

EPSON[®]
EQUITY[®] 386/33 PLUS
Setup Guide

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General notice: Other product names used herein are for identification purposes only and may be trademarks of their respective companies.

Important Safety Instructions

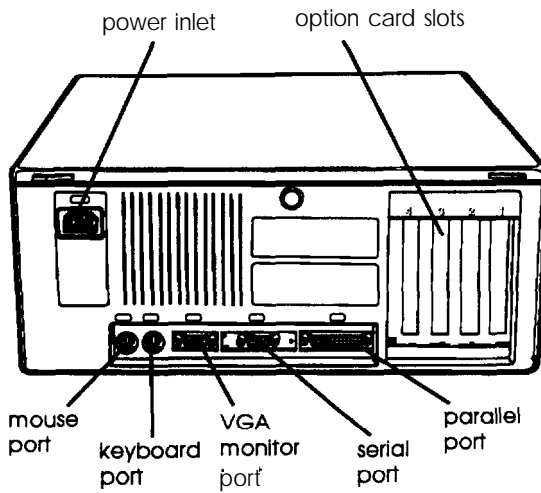
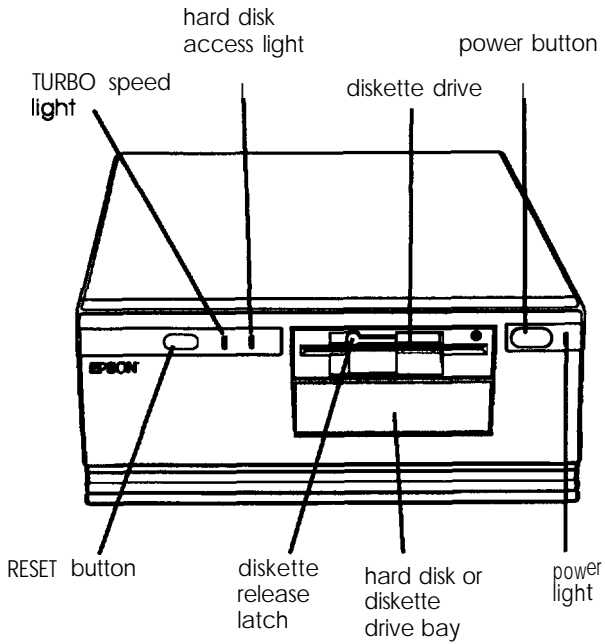
1. Read all of these instructions and save them for later reference.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from the wall outlet before cleaning. Use a damp cloth for cleaning, not liquid cleaners or aerosol cleaners.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation; these openings must not be blocked or covered. This product should never be placed near or over a radiator or heat register.
7. This product should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. Connect all equipment to properly grounded (earthed) power outlets. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Avoid using outlets on the same circuit as photocopiers or air control systems that regularly switch on and off.
9. Do not locate this product where the cord will be walked on.
10. If an extension cord is used with this product, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord ampere rating. Also, make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
11. Never push objects of any kind into this product through the cabinet slots. Never spill liquid of any kind on the product.

12. Except as specifically explained in the User's Guide, do not attempt to service this product yourself. Refer all servicing to qualified service personnel.
13. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - A. When the power cord or plug is damaged.
 - B. If liquid has entered the product.
 - C. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions, since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
 - D. If the product has been dropped or the cabinet has been damaged.
 - E. If the product exhibits a distinct change in performance.

Importantes Mesures de **Sécurité**

1. Lire attentivement les instructions qui suivent. Les conserver en lieu **sûr**.
2. Observer les avertissements et suivre rigoureusement les instructions marquées sur l'ordinateur.
3. Debrancher l'appareil avant de le nettoyer. Se servir d'un chiffon humide, sans détergents ni aerosols.
4. Ne pas se servir de l'ordinateur **près** de l'eau.
5. Ne pas placer l'appareil sur un meuble instable.
6. Les ouvertures et fentes **à l'arrière** et au dessous du **coffre** en assurent la ventilation. Il est important de ne pas couvrir ni bloquer ces prises d'air. De **même**, il ne faut jamais placer l'ordinateur **près d'un** appareil de chauffage.
7. N'utiliser **comme** type de courant que celui qui est **indiqué** sur **l'étiquette**. En cas de doute, **consultez** votre distributeur ou la compagnie **électrique** de votre secteur.
8. Toutes les connexions électriques doivent **être** des connexions de **sécurité, avec** contact de terre. Si la fiche de **sécurité** n'entre pas **dans** le **socle** de prise de courant, demander **à un électricien** de remplacer l'ancien **socle** par un **socle** neuf. Eviter de **brancher** l'ordinateur sur le **même** circuit que des machines qui se **mettent en marche** et **s'arrêtent** tour **à** tour, telles que photocopieurs ou climatiseurs.
9. Ne pas laisser de fils ou cordons **électriques** dans un lieu de passage; **éviter** de leur marcher dessus.

10. S'il est **nécessaire** d'employer un cordon prolongateur pour **brancher** l'appareil, s'assurer que la **consommation d'énergie totale** des machines branchées sur le cordon prolongateur ne **dépasse** pas la **capacité** en ampères **dudit** cordon. **L'ampérage** total de toutes les pièces **branchées** sur le socle ne **doit** pas **dépasser** 15 ampères.
11. Ne jamais rien introduire dans les prises d'air. Ne pas renverser de liquide sur l'appareil.
12. Sauf dans les cas **spécifiquement indiqués** dans le Guide de l'utilisateur, ne pas essayer de **réparer** l'ordinateur **soi-même**; s'adresser **à un spécialiste qualifié**.
13. **Débrancher** l'appareil et s'adresser au personnel de service qualifié dans les cas suivants:
 - A. Lorsque le cordon, les **broches**, la prise ou le socle sont endommagés.
 - B. Lorsqu'un liquide a **pénétré à l'intérieur** de l'appareil.
 - C. Lorsque l'ordinateur ne **répond** pas normalement aux **commandes passées** en suivant les instructions. **Ajuster** uniquement les **contrôles décrits** dans les instructions; il est possible de gravement endommager l'appareil en **touchant** les autres, ce qui pourrait **nécessiter** l'intervention **d'un technicien qualifié** pour le remettre en **état de marche**.
 - D. Lorsque l'appareil est **tombé** ou le **coffre a été endommagé**.
 - E. Lorsque la performance de l'ordinateur est nettement **inférieure à l'ordinaire**.



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Introduction

The Epson® Equity® 386/33 PLUS is a high-performance personal computer which offers exceptional speed and convenience in a compact design.

Your 33 MHz, 80386DX system includes 4MB of internal memory, a built-in VGA (video graphics array) display adapter, built-in parallel and serial interfaces, and an IBM® PS/2™ compatible mouse port. With these interfaces, you can connect most of your peripheral devices directly to the computer, without installing option cards.

