the most common kinds of add-on equipment.

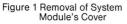
- Opening the system unit
- Installing a new controller board
- Setting configuration switches

Opening the System Unit

If you purchase equipment that requires you to install a new controller board, you'll need to open the system unit.

- 1 Using the small screwdriver that came with your PC 6300 system, loosen the two screens on both sides of the upper back of the system unit, as shown in the diagram.
- 2 Slide the system cover forward until it is free of the bottom portion of the cabinet.
- **3** Lift the cover off of the system unit.





- 1. Set the power switch on the System Module (and expansion unit, if attached) to OFF.
- 2. Set all the external power switches to OFF (printer etc.).
- 3. Unplug the System Module (and expansion unit's) power cable from the wall outlet.
- 4. Remove the System Module bottom covers. See figure 1.

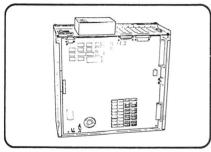


Figure 2 Positioning of System Module

 Place the System Module in a convenient position so as to have easy access to the motherboard. See figure 2.

Installing a New Controller Board

Follow the instructions that came with your new equipment to determine which expansion slot you should use for the new board.

- 1 Remove the expansion slot cover that corresponds to the slot you have chosen. The slot cover is held in place by a single screw. Keep it in a safe place so that you can re-install it later.
- 2 Insert the new board into the vacant expansion slot, making sure that the edge connector fits into the system board.
- **3** Use the screw you removed in step 1 to secure the board.
- **4** Connect a cable (if necessary) to the new board.
- 5 Unless you need to modify switch settings, replace the system cover.

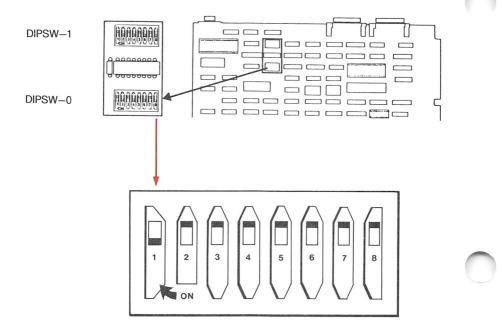
Setting Configuration Switches

If you add certain optional equipment, you may need to set some switches on the system board.

These options require changes to the configuration switches on the system board:

- Additional memory
- 8087 numeric data processor
- Communications controller
- Hard disk unit

Change the configuration switches according to the tables below.



Note: In the tables, 1 is ON, 0 is OFF, and x is the don't care condition.

SWITCH DIPSW-0

Position	Function
1-3	System memory
4	64Kx1 or 256Kx1 DRAMs on Motherboard
5	Numeric Data Processor, Intel 8087
6	Serial Communication Controller, 8250
7	Not Used
8	Read-only memory, 4Kx8 or 8Kx8 ROM/ PROMs

	¥	¥	¥	¥					
System Memory	SW1	SW2	SW3	SW4	SW 5	SW6	SW7	SW8	Location
128KB	0	1	1	1	Х	Х	Х	Х	128KB-Motherboard
256KB	1	0	1	1	Х	Х	Х	Х	256KB-Motherboard
384KB	0	0	1	1	Х	Х	Х	Х	256KB-Motherboard + 128KB-expansion board
512KB	1	1	0	1	Х	Х	х	х	256KB-Motherboard + 256KB-expansion board
640KB	0	1	0	1	х	х	Х	Х	256KB-Motherboard + 384KB-expansion board
512KB	1	1	1	0	Х	Х	Х	Х	512KB-Motherboard BANK 0
640KB	0	1	1	0	х	Х	х	х	512KB-Motherboard BANK0 + 128KB-Motherboard BANK1
640KB	0	1	0	0	х	х	X	х	128KB-Motherboard BANKO + 512KB-Motherboard BANK 1

