

HEWLETT-PACKARD

Installing Your  
Operating System



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Installing Your Operating System

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**Personal Computer Group  
974 E. Arques Avenue  
P.O. Box 486  
Sunnyvale, CA 94086, USA**

**Printing History**

May, 1988

Printed in Singapore

**HP Computer Museum**  
**[www.hpmuseum.net](http://www.hpmuseum.net)**

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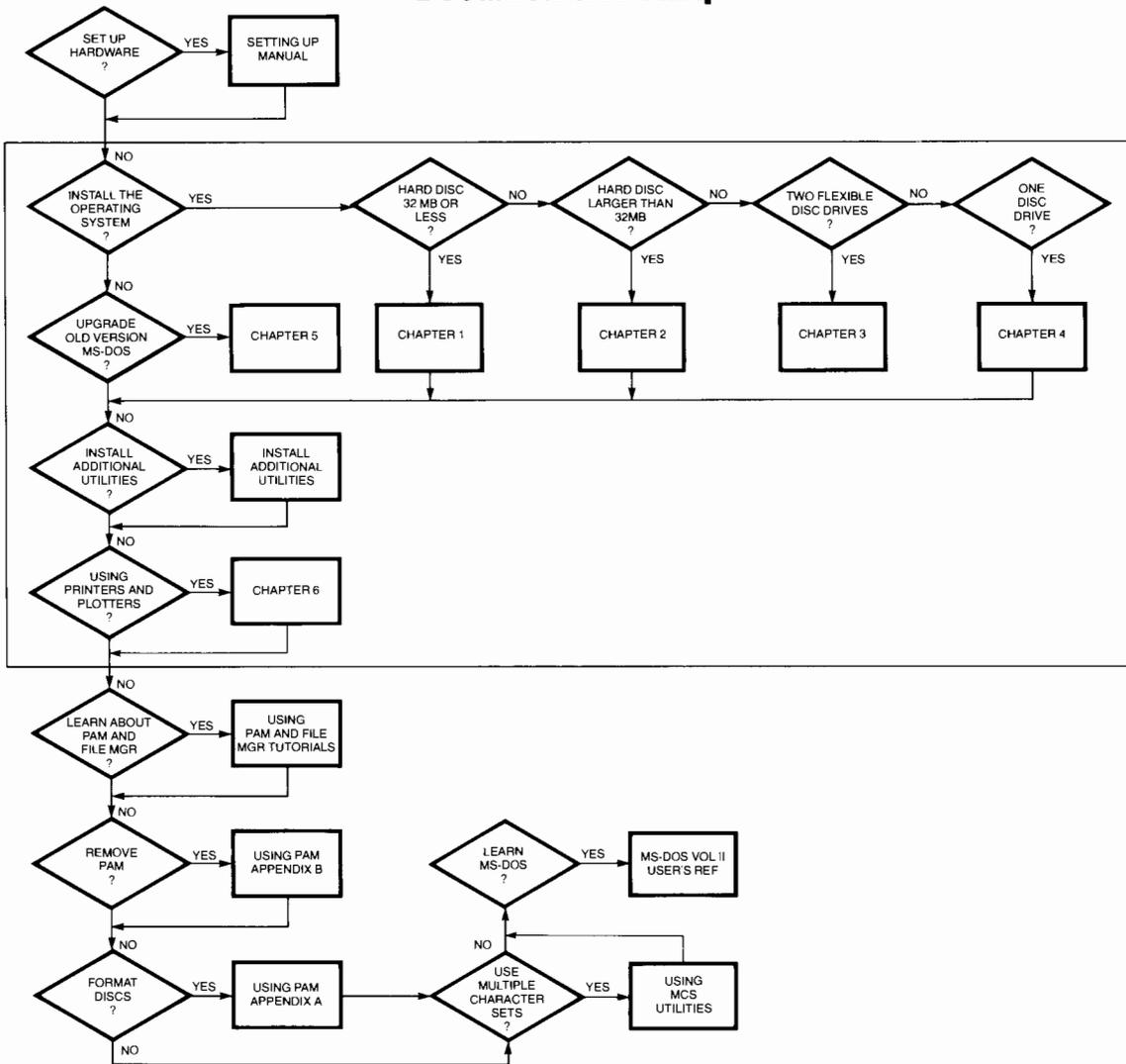
## Corrections and Updates

The *HP PC Communicator* magazine provides current information about Hewlett-Packard computers and software. A recent copy was included with your HP Vectra personal computer. Some of the things you can find in *The Communicator* include announcements of software updates, updates to manuals, articles on usage and programming techniques, and answers to frequently asked questions. We recommend that you order a subscription (HP Product Number 45530A/B/C, available in English only).





# Documentation Map





# Installing Your Operating System

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# Read This First

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This manual contains the instructions for installing the MS-DOS 3.3 operating system on your Hewlett-Packard personal computer.

## Requirements

- Know what kind of disc drive(s) you have. Refer to the *System Checklist* that came packaged with your computer if your disc drive(s) were installed at the factory.
- If you **don't** have a hard disc drive, you must have a box of blank flexible discs that match the capacity of drive A:.
- Get the MS-DOS master discs located at the back of this binder.
- MS-DOS 3.3 is available on both 3.5-inch and 5.25-inch flexible discs. If you have the 3.5-inch media, you will have two discs: the **Startup/Operating** disc and the **HP+** disc. If you have the 5.25-inch media, you will have three discs: the **Startup** disc, the **Operating** disc, and the **HP+** disc.

The instructions in this manual refer to 5.25-inch media. Therefore, if you have 3.5-inch media, you should use your **Startup/Operating** disc whenever the manual refers to either the **Startup** or **Operating** disc.

- If you have a hard disc and are upgrading MS-DOS 3.1 to MS-DOS 3.3, you may have received the Vectra Hard Disc Multi-Voluming Utility with your computer or hard disc drive. If so, get your Vectra Hard Disc Multi-Voluming Utility master disc.
- If you have a hard disc and are upgrading MS-DOS 3.2 to MS-DOS 3.3, get your MS-DOS 3.2 Supplemental master disc.

## Where to Go

- If your new Hard Disc Drive C: is **32 Mb or less** and you don't have a previous version of MS-DOS installed on it, go to Chapter 1.
- If your new Hard Disc Drive C: is **greater than 32 Mb** and you don't have a previous version of MS-DOS installed on it, go to Chapter 2.
- If you only have **Two Flexible Disc Drives**, go to Chapter 3.
- If you only have **One Flexible Disc Drive**, go to Chapter 4.
- If you are **upgrading a previous version of MS-DOS to the new 3.3 version**, go to Chapter 5.

# 1

## Computers with Hard Discs of 32 Mb or Less

---

This chapter contains instructions for installing MS-DOS on a hard disc of *32 Megabytes or less*.

Installing MS-DOS on a new hard disc is a multi-step process. You should have already **initialized** your hard disc as described in the *SETUP Program Guide* that came in your computer's *Setting Up* binder.