The Equity 386/33 PLUS also has four option slots (three 16-bit and one 8-bit) in which you can install additional devices, such as a modem or a network card. It can support up to three internal drives: either two diskette drives and one hard disk drive, or one diskette drive and two hard disk drives.

The alternate VGA feature connector provides an interface to connect an optional high-resolution graphics adapter card. This allows you to use the special graphics features on the adapter card while accessing the standard VGA signals provided by your main system board.

Your system offers 128KB of shadow RAM to speed up processing by moving the ROM BIOS and video ROM into the RAM area of memory. Additionally, the 64KB of cache memory lets the computer copy portions of memory into a high-speed cache buffer so it can access programs and data very quickly.

Optional Equipment

You can easily upgrade your computer by installing additional memory and adding just about any optional device that is compatible with the IBM Personal Computer, PC XT™, or PC AT™.

By adding 4MB single inline memory modules (SIMMs) to the main system board, you can expand the computer's memory up to 16MB.

You may want to install an 80387DX, 33 MHz or 3167, 33 MHz math coprocessor in your computer to speed up mathematical calculations in certain application programs.

Check with your authorized Epson dealer for information on optional equipment. Instructions for installing options are provided in the User's Guide.

Installing Operating Systems and Other Software

You probably have a version of MS-DOS® to use with your computer. However, you can use another operating system such as OS/2®, UNIX®, or XENIX®. This manual covers basic operating instructions for using your computer, but does not explain how to install or use the operating system. Refer to the documentation that came with your operating system to install and run it on your computer.

Once you install an operating system, you can use virtually any application program designed for the IBM PC, PC XT, PC AT, or compatible computers on your Equity 386/33 PLUS. You may also use powerful 32-bit software such as Microsoft® Windows™ 3.0.

VGA Utilities

Your Equity 386/33 PLUS comes with special VGA device drivers and utilities for use with the built-in VGA adapter. With these utilities, you can take advantage of extended VGA features such as 16-color graphics mode resolutions up to 1024 x 768 (non-interlaced), 256-color resolutions up to 640 x 480, and 132-column text mode. Instructions for installing the VGA device drivers and utilities are provided in the *VGA Utilities Guide*.

How to Use This Manual

This manual explains how to set up your computer. Chapter 1 provides simple step-by-step instructions for setting up your system and connecting peripheral devices such as the monitor, mouse, and printer.

Chapter 2 describes how to run the SETUP program to define your computer's configuration. Do this before you use your computer. You may need to do it again later, if you change the configuration.

Once you complete the procedures in the manual, see the User's *Guide* for instructions on using your computer.

Where to Get Help

If you purchased your computer in the United States, Epson America provides local customer support and service through a nationwide network of authorized Epson dealers and Service centers.

Epson also provides the following support services through the Epson Customer Resource Center at (800) 922-8911:

- ❑ Technical assistance with the installation, configuration, and operation of Epson products
- ❑ Assistance in locating your nearest Authorized Epson Reseller or Service Center
- ❑ Sales of ribbons, supplies, parts, documentation, and accessories for your Epson product
- ❑ Customer Relations
- ❑ Epson technical information library fax service
- ❑ Product literature with technical specifications on our current and new products.

If you purchased your computer outside of the United States, please contact your dealer or the marketing location nearest you for customer support and service. International marketing locations are listed on the inside back cover of the User's *Guide*.

Chapter 1

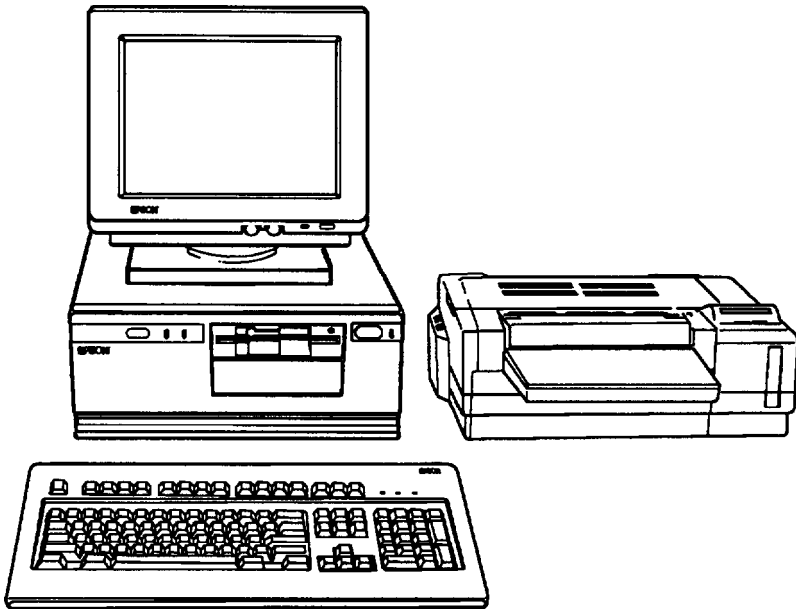
Setting Up Your System

To set up your Equity 386/33 PLUS, follow the eight steps in this chapter. You may want to open this manual's back cover foldout so you can refer to the illustrations identifying the different parts.

Note

The illustrations in this manual show the computer with a **5¼-inch** diskette drive. If your system has a **3½-inch** diskette drive instead, and you need instructions for using it, see Chapter 1 in the *User's Guide*.

1 Choosing a location

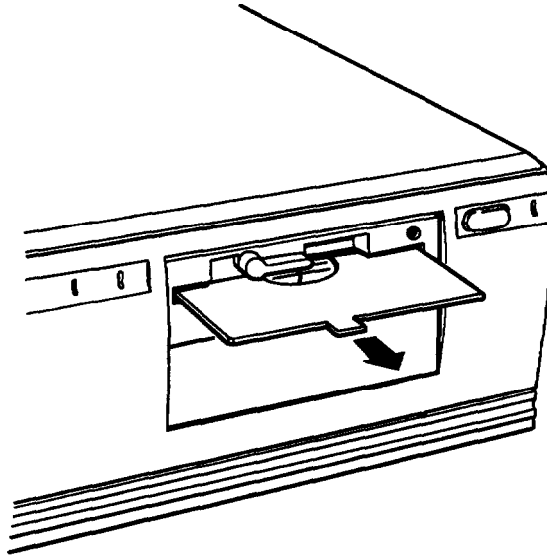


Before you set up your computer, choose a convenient location that provides the following:

- ❑ A sturdy desk or table strong enough to support the weight of your system and its components.
- ❑ A flat, hard surface. Soft surfaces like beds and carpeted floors attract static electricity, which can erase data on your disks, damage the computer's circuitry, and prevent proper ventilation.
- ❑ Good air circulation. Leave several inches of space around the computer so air can move freely.
- ❑ Moderate environmental conditions. Select a cool, dry area and protect your computer from extremes in temperature, humidity, dust, and smoke. Avoid direct sunlight or other sources of heat.
- ❑ Appropriate power sources. To prevent static charges, connect all your equipment to three-hole, 120-volt, grounded outlets. You need one outlet for the computer, one for the monitor, and additional outlets for a printer and any other peripheral devices.
- ❑ No electromagnetic interference. Do not place your system too close to any electrical device, such as a telephone, which generates an electromagnetic field.