SYSTEM MEMORY

NUMERIC DATA PROCESSOR, INTEL 8087

				*				
SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	Function
х	х	х	х	1	х	х	х	8087 not installed
х	х	х	X	0	х	х	х	8087 installed

SERIAL COMMUNICATION CONTROLLER, 8250

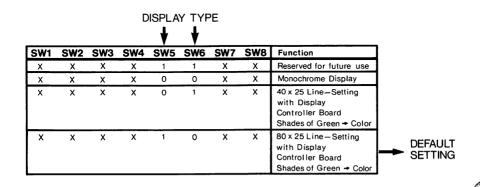
	*									
SW1	SW2	SW3	SW4	S₩5	SW6	S₩7	SW8	Function		
Х	х	Х	Х	х	1	Х	Х	8250 installed		
Х	Х	х	х	х	0	Х	×	Z8530 installed		

SWITCH DIPSW-1

Position	Function						
1	MFD(s), 96 TPI or 48 TPI						
2	Start-up Speed for MFD(s)						
3–4	Hard Disk Unit (HDU) Type						
5-6	Display type						
7–8	Number of MFDs						

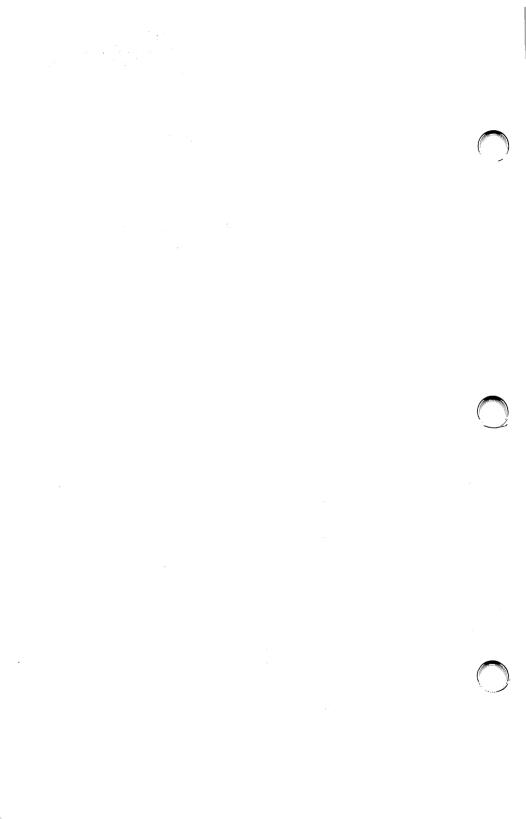
HARD DISK UNIT (HDU) TYPE

		♦	¥							
SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	Function		-Ç
x	х	0	Х	х	х	х	Х	Uses external hard disk code	DEFAULT	
х	х	1	х	х	х	х	х	Uses internal hard disk code		
X	X	Х	1	Х	Х	Х	Х	Reserved for future use	02111NG	



Installing Additional Hardware in Your System





Glossary

Application Software: Programs commercially distributed on diskettes. Word Processing is an example of application software.

Backup: The process of making copies of important files to protect them from accidental erasure.

Boot: The operation that loads the operating system into a computer — shortened from "bootstrap load."

Break: To stop the execution of a program at the user's request.

Byte: Used to specify size of a file or amount of memory that a computer has. Each character of information is stored as one byte.

COM Files: Files with the type extension .COM are command programs in machine language.

Commands: Entries that tell the computer what functions to perform.

Computer Program: The computer does nothing by itself. It needs electronic instructions to perform calculations, print reports, etc. These instructions are called a program.

Cursor: The symbol, often an illuminated box or blinking underline, that indicates where the next data entry will appear on the screen.

Data: Items of information.

Data File: A file in which information is kept. An alternate file type is a program file, in which instructions, rather than data, are stored.

Glossary

Default: The option or device used unless a different option or device is specifically selected. The default drive is the one that the computer returns to after completing a task.

Directory: A list of the files currently on a diskette or hard disk.