---

### Running FDISK

Follow these steps to run FDISK:

1. Put the Startup disc in drive A:.
2. Turn on your computer. If your computer is already on, hold down **CTRL** and **Alt**, and press **DEL** at the same time. The PAM Main Menu is displayed.
3. Remove the Startup disc from drive A:, and insert the Operating disc.
4. On the PAM Main Menu, at the A> prompt, type:

FDISK

and press **Enter**. The FDISK Options menu is displayed.

5. Press **Enter** at the FDISK Options menu. This selects Option 1, Create DOS partition.



6. Press **Enter** at the Create DOS Partition menu. This selects Option 1, Create Primary DOS Partition.

7. You will see this message:

```
Do you wish to use the maximum size
for a DOS partition and make the DOS
partition active (Y/N)...?
```

Press **Enter**.

8. You will then see this message:

```
System will now restart
```

```
Insert DOS diskette in drive A:
Press any key when ready. . .
```

Remove the Operating disc and insert the Startup disc. Then press **Enter** to restart your computer.

9. Do you have a second hard disc installed?

■ **YES.** Follow these steps:

- a. Remove the Startup disc and insert the Operating disc.
- b. Type **FDISK** and press **Enter**. The **FDISK** Options menu is displayed.
- c. Press **5** to select Option 5, Select Next Hard Disc. Then press **Enter**.
- d. Go back to step 5 and repeat steps 5 through 8. When done, go to the next section, "Running **FORMAT**."

■ **NO.** Go to the next section, "Running **FORMAT**."

---

## Running FORMAT

Follow these steps to format your hard disc.

1. On the PAM Main Menu, at the A> prompt, type:

FORMAT C: /S/V

and press .

2. A WARNING message is displayed. Type  and then press  to begin formatting.

Formatting information is displayed. Formatting will take about four minutes.

3. When prompted, type a volume name of up to 11 characters. Then press  twice.
4. The PAM Main Menu is displayed. You now have a formatted primary DOS partition (C:) on your hard disc.
5. Do you have a second hard disc drive installed?

- YES. To format drive D:, type:

FORMAT D: /V

and press . Then, go back to step 2 and repeat steps 2 through 4 for drive D:. When done, go to the next section.

- NO. You are now ready to copy MS-DOS and PAM to your hard disc. Go to the next section now.

## Copying MS-DOS and PAM to Your Hard Disc

Follow these steps to copy the files from your master discs to your hard disc.

1. On the PAM Main Menu, at the A> prompt, type:

```
XCOPY A: C:
```

and press . This copies the files from the Startup disc to your hard disc. When done, press  to continue.

2. Type:

```
PAMINSTL A: C:
```

and press . This copies the PAM files to your hard disc. When done, press  to continue.

3. Remove the Startup disc and insert the Operating disc.

4. Type:

```
XCOPY A: C:
```

and press . This copies the files from the Operating disc to your hard disc. When done, press  to continue.

5. Remove the Operating disc and insert the HP+ disc.

6. Type:

XCOPY A: C:

and press **Enter**. This copies the files from the HP+ disc to your hard disc. When done, press **Enter** to continue.

7. Remove the HP+ disc from drive A: and put your master discs away in a safe place. Your hard disc is now ready to use MS-DOS 3.3 and PAM.

8. Restart your computer by holding down **CTRL** and **Alt**, and pressing **DEL** at the same time.

9. Did any additional discs with utilities or drivers come with your computer?

■ **YES.** Install those now using the instructions that came with them. The instructions should be located behind the *Additional Utilities and Drivers* tab in this binder, or in your PC Kit. Then go to Chapter 6, "Using Printers and Plotters."

■ **NO.** Go to Chapter 6, "Using Printers and Plotters."



## Computers with Hard Discs of More Than 32 Mb

---

This chapter contains instructions for installing MS-DOS on a hard disc *greater than 32 Megabytes*. If you have a hard disc greater than 32 Mb, you **MUST** follow these instructions *unless you have the Volume Expansion Utility*.

Did you receive the Volume Expansion Utility in your PC Kit?

- **YES.** Use the instructions in the *HP Vectra Volume Expansion Utility Manual* to partition your hard disc and install MS-DOS. **Do not use the instructions in this chapter.**
- **NO.** Read on.

Installing MS-DOS on a new hard disc is a multi-step process. If your hard disc is not pre-initialized, you should have already **initialized** it as described in the *SETUP Program Guide* that came in your computer's *Setting Up* binder.

---

## Running FDISK

Follow these steps to run FDISK:

1. Put the Startup disc in drive A:.
2. Turn on your computer. If your computer is already on, hold down **CTRL** and **Alt**, and press **DEL** at the same time. The PAM Main Menu is displayed.
3. Remove the Startup disc from drive A:, and insert the Operating disc.
4. On the PAM Main Menu, at the A> prompt, type:

FDISK

and press **Enter**. The FDISK Options menu is displayed.

5. Press **Enter** at the FDISK Options menu. This selects Option 1, Create DOS Partition.
6. Press **Enter** at the Create DOS Partition menu. This selects Option 1, Create Primary DOS Partition.
7. You will see this message:

Do you wish to use the maximum size  
for a DOS partition and make the DOS  
partition active (Y/N)...?

Press **Enter**.

8. You will then see this message:

System will now restart

Insert DOS diskette in drive A:  
Press any key when ready. . .

Remove the Operating disc and insert the Startup disc. Press **Enter** to restart your computer.

9. When the PAM Main Menu is displayed, remove the Startup disc and insert the Operating disc.

10. Type:

FDISK



and press **Enter**. The FDISK Options menu is displayed.

11. At the FDISK Options menu, press **Enter**. This selects Option 1, Create DOS Partition.
12. At the Create DOS Partition menu, type 2 and press **Enter**. This selects Option 2, Create Extended DOS Partition.
13. You are prompted to enter the partition size for your extended DOS partition. Press **Enter** to choose the recommended size (the one displayed for you).
14. Press **ESC**. The Create Logical DOS Drive(s) screen is displayed.



15. Press **Enter** to select the recommended logical drive size. The size displayed is the largest allowable.
16. Press **ESC** to return to the FDISK Options menu.
17. Do you have a second hard disc installed?

- **YES.** Type 5 and press **Enter** to select Option 5, Select Next Hard Disc. Then:

If your second hard disc is *greater than 32 Mb*, go back to step 5 and repeat steps **5 through 16**.  
**Then, skip to step 18.**

If your second hard disc is *32 Mb or less*, go back to step 5 and repeat steps **5 through 8**. Then go to the next section, "Running FORMAT."

- **NO.** Read on.

18. Press **ESC** to return to MS-DOS.

19. You will then see this message:

System will now restart

Insert DOS diskette in drive A:  
Press any key when ready. . .

Remove the Operating disc and insert the Startup disc. Press **Enter** to restart your computer. Now go to the next section, "Running FORMAT."

## Running FORMAT

Follow these steps to format your hard disc.

1. On the PAM Main Menu, at the A> prompt, type:

```
FORMAT C: /S/V
```

and press **Enter**.