2 Removing the Protective Card

If you have a **5¼-inch** diskette drive, there is a protective card in the diskette slot. To remove it, flip the latch up to pop the card out part way, as shown below; then pull it out.



(If you have a second **5¼-inch** diskette drive, be sure to remove the card from it.)

Caution

Never turn on your computer with a protective card in the diskette slot. You could damage the diskette drive.

Save the protective card. If you transport your computer later, insert the card to protect the drive's read/write heads during shipping.

3 *Connecting a Monitor*

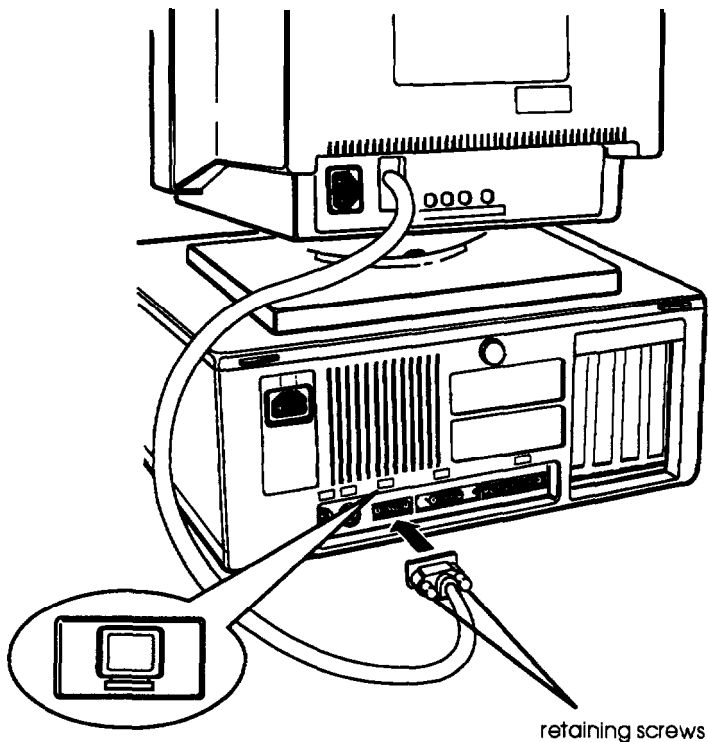
The way you connect your monitor to the computer depends on the type of monitor you have. If you have a VGA monitor (or a multifrequency monitor with an analog connector), you can connect it to the computer's built-in VGA port as described below. If you have any other type of monitor, see "Using a Display Adapter Card" on page 1-7.

Using the VGA Interface

Follow these steps to connect your VGA monitor to the VGA port on the computer:

1. Make sure your monitor and computer are turned off.
2. Place your monitor on top of or near the computer. Turn the monitor and computer around so the backs are facing you.
3. If your monitor does not have an attached cable, connect the monitor cable to it.

4. Examine the connector end of the monitor cable, and position the plug to line up with the monitor port on the computer (marked with a monitor icon). Then insert the plug into the port, as shown below.

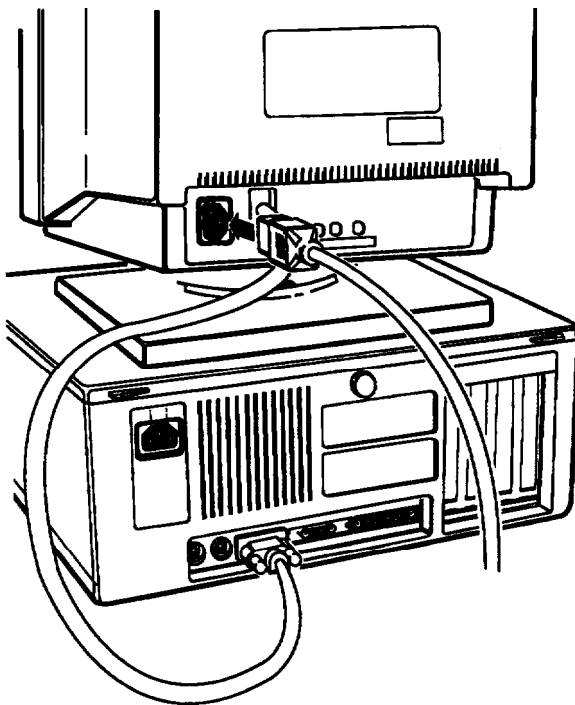


Caution

To avoid damaging the connector, be careful not to bend the pins when inserting the plug.

5. If the connector has retaining screws, be sure to tighten them.

6. Plug the monitor power cord into the monitor's power inlet, as shown below.



7. Plug the other end of the power cord into a three-hole, 120-volt, grounded electrical outlet.

Using a Display Adapter Card

If you are using a non-VGA monitor, you'll need to install a display adapter (video) card in one of the computer's option slots before you can connect the monitor. (Your dealer may have already installed the video card for you.)

If the video card has not yet been installed, follow the instructions in Chapter 4 of the User's Guide to install an option card. But first, check the following table to make sure your display adapter card and monitor are properly matched.

Monitor/video card compatibility

Monitor	Video Card
Monochrome	Monochrome display adapter (MDA) Multi-mode graphics adapter (MGA) Enhanced graphics adapter (EGA) Hercules® graphics card
CGA	Color graphics adapter (CGA) Multi-mode graphics adapter (MGA) Enhanced graphics adapter (EGA)
EGA	Enhanced graphics adapter (EGA)
Monochrome or color VGA	Video graphics array (VGA)
Extended VGA	Super VGA adapter

When installing the video card, check to make sure any switches or jumpers on the card are set properly. For example, you may need to change a switch setting to select color or monochrome. See the documentation that came with your monitor or video card for instructions.

If you install a high-resolution graphics adapter card for your VGA monitor, you can still take advantage of the computer's built-in VGA capabilities. See Chapter 4 of the *User's Guide* for instructions on using the alternate VGA connector with your graphics adapter card.

Note

If you install a display adapter card, you must set jumper J1 on the main system board to disable the built-in VGA interface so that your card can operate as the primary display adapter. You may also need to set jumper J4 to indicate whether a color or monochrome monitor is installed. See Chapter 4 of the *User's Guide* for instructions on changing jumper settings.