Diagnostics: A collection of routines that are used to test the correct functioning of the parts of a computer.

Diskette: A flexible magnetic medium used for storing information.

Display Screen: An electronic picture tube, such as a television picture tube, that can be used to display text and graphic images.

DOS: Disk Operating System. The program that runs the computer.

Drive Letters: The letters assigned to each drive to enable the computer to identify them. You can tell the computer to use a specific drive by specifying its drive letter.

File: A collection of information stored on disk under a specific name. This may be a program or a data file.

File Maintenance: The "housekeeping" tasks associated with caring for or organizing files.

Filename: A specific name given to a file in order to uniquely identify it.

File Type Extension: The three-character suffix added to a filename to identify the type of file. For example, program files are given the extension .COM in MS-DOS.

Floppy: Another name for a diskette.

Format: The procedure for preparing a diskette or the hard disk for use. Formatting arranges the storage space in a form that allows MS-DOS to use the disk.

Function Keys: Special keys that can be set up to perform with only one keystroke tasks that would normally require several keystrokes.

Hard Disk: A high capacity storage device on which data is written on and read from the surfaces of a stack of revolving record-like disks which have been coated with magnetic material.

Indicator Light: A light that illuminates when a particular condition occurs in the system. For example, an indicator light is illuminated when the CAPS LOCK key is set for all caps.

Interface: The parts of a computer that provide connection between other parts of the computer. An interface may consist of ports, cables, connectors, etc., or the software that operates the hardware, or both.

Main Unit: The central unit of the computer. It houses the drives, memory, and electronic processing board.

Memory: The internal "working" memory of the computer. It is not the hard disk or floppy diskettes, but an internal storage area where programs and data are processed. Information remains in memory only as long as the computer is turned on.

Menu: A list of options or functions displayed in a form similar to a restaurant menu from which the user chooses what task he/she wants the computer to perform.

Mode: Refers to how a function, which can be set up several different ways, is set up. For example, diagnostics can operate in automatic or nonautomatic mode.

MS-DOS: The program that provides the routines that perform the most basic functions of the computer. Such things as reading the keyboard and loading and saving files are MS-DOS functions.

Parallel Port: A port on the back of the computer used to connect a parallel printer.

Partition the Hard Disk: The procedure which identifies the hard disk to the computer. It is the first of two steps used to prepare a hard disk for use.

Port: The connection by which a computer communicates with another device, such as a printer or communications device.

Program: A set of instructions that instructs the computer to perform a useful task. Programs, collectively, are called software.

Program Files: Files that contain "program" instructions as opposed to data files that contain "raw" information.

Prompt: The symbol displayed on the screen which indicates that the computer is ready to receive an instruction.

Processor Board: The electronic circuits that form the "brain" of a computer system — often abbreviated CPU for Central Processing Unit. This term is often used loosely to refer to larger parts of a computer system that include the CPU.

Reset: The procedure of restarting the computer without turning the power switch off and on again. There is a reset button on the front of your computer.

Screen: (See Display Screen)

Sector: A part of a track on a diskette or hard disk. MS-DOS divides each track into eight or nine sectors on a floppy disk, 17 on a fixed disk.

Self-Check: The initial test that the computer runs on itself to verify that the computer is working properly.

Serial Port: The connector used to send and receive data by a serial communications method.

Software: The programs which instruct or control computer operations. The MS-DOS System diskette is a piece of software.

Storage Capacity: The total amount of data that can be stored on a diskette or hard disk.

Toggle: A key that turns a condition on or off each time it is used. The INS (Insert) key on the keyboard is a toggle.

Track: The path on magnetic media along which information is recorded. Tracks are broken up into sectors.

Working Copy: A copy of a diskette which is used instead of the original. This prevents the original from being accidentally damaged.

Write-protect: Protecting the information on a diskette from accidental erasure by placing a writeprotect tab over the write-enable notch on the side of the diskette.

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