2. A WARNING message is displayed. Type **Y** and then press **Enter** to begin formatting.

Formatting information is displayed. Formatting will take about four minutes.

3. When prompted, type a volume name of up to 11 characters. Then press **Enter** twice.

4. Type:

```
FORMAT D: /V
```

and press **Enter**.

5. A WARNING message is displayed. Type **Y** and then press **Enter** to begin formatting.

6. When prompted, type a volume name of up to 11 characters. Then press **Enter** twice.

7. The PAM Main Menu is displayed. You now have a formatted primary DOS partition (C:) and formatted extended DOS partition (D:) on your hard disc.

8. Do you have a second hard disc drive installed?

- **YES.** If your second hard disc is *greater than 32 Mb*, go back to step 4 and repeat steps **4 through 6** for drive E: and again for drive F:. Substitute the correct drive letter in the FORMAT command as necessary. When done, go to the next section, "Copying MS-DOS and PAM to Your Hard Disc."

If your second hard disc is *32 Mb or less*, go back to step 4 and repeat steps **4 through 6** for drive E:. Substitute the correct drive letter in the FORMAT command. When done, go to the next section, "Copying MS-DOS and PAM to Your Hard Disc."

- **NO.** Go to the next section, "Copying MS-DOS and PAM to Your Hard Disc."

---

## Copying MS-DOS and PAM to Your Hard Disc

Follow these steps to copy the files from your master discs to your hard disc.

1. On the PAM Main Menu, at the A> prompt, type:

XCOPY A: C:

and press . This copies the files from the Startup disc to your hard disc. When done, press  to continue.

2. Type:

PAMINSTL A: C:

and press . This copies the PAM files to your hard disc. When done, press  to continue.

3. Remove the Startup disc from drive A:, and insert the Operating disc.

4. Type:

C:

then press  twice.

5. Type:

XCOPY A: C:

and press . This copies the files from the Operating disc to your hard disc. When done, press  to continue.

6. Remove the Operating disc and insert the HP+ disc.

7. Type:

XCOPY A: C:

and press **Enter**. This copies the files from the HP+ disc to your hard disc. When done, press **Enter** to continue.

8. Remove the HP+ disc from drive A: and put your master discs away in a safe place. Your hard disc is now ready to use MS-DOS 3.3 and PAM.

9. Restart your computer by holding down **CTRL** and **Alt**, and pressing **DEL** at the same time.

10. Did any additional discs with utilities or drivers come packaged in your computer hardware box(es)?

- **YES.** Install those now using the instructions that came with them. The instructions should be located behind the *Additional Utilities and Drivers* tab in this binder, or in your PC Kit. Then go to Chapter 6, "Using Printers and Plotters."

- **NO.** Go to Chapter 6, "Using Printers and Plotters."

# 3

## Computers with Two Flexible Disc Drives

---

This chapter contains instructions for creating MS-DOS work discs on computers with two flexible disc drives. Your work discs will use the format of your A: drive.

Does drive A: have an "\*" on the front?

- **YES.** Skip to the "Instructions for a 360 Kb Drive A:" section in this chapter.
- **NO.** Read on.

---

### Instructions for a Greater than 360 Kb Drive A:

The capacity of your flexible disc drive A: is greater than 360 Kb. This means that you will make one work disc with the Startup and Operating files on it and one work disc with the HP+ files on it. Follow the steps below:

1. Put the Startup disc in drive A:.
2. Turn on your computer. If your computer is already on, hold down **CTRL** and **Alt**, and press **DEL** at the same time.

3. Are you creating work discs on 1.2 Mb or 1.44 Mb media?

- **YES.** On the PAM Main Menu, at the A> prompt, type:

FORMAT A: /S

and press . Skip to step 4.

- **NO.** You are creating work discs on 720 Kb media. On the PAM Main Menu, at the A> prompt, type:

FORMAT A: /S /T:80 /N:9

and press .

4. When prompted to insert a new disc for drive A:, remove the Startup disc from drive A: and insert a blank disc of the appropriate capacity.

Then press  to begin the formatting process. Formatting information is displayed.

5. When formatting is complete, press  when asked to format another. Then press  and remove the formatted disc from drive A:.

When prompted to insert a new disc for drive A:, insert another blank disc of the appropriate capacity. Then press  to format the second blank disc.

6. When formatting is complete, press  when asked to format another. Then press  twice.

7. Put the Startup disc in drive B:, then type:

B:

and press  twice.

8. At the B> prompt, type:

XCOPY B: A:

and press . This copies the files from the Startup disc to your work disc. When done, press  to continue.

9. At the B> prompt, type:

PAMINSTL B: A:

and press . This copies the PAM files to your work disc. When done, press  to continue.

10. Remove the Startup disc from drive B: and insert the Operating disc.

11. At the B> prompt, type:

XCOPY B: A:

and press . This copies the files from the Operating disc to your work disc. When done, press  to continue.

12. Get a blank label from your box of discs and write this on it:

**Startup/Operating Work Disc**  
**MS-DOS Version 3.3**  
today's date

13. Remove the work disc from drive A: and affix the label to it.



14. Remove the Operating disc from drive B: and insert the HP+ disc.
15. Insert the second blank disc you formatted earlier in drive A:
16. At the B> prompt, type:

XCOPY B: A:

and press **Enter**. This copies the files from the HP+ disc to your work disc. When done, press **Enter** to continue.

17. Get a blank label from your box of discs and write this on it:

**HP+ Work Disc**  
**MS-DOS Version 3.3**  
today's date

18. Remove the work disc from drive A: and affix the label to it.
19. Remove the HP+ disc from drive B: and put all of your master discs away in a safe place. Your work discs now contain the MS-DOS 3.3 operating system and PAM.
20. Put your Startup/Operating work disc in drive A:, and hold down **CTRL** and **Alt**, and press **DEL** at the same time. The PAM Main Menu is displayed.

21. Are you setting up your computer for the first time?

- **YES.** If any additional discs with utilities or drivers came with your computer, install them now. The instructions should be located behind the *Additional Utilities and Drivers* tab in this binder, or in your PC Kit. Then go to Chapter 6, "Using Printers and Plotters."
- **NO.** Go to Chapter 6, "Using Printers and Plotters."

## Instructions for a 360 Kb Drive A:

The capacity of your flexible disc drive A: (with an "\*" on the front of it) is 360 Kb. This means that you will make three work discs. The first disc will contain the Startup files, and the second disc will contain the Operating files. The third work disc will contain the HP+ files. Follow the steps below:

1. Put the Startup disc in drive A:.
2. Turn on your computer. If your computer is already on, hold down **CTRL** and **Alt**, and press **DEL** at the same time.
3. On the PAM Main Menu, at the A> prompt, type:

FORMAT A: /S

and press **Enter**.

4. When prompted to insert a new disc for drive A:, remove the Startup disc from drive A: and insert a blank 360 Kb disc.

Then press **Enter** to begin the formatting process. Formatting information is displayed.