Once you have installed your video card, return to this section to connect your monitor to the computer. If your monitor came with its own manual, follow the instructions there. Otherwise, you can follow the steps in “Using the VGA Interface” on page 1-4; just insert your monitor connector into the video card port instead of the built-in VGA port.

4 *Connecting a Printer or Other Device*

Your computer has both parallel and serial interfaces. To connect a printer or other peripheral device to one of these interfaces, follow the instructions below.

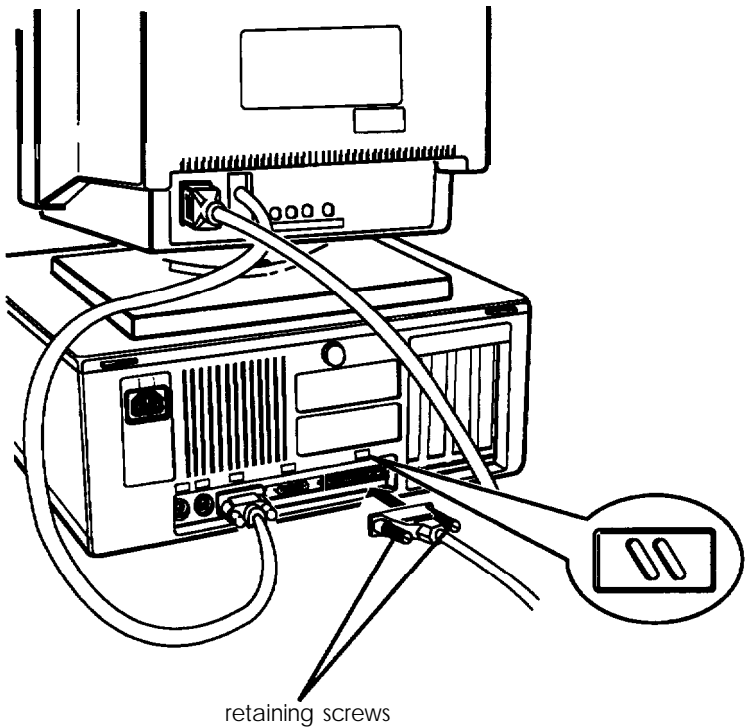
Using the Parallel Interface

The parallel interface on your computer is Centronics[®] compatible and uses a DB-25S connector.

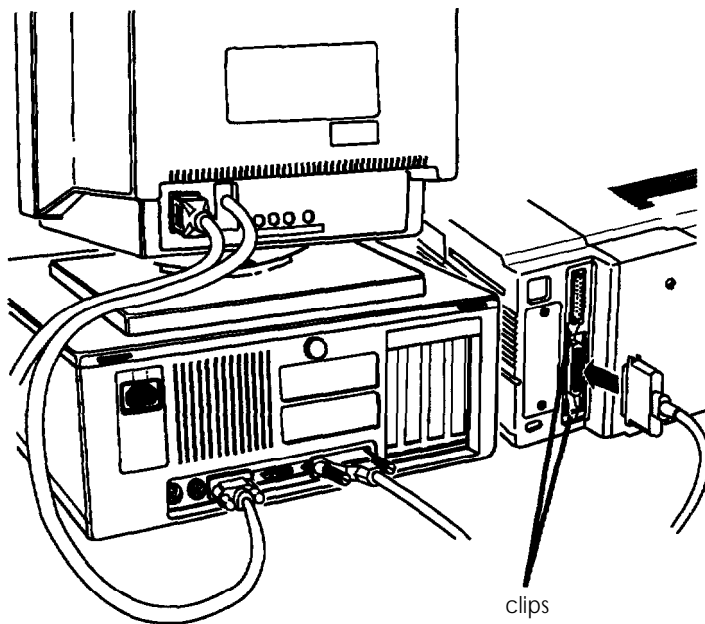
To connect your printer and computer, you need an IBM compatible printer cable. If you are not sure which cable you need, check with your Epson dealer.

Once you have the right printer cable, follow these steps:

1. Make sure the printer and computer are turned off.
2. Place the printer next to the computer with their backs facing you.
3. One end of the printer cable has a 25-pin, D-shell connector. Position the plug to line up with the parallel interface (marked with the icon shown below). Then plug the connector into the port, as shown. If the plug has retaining screws, tighten them by hand or with a screwdriver.



4. Connect the other end of the cable to the printer as shown below. To secure the cable, squeeze the clips at each side of the printer port and push them into place.

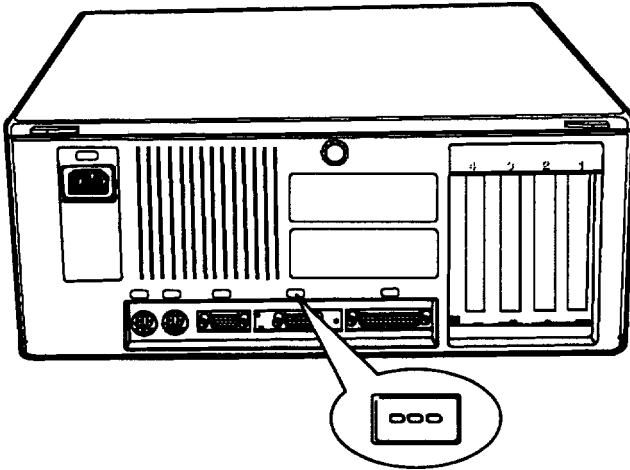


5. Plug the printer's power cord into a three-hole, 120-volt, grounded electrical outlet.

Using the Serial Interface

If you have a printer, a modem, or other peripheral device with a serial interface, you can connect it to the serial (BS-232C) port on the back of the computer.

The serial port uses a DB-9P connector, so be sure you have a compatible cable. To connect a serial device, follow the same steps as above for connecting a parallel device, but insert the connector into the serial port, marked with the icon shown below.



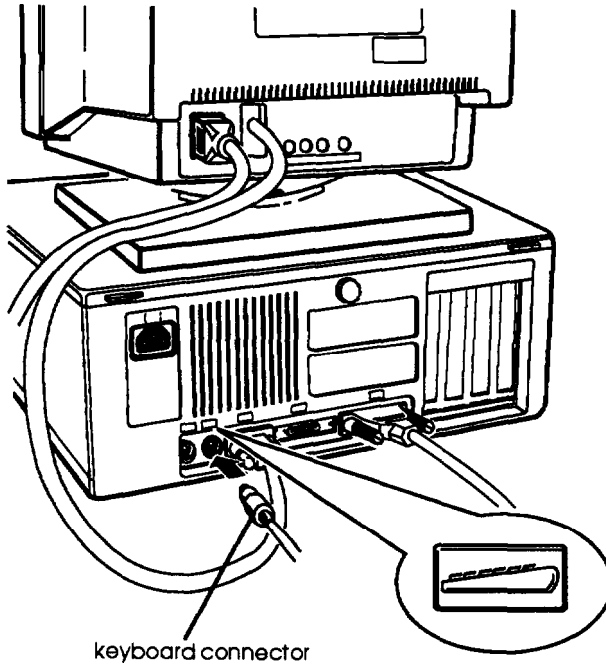
Note

You need to ensure that the serial port is set up so it functions properly. If you are using the port for a serial printer, you need to redirect printer output to the serial port instead of the parallel port. If you are using MS-DOS, you **can** do this with the `MODE` or `SETMODE` commands. See your MS-DOS manual for instructions.