5. When formatting is complete, press **N** when asked to format another. Then press **Enter** twice.
6. Put the Startup disc in drive B:, then type:

B:

and press **Enter** twice.

7. At the B> prompt, type:

XCOPY B: A:

and press **Enter**. This copies the files from the Startup disc to your work disc. When done, press **Enter** to continue.

8. At the B> prompt, type:

PAMINSTL B: A:

and press **Enter**. This copies the PAM files to your work disc. When done, press **Enter** to continue.

9. Get a blank label from your box of discs and write this on it:

**Startup Work Disc**  
**MS-DOS Version 3.3**  
today's date

10. Remove the work disc from drive A: and affix the label to it.
11. Get another blank 360 Kb disc and insert it in drive A:. (The Startup master disc should still be in drive B:.)
12. At the B> prompt, type:

FORMAT A:

and press **Enter**.

13. Since you already have a blank disc in drive A:, just press **Enter** when prompted to insert a disc for drive A:. This starts the formatting process. Formatting information is displayed.
14. When formatting is complete, press **N** when asked to format another. Then press **Enter** twice.
15. Remove the Startup disc from drive B:, and insert the Operating disc. Then type:

XCOPY B: A:

and press **Enter**. This copies the files from the Operating disc to your work disc. When done, press **Enter** to continue.

16. Get a blank label from your box of discs and write this on it:

**Operating Work Disc**  
**MS-DOS Version 3.3**  
today's date

17. Remove the work disc from drive A: and affix the label to it.
18. Get another blank 360 Kb disc and insert it in drive A:. (The Operating master disc should still be in drive B:.)
19. At the B> prompt, type:

FORMAT A:

and press **Enter**.

20. Since you already have a blank disc in drive A:, just press **Enter** when prompted to insert a disc for drive A:. This starts the formatting process. Formatting information is displayed.
21. When formatting is complete, press **N** when asked to format another. Then press **Enter** twice.
22. Remove the Operating disc from drive B: and insert the HP+ disc. Then type:

XCOPY B: A:

then press **Enter**. This copies the files from the HP+ disc to your work disc. When done, press **Enter** to continue.

23. Get a blank label from your box of discs and write this on it:

**HP+ Work Disc**  
**MS-DOS Version 3.3**  
today's date

24. Remove the work disc from drive A: and affix the label to it.
25. Remove the HP+ disc from drive B: and put all of your master discs away in a safe place. Your work discs now contain MS-DOS 3.3 and PAM.
26. Put the Startup work disc in drive A:, and hold down **CTRL** and **Alt**, and press **DEL** at the same time. The PAM Main Menu is displayed.

27. Are you setting up your computer for the first time?

- **YES.** If any additional discs with utilities or drivers came with your computer, install them now. The instructions should be located behind the *Additional Utilities and Drivers* tab in this binder, or in your PC Kit. Then go to Chapter 6, "Using Printers and Plotters."
- **NO.** Go to Chapter 6, "Using Printers and Plotters."

# 4

## Computers with One Flexible Disc Drive

---

This chapter contains instructions for creating MS-DOS work discs on computers with only one flexible disc drive. Your work discs will use the format of your A: drive.

Does drive A: have an "\*" on the front?

- YES. Skip to the "Instructions for a 360 Kb Drive A:" section in this chapter.
- NO. Read on.



---

### Instructions for a Greater than 360 Kb Drive A:

The capacity of your flexible disc drive A: is greater than 360 Kb. This means that you will make one work disc with the Startup and Operating files on it and one work disc with the HP+ files on it. Follow the steps below:

1. Put the Startup disc in drive A:.
2. Turn on your computer. If your computer is already on, hold down **CTRL** and **Alt**, and press **DEL** at the same time.



3. Are you creating work discs on 1.2 Mb or 1.44 Mb media?

- **YES.** On the PAM Main Menu, at the A> prompt, type:

FORMAT A: /S

and press . Skip to step 4.

- **NO.** You are creating work discs on 720 Kb media. On the PAM Main Menu, at the A> prompt, type:

FORMAT A: /S /T:80 /N:9

and press .

4. When prompted to insert a new disc for drive A:, remove the Startup disc from drive A: and insert a blank disc of the appropriate capacity.

Then press  to begin the formatting process. Formatting information is displayed.

5. When formatting is complete, press  when asked to format another. Then press  and remove the formatted disc from drive A:.

When prompted to insert a new disc for drive A:, insert another blank disc of the appropriate capacity. Then press  to format the second blank disc.

6. When formatting is complete, press  when asked to format another. Then press  twice, and remove the formatted disc from drive A:.

## Note



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When a computer has only one disc drive, MS-DOS considers the drive as two drives: drive A: and drive B:. In the next steps, when you are prompted for both drive A: and drive B:, you will change flexible discs in drive A: only.

---

7. Put the Startup disc back into drive A:. At the A> prompt, type:

```
XCOPY A: B:
```

and press **Enter**.

8. When prompted to insert a disc for drive B:, remove the Startup disc from drive A: and insert one of the blank discs you just formatted. Press **Enter** when ready.

Follow the instructions on the screen to copy the files from the Startup disc to your work disc. Remember, always use the Startup disc for drive A: and your work disc for drive B:. When done, press **Enter** to continue.

9. Make sure the Startup disc is in drive A:. Then type:

```
PAMINSTL A: B:
```

and press **Enter**. Follow the instructions on the screen to install PAM on your work disc. Remember, always use the Startup disc for drive A: and your work disc for drive B:. When done, press **Enter** to continue.

10. Remove the Startup disc from drive A: and insert the Operating disc. Then type:

XCOPY A: B:

and press **Enter**. Follow the instructions on the screen to copy the files from the Operating disc to your work disc (which already contains the Startup files). Remember, always use the Operating disc for drive A: and your work disc for drive B:. When done, press **Enter** to continue.

11. Get a blank label from your box of discs and write this on it:

**Startup/Operating Work Disc**  
**MS-DOS Version 3.3**  
today's date

Affix the label to the work disc you just created.

12. Remove the Operating disc from drive A: and insert the HP+ disc. Then type:

XCOPY A: B:

and press **Enter**.

13. When prompted to insert a disc for drive B:, remove the HP+ disc from drive A: and insert the second blank disc you formatted earlier. Press **Enter** when ready.

Follow the instructions on the screen to copy the files from the HP+ disc to your work disc. Remember, always use the HP+ disc for drive A: and your work disc for drive B:. When done, press **Enter** to continue.

14. Get a blank label from your box of discs and write this on it:

**HP+ Work Disc**  
**MS-DOS Version 3.3**  
today's date

Affix the label to the work disc you just created.

15. Remove the HP+ disc from drive A: and put your master discs away in a safe place. Your work discs now contain MS-DOS 3.3 and PAM.
16. Put your Startup/Operating work disc in drive A:. Then, hold down **CTRL** and **Alt**, and press **DEL** at the same time. The PAM Main Menu is displayed.
17. Are you setting up your computer for the first time?
  - **YES.** If any additional discs with utilities or drivers came with your computer, install them now. The instructions should be located behind the *Additional Utilities and Drivers* tab in this binder, or in your PC Kit. Then go to Chapter 6, "Using Printers and Plotters."
  - **NO.** Go to Chapter 6, "Using Printers and Plotters."