5 Connecting the Keyboard

Follow these steps to connect the keyboard:

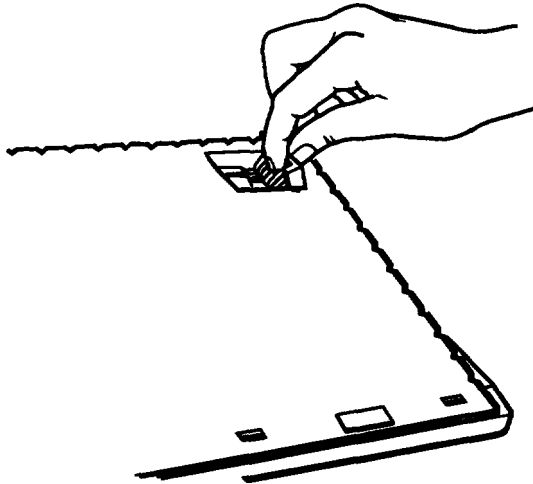
1. Make sure the computer is turned off.
2. Hold the keyboard cable connector so the arrow on the connector faces up. Insert it into the port marked with a keyboard icon, as shown below.



Caution

Although the connectors and ports for the keyboard and mouse are physically identical, they cannot be used interchangeably. Be sure to plug the keyboard into the keyboard port.

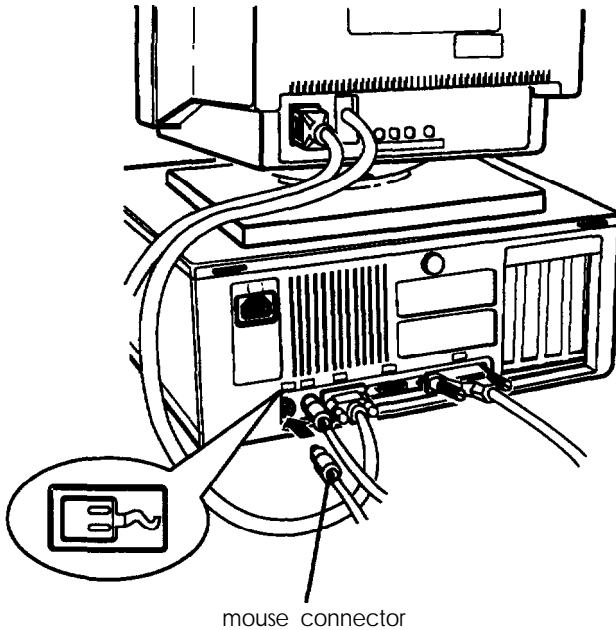
3. You can change the angle of the keyboard by adjusting the legs on the bottom. Turn it over and flip each leg upward until it locks into place, as shown below.



6 *Connecting the Mouse*

Your computer has an auxiliary port for an IBM PS/2 compatible mouse that uses a round, miniature DIN (6-pin) connector. If your mouse has this type of connector, you can connect it to the built-in port on your computer. If your mouse requires a different interface port, you can connect it to the built-in serial port or install an option card to provide the interface.

To connect a mouse to the built-in mouse port, make sure your computer is turned off. Then plug the connector into the port marked with a mouse icon, as shown in the following illustration.



Caution

Although the connectors and ports for the mouse and keyboard are physically identical, they cannot be used interchangeably. Be sure to plug the mouse connector into the mouse port.

Once you have connected a mouse, you may need to add commands to your MS-DOS CONFIG.SYS file (or equivalent) to enable your computer to use a mouse. See your operating system and mouse manuals for instructions.

Note

If you want to use a mouse or other pointing device connected to an option card in your computer, disable the built-in mouse connector by changing the setting of jumper J2. See Chapter 4 of the User's Guide for instructions.

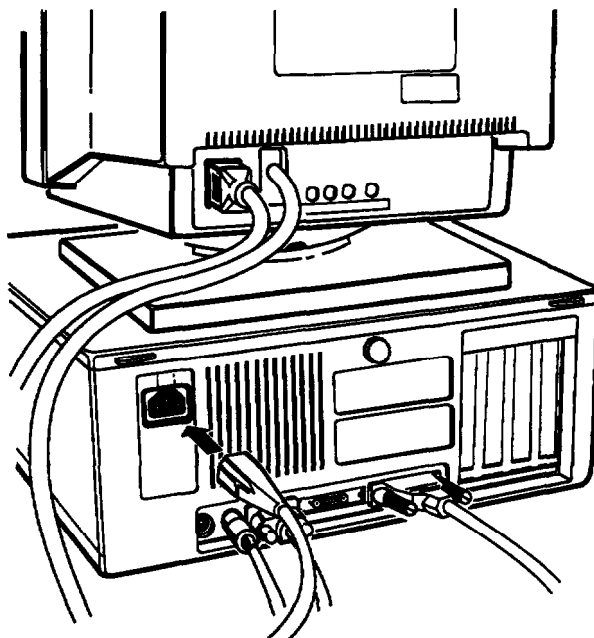
7 *Connecting the Power Cord*

Follow these steps to connect the power cord:

1. Plug the power cord into the AC power inlet on the back panel, as shown below.

WARNING

To avoid generating an electric shock, be sure to plug the cord into the computer before plugging it into the wall socket.



2. Plug the other end of the power cord into a three-hole, 120-volt, grounded electrical outlet.

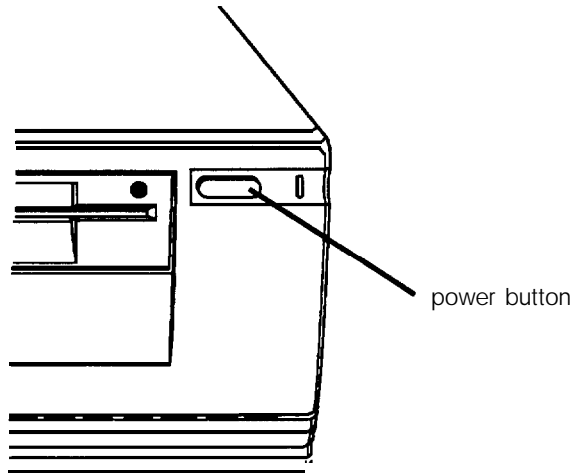
8 *Turning On the Computer*

After you set up your system, you're ready to turn on the power. But first, read the following safety rules to avoid accidentally damaging your computer or injuring yourself:

- ❑ Do not connect or disconnect any peripheral devices (including the mouse or keyboard) or power cables when the computer's power is on.
- ❑ Never turn on the computer with a protective card in the diskette drive.
- ❑ Never turn off or reset your computer while a disk drive light is on. This can destroy data stored on the disk.
- ❑ Always wait at least five seconds after you turn off the power before you turn it on again. This allows the computer to clear and reset its memory.
- ❑ Do not leave a beverage near your system. Spilled liquid can damage the circuitry of your equipment.
- ❑ Always turn off the power, disconnect the computer's power cord, and wait 30 seconds before you remove the cover. Only remove the cover to access internal devices.

Follow these steps to turn on your system:

1. Turn your computer around so the front panel faces you and place your other system components in a convenient arrangement.
2. Turn on the monitor, printer, and any other peripheral devices connected to the computer.
3. To turn on the computer, press the power button located on the right side of the front panel, as shown in the following illustration.



The power indicator next to the button lights up. After a few seconds, the computer counts the amount of memory, and then performs a diagnostic self test. This is a series of checks the computer completes each time you turn it on to make sure everything is working correctly.

If necessary, use the controls on your monitor to adjust the brightness and contrast until characters on the screen are clear and at a comfortable level of intensity. If your monitor has horizontal and vertical hold controls, you may need to use them to stabilize the display.

Note

If you or your dealer has made a major change to your system, such as adding a disk drive, you may need to wait a few minutes for your computer to complete power-on diagnostics the first time you turn it on.

When the system has successfully completed its self test, you see the following prompt:

Press to start SETUP

Do not press any key yet. (If MS-DOS is already installed on your system, you will see a prompt to enter the date.) Turn off the computer as described below.

If there is no operating system on your computer, you see an error message. Ignore the message for now. Follow the instructions below to turn off the computer.

Note

If your computer's configuration does not match the information stored in the computer's CMOS RAM (defined through the SETUP program), you see an error message and a prompt to press the **F1** key. Press **F1** to continue. Then run the SETUP program to correct the information. (See Chapter 2 for instructions.)

Turning Off the Computer

Whenever you turn off your system, follow these steps:

1. Save your data and exit any application program you are using.
2. Check the hard disk drive light and the diskette drive light(s) to make sure they are not on. Do not turn off the computer if a drive light is on.
3. Remove any diskette(s) from the diskette drive(s).
4. Press the power button to turn off the computer and then turn off any peripheral devices (monitor, printer, etc.).

Now go on to Chapter 2 and follow the instructions to run the SETUP program. When you finish running SETUP, you must install an operating system before you can run your application software. See your operating system manual for instructions.

Chapter 2

Running the *SETUP* Program

The first time you use your computer, you need to run the *SETUP* program to define how your system is set up. You may need to run it again later if you change some part of your configuration.

The *SETUP* program is stored in the computer's read only memory (ROM), so you can run the program any time you turn on or reset your computer. *SETUP* lets you verify or change the following:

- Current date and time
- Type of diskette drives(s) installed
- Type of hard disk drive(s) installed
- Type of video display adapter you are using
- Password feature
- Network server mode
- Booting sequence
- Shadow RAM function
- Video and system memory cache
- CPU speed
- Keyboard testing function
- Built-in interface settings.

The configuration you define through SETUP is stored in a special area of memory called CMOS RAM. This memory is backed up by a battery, so it is not erased when you turn off or reset the computer. Whenever you reboot the computer, it checks the settings, and if it discovers a difference between the information in the CMOS RAM and its actual hardware configuration, it prompts you to run SETUP. You see a message such as the following:

```
CMOS memory size mismatch
RUN SETUP UTILITY
Press <F1> to RESUME
```

If this happens, press **F1** to run SETUP and correct the setting.

Starting the SETUP Program

To start SETUP, make sure there is no diskette in the diskette drive; then turn on your computer. (If the computer is already on, press the RESET button on the front panel to reset it.) After the self test, you see the following prompt:

```
Press <Del> to start SETUP
```

As soon as you see this message, press the **Delete** key. If you do not press **Delete** within five seconds, the computer starts loading the operating system and you will not be able to run SETUP. If this happens, reset the computer and try again.







You see the following options:

```
Start operating system
Run SETUP
```

The first option is highlighted. Press  to highlight **Run SETUP**, and then press . The SETUP menu appears on the screen.

The menu automatically displays the base memory size, the extended memory size, and whether a math coprocessor (numeric processor) is installed. Additionally, the SETUP menu lists the parameters you can change.

Selecting Options

A solid cursor bar highlights the parameter currently selected. You can scroll through the parameters using the four arrow keys (, , , ). When you reach a parameter you want to change, press  or  to display and select the available options.

An information window at the bottom of the menu describes the options available or any other keys you can press to change the highlighted parameter.

The rest of this chapter describes how to choose the correct SETUP parameters for your system.

Setting the Date and Time

The real-time clock in your computer continuously tracks the date and time—even when the computer is turned off. Once you set the date and time using SETUP, you should not need to change either parameter, unless you need to adjust the time for daylight savings. (The computer automatically changes the date for leap years.)

The current month is highlighted and a calendar on the right side of the screen shows all the days for the month, with the current day flashing. Press **Pg Up** or **Pg Dn** to select the correct month, day, and year.

To change the time, move the cursor to the next line and press **Pg Up** or **Pg Dn** to enter the correct hour and minutes according to a 24-hour clock. For example, 5 p.m. would be hour 17. You cannot set the number of seconds.

Setting the Diskette Drive(s)

Your system probably came with one diskette drive installed and you may have another drive of a different size or capacity. The SETUP menu offers five possible selections for your diskette drives (A and B):

- 1.2MB, 5¼-inch
- 360KB, 5¼-inch
- 1.44MB, 3½-inch
- 720KB, 3½-inch
- Not installed.

Check the settings displayed for both drives and correct them if necessary. (If you have only one diskette drive, select **Not installed** for drive B.)

Note

If you do not know the capacity of your diskette drive, ask your dealer.

Setting the Hard Disk Drive(s)

The SETUP program lets you select the type of hard disk drive(s) installed in your computer. If you have two hard disk drives, the first one is C and the second one is D. Be sure to choose the correct setting for both drives.

Follow these guidelines:

- ❑ If your system does not have a hard disk, select **Not installed** for drives C and D. If you have only one hard disk drive, select **Not installed for drive D**.
- ❑ If your computer came with an Epson 120MB hard disk drive (or if you installed this drive yourself), select number **39** for drive C.
- ❑ **If you have installed** another type of hard disk drive, you need to select the drive type number that matches your drive. See “Hard Disk Drive Types” below.