---

## Instructions for a 360 Kb Drive A:

The capacity of your flexible disc drive A: (with an "\*" on the front of it) is 360 Kb. This means that you will make three work discs. The first disc will contain the Startup files, and the second disc will contain the Operating files. The third work disc will contain the HP+ files. Follow the steps below:

1. Put the Startup disc in drive A:.
2. Turn on your computer. If your computer is already on, hold down **CTRL** and **Alt**, and press **DEL** at the same time.
3. On the PAM Main Menu, at the A> prompt, type:

FORMAT A: /S

and press **Enter**.

4. When prompted to insert a new disc for drive A:, remove the Startup disc from drive A: and insert a blank 360 Kb disc.

Then press **Enter** to begin the formatting process. Formatting information is displayed.

5. When formatting is complete, press **N** when asked to format another. Then press **Enter** twice and remove the formatted disc from drive A:.

## Note



---

When a computer has only one disc drive, MS-DOS considers the drive as two drives: drive A: and drive B:. In the next steps, when you are prompted for both drive A: and drive B:, you will change flexible discs in drive A: only.

---

6. Put the Startup disc back in drive A:. At the A> prompt, type:

XCOPY A: B:

and press .

7. When prompted to insert a disc for drive B:, remove the Startup disc from drive A: and insert the blank disc you just formatted. Press  when ready.

Follow the instructions on the screen to copy the files from the Startup disc to your work disc. Remember, always use the Startup disc for drive A: and your work disc for drive B:. When done, press  to continue.

8. Make sure the Startup disc is in drive A:. Then type:

PAMINSTL A: B:

and press . Follow the instructions on the screen to install PAM on your work disc. Remember, always use the Startup disc for drive A: and your work disc for drive B:. When done, press  to continue.

9. Get a blank label from your box of discs and write this on it:

**Startup Work Disc**  
**MS-DOS Version 3.3**  
today's date

Affix the label to the work disc you just created.

10. Make sure the Startup disc is in drive A:. Then type:

FORMAT A:

and press .

11. When prompted to insert a new disc for drive A:, remove the Startup disc from drive A: and insert a blank 360 Kb disc.

Then press  to begin the formatting process. Formatting information is displayed.

12. When formatting is complete, press  when asked to format another. Then press  twice and remove the formatted disc from drive A:.

13. Put the Operating disc in drive A:. Then type:

XCOPY A: B:

and press .

14. When prompted to insert a disc for drive B:, remove the Operating disc from drive A: and insert the blank disc you just formatted. Press  when ready.

Follow the instructions on the screen to copy the files from the Operating disc to your work disc.

Remember, always use the Operating disc for drive A: and your work disc for drive B:. When done, press  to continue.

15. Get a blank label from your box of discs and write this on it:

**Operating Work Disc**  
**MS-DOS Version 3.3**  
today's date

Affix the label to the work disc you just created.

16. With the Operating disc in drive A:, type:

FORMAT A:

and press .

17. When prompted to insert a new disc for drive A:, remove the Operating disc from drive A: and insert a blank 360 Kb disc.

Then press  to begin the formatting process. Formatting information is displayed.

18. When formatting is complete, press  when asked to format another. Then press  twice and remove the formatted disc from drive A:.

19. Put the HP+ disc in drive A:. Then type:

XCOPY A: B:

and press .

20. When prompted to insert a disc for drive B:, remove the HP+ disc from drive A: and insert the blank disc you just formatted. Press  when ready.

Follow the instructions on the screen to copy the files from the HP+ disc to your work disc. Remember, always use the HP+ disc for drive A: and your work disc for drive B:. When done, press  to continue.



21. Get a blank label from your box of discs and write this on it:

**HP+ Work Disc**  
**MS-DOS Version 3.3**  
today's date

Affix the label to the work disc you just created.

22. Remove the HP+ disc from drive A:. Put your master discs away in a safe place. Your work discs now contain MS-DOS 3.3 and PAM.
23. Put your Startup work disc in drive A:. Then, hold down **CTRL** and **ALT**, and press **DEL** at the same time. The PAM Main Menu is displayed.
24. Are you setting up your computer for the first time?
  - **YES.** If any additional discs with utilities or drivers came with your computer, install them now. The instructions should be located behind the *Additional Utilities and Drivers* tab in this binder, or in your PC Kit. Then go to Chapter 6, "Using Printers and Plotters."
  - **NO.** Go to Chapter 6, "Using Printers and Plotters."

# 5

## Upgrading a Previous Version of MS-DOS

---

This chapter contains instructions for upgrading a hard disc that currently contains a previous version of MS-DOS to the new 3.3 version. The steps listed here are for upgrading a **hard disc**.



---

### Partitioning Your Hard Disc

When you installed the previous version of MS-DOS, you may have partitioned your hard disc using MVBUILD and the MULTIVOL.SYS driver. With MS-DOS 3.3, this functionality is replaced by FDISK's extended DOS partition. This new feature creates a partition on your hard disc which can be divided into as many as 23 logical disc drives.

Did you previously use MULTIVOL.SYS to partition your hard disc?

- **NO.** Go directly to the "Upgrading MS-DOS" section in this chapter now.
- **YES.** Read on. The following procedure will replace the multi-volume partition on your hard disc with an extended DOS partition.
- **NOT SURE.** Read on.

1. Turn on your computer. If your computer is already on, hold down **CTRL** and **Alt**, and press **DEL** at the same time.

2. On the PAM Main Menu, at the C> prompt, type:

TYPE CONFIG.SYS

and press **Enter**. The contents of your CONFIG.SYS file are displayed.

3. Do you see the following line?

DEVICE=MULTIVOL.SYS

- **NO.** Press **Enter** to continue. Then go to the "Upgrading MS-DOS" section in this chapter.
- **YES.** You must remove the multi-volume partition from your hard disc before upgrading to the new MS-DOS version. Press **Enter** and read on.

4. *Before you do anything else*, back up your hard disc.
- 

**Caution**



Removing a partition destroys the files in that partition. All files in the multi-volume partition will be destroyed. If you want to save any files you have on logical drives within the multi-volume partition (for example, D:, E:, etc.), be sure to back them up.

For example, to back up all files on drive D: to a flexible disc in drive A:, insert a blank, formatted disc into A: and type the following command at the MS-DOS prompt.

BACKUP D: A:

A message is displayed warning that all files in the root directory of the flexible disc in drive A: will be erased. If you are sure the root directory (A:\) is empty, press  to continue.

Be sure to have enough blank, formatted discs available to complete the back up. See the *User's Reference* for more information about the BACKUP command.