Hard Disk Drive Types

If you have installed a hard disk in your computer that is not the standard Epson 120MB drive (type 39), you need to select the correct type number to match your drive.

The following table lists the types of standard hard disk drives you can use. Check this table and the documentation supplied with your hard disk to find the correct type number for your drive. (Your drive’s documentation should list all the parameters necessary to identify it in this table.) If none of the types listed matches your drive, see “Defining your own drive type,” below.

Hard disk drive types

Type no.	Cylinders	Heads	Sectors (Sec)	Precomp (WPcom)	Landing Zone	Size (In MB)	Drive name/ manufacturer
1	306	4	17	128	305	10	
2	615	4	17	300	615	20	ST-225, ST-4026
3	615	6	17	300	615	31	
4	940	8	17	512	940	62	
5	940	6	17	512	940	47	
6	615	4	17	none	615	20	CP-3024, ST-125
7	462	8	17	256	511	31	
8	733	5	17	none	733	30	ST-4038
9	900	15	17	none	901	112	
10	820	3	17	none	820	20	
11	855	5	17	none	855	35	
12	855	7	17	none	855	50	
13	306	8	17	128	319	20	
14	733	7	17	none	733	43	
15							- reserved -
16	612	4	17	0	663	20	
17	977	5	17	300	977	41	CP-3044, 7040, 8051A
18	977	7	17	none	977	57	
19	1024	7	17	512	1023	60	CP-2064
20	733	5	17	300	732	30	MK-133FA
21	733	7	17	300	732	43	MK-134FA, ST-157A
22	733	5	17	300	733	30	
23	306	4	17	0	336	10	
24	903	4	46	none	902	81	CP-30084
25	776	8	33	none	775	100	CP-3104
26							- reserved -
27	698	7	17	300	732	41	
28	976	5	17	488	977	41	
29							- reserved -
30							- reserved -
31	732	7	17	300	732	43	
32	1023	5	17	none	1023	42	
33	901	5	53	none	900	117	LPS120AT

Hard disk drive types (continued)

Type no.	Cylinders	Heads	Sectors (Sec)	Precomp (WPcom)	Landing Zone	Size (In MB)	Drive name/ manufacturer
34	723	13	51	none	722	234	LPS240AT
35	934	16	17	none	933	124	MK2124FC
36							- reserved -
37	683	16	38	none	682	203	CP-3204F
38	548	8	38	none	547	81	CP-2048
39	761	8	39	none	760	116	CP-30104
40	980	10	17	none	979	81	7080A, MK2024FC
41	1022	5	34	none	1022	85	CDC-94216-106
42	1022	5	36	none	1022	90	CDC-94216-106
43	1024	8	17	512	1023	68	1325, 3085
44	828	10	34	none	828	137	MK-156F
45	1024	5	17	512	1023	43	
46	615	8	17	128	618	41	
47	—	—	—	—	—	—	User defined type

Defining your own drive type

If the parameters for your hard disk (listed in its documentation) do not match any of the types listed in the table above, you can define your own type. Follow these steps:

1. **With the cursor at the Hard disk type option, press Pg Up or Pg Dn to scroll through the types until you come to 47 = USER TYPE.**

2. Use the numeric keys to enter the appropriate values for these parameters:

CylIn = the number of cylinders on the disk.

Head = the number of read/write heads in the drive.

WPcom = the precompensation cylinder.

LZone = the landing zone (the area on which the computer parks the heads when you run the HDSIT program).

Sec = the number of sectors on the disk.

size = the total amount of storage capacity for the disk (selected automatically).

Press **Enter** after typing each number. If you enter an invalid number, the computer beeps and does not go on to the next parameter. Check your drive documentation and try again. You do not enter a value for **size**; SETUP does this automatically based on the other values you have entered.

Setting the Primary Display Type

This option lets you define the type of adapter you are using for your primary display device:

- VGA or EGA
- Color 80 x 25
- Monochrome
- Color 40 x 25.

If you have connected your monitor to the computer's built-in VGA port, select **vga or EGA**. If you installed an optional video card, follow these guidelines to select the correct adapter type:

- ❑ If you have a VGA adapter card or an enhanced graphics adapter (EGA) card, select **vga or EGA**.
- ❑ If you have a color graphics adapter (CGA) or a multi-mode graphics adapter (MGA) attached to an RGB (color) monitor, select **Color 80x25**. (Also be sure to set the color/mono switch on the MGA card to color.)
- ❑ If you have a monochrome display adapter (MDA), an MGA, or a Hercules MGA attached to a monochrome monitor, choose **Monochrome**. (Also remember to set the color/mono switch on the MGA card to mono.)
- ❑ If you have a composite color monitor, such as a color television with a video input, try selecting **Color 80x25**. If the monitor's resolution is poor, run **SETUP** again and select **Color 40x25**.

If you have two display adapters of different types, select the setting for the one you want to be your primary display adapter. The other one is your secondary adapter.

If you have installed an EGA or VGA display adapter card, or another type of card that you want to be the primary display adapter, you must set jumper J1 on the main system board to position B to disable the built-in VGA interface.

If you install one type of display adapter card and then change the type of monitor you are using (from color to monochrome or vice-versa), you also need to set jumper J4. If you have two types of cards, set the jumper to match the monitor that is your primary display. See Chapter 4 in the User's *Guide* for instructions on changing jumper settings.

Setting the Password

The SETUP program lets you set an optional password to control who can use your system. If you do not want to set a password for your computer, skip this section.

Once you set a password through SETUP, you must enter it every time you turn on your computer or reset it by pressing the **RESET** button. If you do not enter it correctly, you cannot access your system.

To set a password, move the cursor to the **Password** option. Next to it, you see **Not installed**. (If you have already set a password you see **Installed**.) Press **Pg Up** or **Pg Dn** to display the following:

```
New Install *****
```

Now type the password you want to use. You can type up to eight characters using the letter or number keys, in upper- or lowercase. For example, you could enter the following:

```
123aBc!
```

You can use the backspace **key** to correct mistakes. After you type the password, press **Enter**.

Note

Be sure to remember the password you enter or write it down and keep it in a safe place. If you cannot remember it, you will not be able to access the computer the next time you turn it on. If you forget your password, however, there is a way to disable the function. See "Password Problems" in Appendix C of the User's Guide for more information.

Changing or Deleting a Password

If you want to change the current password, highlight the Password option and press **Pg Up** or **Pg Dn** to display New Install. Then enter a new password, as described above.

To delete the password, press **Pg Up** or **Pg Dn** to display Not installed.

Be sure to save your settings (as described at the end of this chapter) when you exit the SETUP program.