---

5. Restart your computer by holding down  and , and pressing  at the same time.

6. Are you upgrading MS-DOS 3.2 to MS-DOS 3.3?
  - YES. Put the MS-DOS 3.2 Supplemental disc in drive A:. Skip to step 7.
  - NO. Put the Vectra Hard Disc Multi-Voluming Utility disc in drive A:. (You used this disc to create a multi-volume partition when you originally set up your hard disc. It was included with your computer or hard disc drive.)

7. On the PAM Main Menu, at the C> prompt, type:

A: MVBUILD

and press . The Multi-Volume Set-up & Formatting Utility menu is displayed.

8. Type 2 to select Option 2, Delete a Multi-Vol Partition, and press .

Press , when asked if you want to delete the multi-volume partition, then press .

9. Press  to return to MS-DOS.

10. You will see this message:

Your system must now be restarted.  
Insert the DOS disc into drive A: and  
press <Enter>.

Remove the disc from drive A: and put it away.

11. Put the MS-DOS 3.3 Startup disc into drive A:, then press .

12. When the PAM Main Menu is displayed, go to the next section, "Running FDISK."

---

## Running FDISK

Follow these steps to run FDISK.

1. Remove the Startup disc from drive A: and insert the Operating disc.

2. Type:

FDISK

and press **Enter**. The FDISK Options menu is displayed.

3. Press **Enter** at the FDISK Options menu. This selects Option 1, Create DOS partition.
4. Type 2 and press **Enter** to create an extended DOS partition.
5. You are prompted to enter the partition size for your extended DOS partition. Press **Enter** to select the recommended partition size and create the extended DOS partition.
6. Press **ESC** to go to the Create Logical DOS Drive(s) menu.
7. Press **Enter** to select the recommended logical drive size. The size displayed is the largest allowable.

8. Write down the logical drive(s) you just created. The logical drives are listed on the screen in the column labeled Drv. You will need this information when you run FORMAT in the next section.
9. Press **ESC** to return to the FDISK Options menu.
10. Press **ESC** to return to MS-DOS.
11. You will see this message:  
  
System will now restart  
  
Insert DOS diskette in drive A:  
Press any key when ready. . .  
  
Remove the Operating disc and insert the Startup disc. Then press **Enter** to continue.
12. When the PAM Main Menu is displayed, go to the next section, "Running FORMAT."

---

## Running FORMAT

Follow these steps to format your extended DOS partition.

1. On the PAM Main Menu, at the A> prompt, type:

```
FORMAT D: /V
```

and press **Enter**.

2. A WARNING message is displayed. Type **Y** and then press **Enter** to begin formatting.

Formatting information is displayed.

3. When prompted, type a volume name of up to 11 characters. Then press **Enter** twice.
4. When done, the PAM Main Menu is displayed. You now have an extended DOS partition on your hard disc.
5. Did you list more than one logical drive in step 8 of the "Running FDISK" section?
  - **NO.** Go to step 6.
  - **YES.** You must format each additional logical drive. For example, if you have one more logical drive (E:), type:

```
FORMAT E: /V
```

and press **Enter**. Then, go back to step 2 in this section and repeat steps 2 and 3. After you have formatted all logical drives, go to step 6.



6. Did you back up files from your hard disc in the "Partitioning Your Hard Disc" section?

- ❑ **NO.** You are now ready to copy MS-DOS and PAM to your hard disc. Go on to the next section, "Upgrading MS-DOS."
- **YES.** Restore the files to your hard disc now.

For example, to restore files from a flexible disc in drive A:, remove the Startup disc from drive A: and insert the Operating disc. Then type:

RESTORE A: D:

and press **Enter**. When prompted, remove the Operating disc, insert the first backup disc, and press **Enter**. Follow the instructions on the screen to restore all files from the backup flexible disc(s) to your hard disc. See the *User's Reference* for more information about the **RESTORE** command. When you are finished, go to the next section, "Upgrading MS-DOS."

---

## Upgrading MS-DOS

1. Be sure the Startup disc is in drive A:. Then, hold down **CTRL** and **Alt**, and press **DEL** at the same time.

2. On the PAM Main Menu, at the A> prompt, type:

```
COPY C:CONFIG.SYS C:CONFIG.OLD
```

and press **Enter**. This saves a copy of your current CONFIG.SYS file, if one exists. If you see the message **File not found**, ignore it and continue. When done, press **Enter** to continue.

3. Type:

```
COPY C:AUTOEXEC.BAT C:AUTOEXEC.OLD
```

and press **Enter**. This saves a copy of your current AUTOEXEC.BAT file, if one exists. If you see the message **File not found**, ignore it and continue. When done, press **Enter** to continue.

4. Type:

```
SYS C:
```

and press **Enter**. When the message **"System transferred"** appears on the screen, press **Enter** to continue.

5. Type:

```
PAMINSTL A: C:
```

and press . This transfers PAM files to your hard disc. When done, press  to continue.

6. The following steps use the REPLACE command to replace previous version MS-DOS files with new MS-DOS 3.3 files. All files on your hard disc with the same names as the new MS-DOS files will be replaced, including files in subdirectories.

7. Type the following command exactly as shown, including spaces:

```
REPLACE A:\*.* C:\ /S /R
```

and press . The files are listed on your display as they are replaced. When done, press  to continue.

8. In this step you will add new MS-DOS files to the root directory of your hard disc. Type:

```
REPLACE A:\*.* C:\ /A
```

then press . When done, press  to continue.

9. Type:

```
C:
```

then press  twice.

10. At the C> prompt, type:

```
COPY CONFIG.OLD CONFIG.SYS
```

and press . Do you see the message "File not found"?

- YES. Press  and skip to step 13.
- NO. Press  and read on.

11. At the C> prompt, type:

```
TYPE CONFIG.SYS
```

and press .



12. Do you see the following line?

```
DEVICE=MULTIVOL.SYS
```

- NO. Press  and skip to step 13.
- YES. Press  to continue. Remove the Startup disc and insert the Operating disc into drive A:. Then, follow this procedure to delete the line DEVICE=MULTIVOL.SYS using the EDLIN editor:

At the C> prompt, type:

```
A:EDLIN CONFIG.SYS
```

and press . You will see this message:

```
End of input file  
*
```

At the EDLIN \* prompt, type:

L

and press . This lists the lines of your CONFIG.SYS file. Find the line that says DEVICE=MULTIVOL.SYS. Let's say it's line 1. Delete the line by typing the line number followed by "D". For example:

1D

and press .

At the EDLIN \* prompt, now type:

E

then press  twice. This will save the file and end the editing session.

**13. Type:**

TYPE AUTOEXEC.OLD

and press . Do you see the message "File not found"?

- YES. Press , then skip to step 15.
- NO. Read on.

14. Do you see a line similar to the following?

KEYBxx

(where xx is a code for a specific country, for example, KEYBGR)

- NO. Press  and then skip to step 15.
- YES. Press . Then make sure the Operating disc is in drive A:. Use the following procedure to delete the KEYBxx line with the EDLIN editor.