Setting Network Server Mode

If you will be using your computer as a network server, select Installed. If you want to use your computer as a stand-alone workstation, leave this option set to Not Installed.

Note

If you want to use your computer as a network server, you can set a power-on password to increase the security of your system and prevent unauthorized users from accessing system files. See “Setting the Password” above.

Setting the Booting Sequence

The booting sequence determines the order in which the computer reads the drives when it looks for the operating system.






If you select **A: then c :**, each time you turn on or reset the computer, it checks drive A for an operating system diskette and loads the operating system from that diskette. If drive A does not contain an operating system diskette, the computer loads the operating system from drive C. This is the default setting.

If you select **c: only**, the computer loads the operating system from drive C without checking for a diskette in drive A.

Setting the Extended Setup Options

The Extended Setup options control these three features:

- Memory and speed
- Keyboard
- Built-in interfaces.

When you highlight any of these Extended setup options, a submenu listing the current settings for that option appears at the right of the screen. To enter this submenu and change a setting, press . Use  or  to highlight the setting you want to change, then press  or  to display and select the new setting.

When you finish, press  to return to the Main menu.

The following sections describe each of the Extended Setup options.

Setting the Memory and Speed Options

SETUP offers the following options for customizing your system's memory and speed settings:

- BIOS shadow
- Video shadow
- Video cache
- Cache
- speed.

Each of these options is described below.

Setting the BIOS and video shadow options

Your computer can access RAM (random access memory) faster than ROM (read only memory). The BIOS and video shadow RAM options enable the Equity 386/33 PLUS to copy **the contents** of its system BIOS and video ROM into RAM to speed up certain operations. You can enable or disable both options, depending **on your needs**.

Leave the BIOS shadow option set to **Enabled** unless you have installed a memory card that provides its own shadow RAM.

Leave the Video shadow option set to **Enabled unless you have installed a video card that provides its shadow** RAM.

Setting the video cache

When the Video cache option is enabled, the computer speeds up video access so it can display text and graphics on the screen faster. Leave this option set to **Disabled** if you are using a memory manager that can use the video cache RAM as expanded memory. (See your memory manager documentation for more information).

Setting the system memory caching

The Equity 386/33 PLUS provides a 64KB cache area of memory where it can access data faster than standard memory. If you do not want to use this feature, select **Disabled** for the Cache option. Otherwise, leave **Enabled**.

Setting the speed

This option lets you set the default speed at which your computer's processor operates when you turn it on:

- Fast speed (33 MHz)
- Slow speed (simulated 11 MHz)
- Automatic speed.

Select Fast speed for 33 MHz, **Slow speed** for 11 MHz, or Auto to have the computer switch to low speed automatically when necessary.

At fast speed, it can access memory faster, so your programs work faster. Select Fast unless you are using an application program that requires the slower speed. Some programs (especially older ones) have specific timing requirements when accessing diskettes. Check your application program manual.

You can also set the processor to change speed automatically. This enables the computer to switch to slow speed whenever it needs to access a diskette but run at fast speed for all other operations. When it runs at fast speed, the **TURBO** light on the front panel is illuminated.

Note

You may not want to use the Automatic setting for certain copy-protected programs. See "Changing the Processor Speed" in Chapter 2 of the User's Guide for more information.

You can also change the speed temporarily by giving a keyboard command or by running the ESPEED program. See "Changing the Processor Speed" in Chapter 2 of the User's Guide for more information.

Setting the Keyboard Options

There are four options for the keyboard: Test, NumLock, Key rate, and Key delay. The table below describes the settings available.

Keyboard options

Option	Settings	Description
Test	Enabled* Disabled	Tests keyboard at power-on Skips keyboard test at power-on
NumLock	On' Off	Determines initial NumLock status when system is turned on or reset
Key rate	2-30 (characters per second)	Sets rate at which a character repeats when key is held down; default is 10.9
Key delay	0.251 (seconds)	Sets period of delay between the time a key is pressed and the character appears on the screen; default is 0.50.

. Indicates the default setting

Setting the Built-in Interfaces

This option lets you define how the following built-in interfaces operate:

- Parallel port (LPT1, LPT2, LPT3)
- Serial port (COM1 or COM2)
- Built-in mouse controller
- Floppy disk drive controller (FDC)
- Hard disk drive controller (HDC).

Setting the parallel interface

The built-in parallel port is set to act as the primary port (LPT1). If you install an option card that provides an additional parallel interface, you may need to select LPT2 or LPT3 for the built-in port. Follow these guidelines:

- If you are using only the built-in port, select **LPT1**. Also select LPT1 if you have installed an additional port but **want** to keep the built-in port the primary adapter.
- If you have installed an additional port that is pre-set to act as the primary port or one that you want to be the primary port, select **LPT2**. For example, if you have installed an IBM monochrome adapter/parallel interface card, the parallel port on the card must be the primary adapter and you need to select LPT2 for the built-in port.
- If you **have** installed two additional parallel ports and want them to be primary and secondary, select **LPT3**.
- If you have installed three additional parallel ports and you do not want to use **the** built-in port, **select Disabled**.

Note

be sure to set any jumpers on the card(s) to indicate how you want the port to be recognized (LPT1, LPT2, or LPT3).

Setting the serial interface

The built-in serial port in your computer is set to act as the primary port (COM1). If you install an option card that provides an additional serial port, that port automatically becomes secondary (COM2). However, if you want the port on the card to be COM1, select COM2 for the built-in port.

If you install a card (or cards) that provides two additional serial ports and you want them to act as the primary and secondary **ports, select Disabled for the built-in port. Also, be sure to set any jumper(s) on the card(s) to indicate whether you want the port(s) to be primary or secondary.**

Setting the mouse controller

If you are using the built-in mouse port, the PS/2 mouse option should be set to **Enabled**. If you are using a mouse or other pointing device connected to an option card in your computer, **set this option to Disabled**.

Setting the disk drive controllers

If you are using the standard drives that came with your **computer, the hard disk drive controller (HDC) and diskette drive controller (FDC) should be set to Enabled**.

However, if you install an option card to provide a controller for a diskette drive or hard disk drive, you need to select **Disabled**.

Saving Your Settings

After you have made your selections for SETUP, press **Esc** to exit. You see the following prompt:

Save SETUP configuration (Y/N)?

Press **Esc** to return to the menu to make corrections. Press **Y** and **Enter** to save the settings in the CMOS RAM. To exit SETUP without saving your changes press **N** and **Enter**.

If you saved your changes, the SETUP program resets your system and the computer runs through its power-on diagnostic tests.

If something is wrong, however, you see an error message and a prompt to run SETUP. Follow the instructions on the screen to run SETUP again to correct it. (You may need to reset the computer.)

If you have just run SETUP for the first time, the next thing you need to do is install the operating system on your computer. See your operating system manuals for instructions.

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