At the C> prompt, type:

A:EDLIN AUTOEXEC.OLD

and press . You will see this message:

End of input file  
\*

At the EDLIN \* prompt, type:

L

and press . This lists the lines of your AUTOEXEC.OLD file. Find the line that says KEYBxx. Let's say it's line 1. Delete the line by typing the line number followed by "D". For example:

1D

and press . At the EDLIN \* prompt, type:

E

then press  twice. This will save the file and end the editing session.

15. Type:

```
DIR AUTOEXEC.BAT
```

and press **Enter**. Do you see the message "File not found"?

- **YES.** Press **Enter** and skip to step 16.
- **NO.** The AUTOEXEC.BAT file is a localized version that contains a KEYB command. Press **Enter**, then type:

```
COPY AUTOEXEC.OLD + AUTOEXEC.BAT
```

and press **Enter** twice. This will copy the KEYB command from the .BAT file to the end of the .OLD file (if one exists).

16. Type:

```
COPY AUTOEXEC.OLD AUTOEXEC.BAT
```

and press **Enter** twice. This copies the contents of your original AUTOEXEC file (if one exists) to AUTOEXEC.BAT.

17. The following steps use the **REPLACE** command to replace previous version MS-DOS files with new MS-DOS 3.3 Operating files.

Make sure the Operating disc is in drive A:. On the PAM Main Menu, at the C> prompt, type the following command exactly as shown, including spaces:

```
REPLACE A:\*.* C:\ /S /R
```

and press **Enter**. The files are listed on your display as they are replaced. When done, press **Enter** to continue.

18. Add the new Operating files to the root directory of your hard disc by typing:

```
REPLACE A:\*.* C:\ /A
```

then press **Enter**. When done, press **Enter** to continue.

19. Remove the Operating disc from drive A: and insert the HP+ disc.
20. At the C> prompt, type:

```
XCOPY A:\ C:\
```

and press **Enter**. Files from the HP+ disc are copied to your hard disc. When done, press **Enter** to continue.

21. Remove the HP+ disc from drive A:. Put all three master discs away in a safe place. Your hard disc is now ready to use MS-DOS 3.3 and PAM. Restart your computer by holding down **CTRL** and **Alt**, and pressing **DEL** at the same time.



**Don't Use Previous  
Version MS-DOS  
Utilities**

After upgrading your hard disc, only use the new MS-DOS 3.3 utilities (FORMAT, FDISK, etc.). This can be especially important if you are connected to a Local Area Network and there are hard discs on the network that have not been upgraded. Using previous version MS-DOS utilities on an upgraded computer may cause problems.

**Keep a Backup  
Copy of SETUP**

There is NO copy of the SETUP program on the new MS-DOS 3.3 Startup master disc! If you have SETUP.COM on your previous version master disc, keep it to ensure you have a backup copy of the SETUP program. Since SETUP is not an MS-DOS utility, this should not cause a problem.

**Latin America  
Country Code**

If you have the country code for Argentina (054), Mexico (052), or Venezuela (058) in your CONFIG.SYS file, you must replace it with the Latin America country code (003). For more information, refer to the COUNTRY command in the *User's Reference* manual in the Volume II binder.

**For More  
Information**

Refer to the front of the *User's Reference* manual for more information about new MS-DOS 3.3 features.

# 6

## Using Printers and Plotters

---

Printers and plotters (known as peripherals) can be connected to your computer to give you printed copy of information. This information may have been created using an application such as MemoMaker or Lotus 1-2-3.

This chapter explains the ways in which your computer can be configured for use with **Parallel (Centronics interface)** and **Serial (RS-232C interface)** peripherals. Configuration is the first step to using your peripheral.

Do you have a **Parallel** or **Serial** peripheral?

- **NO.** Go to the *Using the Personal Application Manager* manual also in this binder.
- **YES.** Read on.

---

### Requirements

- A Parallel or Serial interface card must have already been installed in your computer (refer to your *System Checklist*, *Setup Inventory Foldout*, or ask your dealer).
- Your peripheral must already be set up and connected as described in your computer's *Setting Up* manual and the manual that came with your peripheral.

---

## Parallel Peripherals

Do you have a parallel (Centronics interface) peripheral?

- **NO.** Skip to the "Serial (RS-232C) Peripherals" section in this chapter.
- **YES.** Read on.

Printing with a parallel peripheral is relatively easy. After the peripheral has been connected to your computer, it's ready to print information (such as files and screens) in the following ways:

- In the MS-DOS environment (in PAM, or when using the MS-DOS Commands application), you may print the contents of a file by using the MS-DOS PRINT command (this command is explained in detail in the *User's Reference* manual in *Volume II* of this binder set). You can also print the contents of a screen by using the keyboard's Print Screen function (on some computers you must hold down the **Shift** and **Prt Sc** keys at the same time).
- You may also print using an application (such as MemoMaker or Lotus 1-2-3). However, additional configuration may be necessary when printing from an application.

The method for using your application to configure your computer follows.



## Requirements

- Your application must have a peripheral installation program that lists your printer or plotter as one of the choices.
- Your peripheral should be connected to the parallel port of your computer (if you have more than one, make sure you know which one you are connected to).

## Configuring with an Application

Your application should have a peripheral installation program which configures the computer for use with your peripheral. The use of this program is documented in the manual that comes with your application.

### Note



---

Each application you use may have its own peripheral installation program. If so, you must run the installation program for *each* application.

---

## If an Application Doesn't List Your Peripheral

If your application has a peripheral installation program, but it doesn't list your peripheral as one that is supported, you may be able to select some other peripheral (or a "standard" peripheral) that has characteristics similar to yours. However, selecting a peripheral with similar characteristics may mean that some of the features of your peripheral (for example, underline or boldface) may not work.

---

## Serial (RS-232C) Peripherals

Do you have a serial (RS-232C interface) peripheral?

- **NO.** Go to the *Using the Personal Application Manager* manual also in this binder.
- **YES.** Read on.

To print or plot information to a serial printer or plotter you must make sure that your computer and the printer or plotter have *matching configurations*.

Configurations can be matched using one of the following methods:

- **Method 1: Configuring with an Application**  
Use an application that has a peripheral installation program to match your computer's configurations to those of a selected peripheral.
- **Method 2: Configuring with the MODE Command**  
Use the MODE Command to configure your computer to match the configurations of your peripheral.
- **Method 3: Configuring the Peripheral**  
Change the peripheral's configurations (usually switch settings) to match the configuration requirements of your application.

Read the following description of each method to decide which would be best for you to use.

### **Method 1: Configuring with an Application**

This is the best method for matching configurations. Many applications have a peripheral installation program which matches configurations for a specific peripheral. Read on to see if you can use this method.

#### **REQUIREMENTS:**

- Your application must have a peripheral installation program.
- Know which serial port of your computer the peripheral is connected to (COM1, COM2, etc.).

### **Using Method 1**

Run your application's peripheral installation program to configure the computer for use with your peripheral as described in the manual that comes with your application.

#### **Note**



---

Each application you use may have its own peripheral installation program. If so, you must run the installation program for *each* application.

---

### **If an Application Doesn't List Your Peripheral**

If your application has a peripheral installation program, but it doesn't list your peripheral as one that is supported, you may be able to select some other peripheral (or a "standard" peripheral) that has characteristics similar to yours. However, selecting a peripheral with similar characteristics may mean that some of the features of your peripheral (for example, underline or boldface) may not work.

## Method 2: Configuring with the MODE Command

This method requires you to use the MS-DOS MODE command to make your computer match the configurations of your peripheral. This method is not as easy as Method 1, and may require you to create a special file.

This method is typically used to configure the computer to print the contents of a file or screen from the MS-DOS environment. Files can then be printed from MS-DOS using the PRINT command (explained in detail in the *User's Reference* in *Volume II* of this binder set). Or, the text contents of a screen may be printed using the keyboard's Print Screen function (on some computers you must hold down the **Shift** and **Prt Sc** keys at the same time).

### REQUIREMENTS:

- Find out your peripheral's settings for:
  - Baud rate,
  - Parity,
  - Databits,
  - Stopbits.

This information is found in the peripheral Owner's manual.

- Know which serial port of your computer the peripheral is connected to (COM1, COM2, etc.).

## Using Method 2

You may use the MODE command to make your computer match your peripheral's configurations by doing the following:

1. If you don't have a hard disc, insert your Startup work disc in drive A:. If you have a hard disc (with a copy of the operating system on it) make sure that there is NO disc in drive A:.
2. Turn on your computer. If your computer is already on, hold down **CTRL** and **ALT**, and press **DEL** at the same time.
3. At the A> prompt (if you don't have a hard disc, and C> if you do) you would first type in your peripheral's configuration settings in a form similar to this:

```
MODE COM1:9600,N,8,1,P
```

This example sets the computer's output at COM1 to:

- Baud rate set to 9600,
- Parity set to None,
- Databits set to 8,
- Stopbits set to 1,
- Output set to P (Printer).

If your peripheral is set differently, you must change the Baud rate, Parity, Databits, and Stopbits, or Output setting of the command to reflect it.



4. Next, you would redirect the output to the serial port to which your printer is connected. (The computer's default is to send output to the parallel port at LPT1.) You would do this in a form similar to the following:

```
MODE LPT1:=COM1:
```

and then press **Enter**.

This example redirects the computer's output to the serial port at COM1.

If your peripheral is connected to some other serial port, you can change the "COM" portion of the above command to reflect it (COM2, COM3, etc.).

## Note



---

The above two portions of the MODE command are explained in greater detail in the "MODE Command" section further on in this chapter.

---

After typing in the two parts of the MODE command, you will be able to print files and text screens from MS-DOS. However, if you turn off or restart your computer, you will need to re-type these parts of the MODE command unless you create a batch file to do it for you as explained in the "Creating or Modifying an AUTOEXEC.BAT File" section further on in this chapter.

### **Method 3: Configuring the Peripheral**

This method may be more difficult than the previous two methods and may make your peripheral run slower. This method requires you to change *both* the peripheral's configurations (switch settings) and the computer's configurations to match those required for your application.

#### **REQUIREMENTS:**

- The manual that comes with your peripheral.
- Any tools required to gain access to your peripheral's configuration switches (not all peripherals use configuration switches).
- Know which serial port of your computer the peripheral is connected to (COM1, COM2, etc.).

### **Using Method 3**

Set your computer and peripheral configurations to match those specified in the documentation that comes with your application. Use the manual that comes with your peripheral to set its configuration. Use the **MODE** command to set your computer's configuration. (Refer to "Method 2" for more information on using the **MODE** command.)

---

## The MODE Command

The MODE command is used to alter the configurations of your video display, serial ports, and parallel ports. In this section, only that part of the MODE command that alters your serial port configurations will be discussed. For a complete explanation of the MODE command refer to the *User's Reference* in *Volume II* of this binder set.

### Configuring the Serial Port

The MODE command can be used to change the parameters and protocol of one or more serial (RS-232C) ports. The system supports four serial ports, 1 through 4. These are referred as COM1, COM2, COM3 and COM4. The following things can be changed by the MODE command for your serial ports.

#### Redirecting Output

This part of the MODE command allows you to redirect output from the default output port (which is the parallel port at LPT1) to one of the serial ports (COM1, COM2, COM3, or COM4), if necessary. This is the first step to sending output to a serial printer. The following example command line will send characters originally intended for (parallel) LPT1 to (serial) COM1.

```
MODE LPT1:=COM1:
```

## Setting Serial Parameters

The next part of the MODE command allows you to set serial communication protocol parameters. An explanation of the parameters that you must set is provided below.

<b>Baud Rate</b>	This parameter determines the baud rate (or speed) the serial port will operate at. It may be set to 110, 150, 300, 600, 1200, 2400, 4800, 9600, or 19200. When entering this parameter, only the significant digits need be entered, the others are ignored by MODE. For example, 12 will select 1200 baud, or 192 will select 19200 baud operation. The default setting is 2400 baud.
<b>Parity</b>	This parameter determines the parity used. It may be set to "N" for no parity, "O" for Odd parity, or "E" for Even parity. "E" is the default.
<b>Databits</b>	This determines the number of databits in each character transmitted. It may be set to either "7" or "8". The default is 7 databits.
<b>Stopbits</b>	This determines the number of stopbits in each character transmitted. It may be set to either "1" or "2". The default is 2 if a baud rate of 110 has been selected and 1 for all others.
<b>P (Printer)</b>	This optional parameter indicates that the port is being used as the system printer port, and therefore all time-outs must be continuously retried. The default has "P" disabled.

The following command line will set serial COM1 to 1200 baud, Even parity, 7 Databits, 1 Stopbit, with the "P" option.

```
MODE COM1:12,E,7,1,P
```

A continuous retry loop (specified with the P option) may be broken by holding down **CTRL** and pressing the **Break** key. To disable the "P" option, re-enter the parameters, but without the "P" option. For example,

```
MODE COM1:12,E,7,1
```

disables the "P" option for COM1.

To create a special file that automatically enters these parts of the MODE command for you when you turn on or restart your computer, go to the next section, "Creating or Modifying an AUTOEXEC.BAT File."

---

## Creating or Modifying an AUTOEXEC.BAT File

The AUTOEXEC.BAT file is a special kind of batch file. It allows you to automatically execute programs each time you turn on or restart your computer. When configuring your serial port, this batch file can automatically set the MODE command configurations for you.

The AUTOEXEC.BAT file can also be use to execute any other sequence of MS-DOS commands. For more information on batch files, refer to the *User's Reference* in *Volume II* of this binder set.

## Methods for Creating or Modifying the File

Create or modify AUTOEXEC.BAT using one of the following methods:

- EDLIN, which is the MS-DOS line editor
- COPY CON command
- A word processing application

EDLIN is described in the *User's Reference* in *Volume II* of this binder set. COPY CON, a form of the COPY command, is described below. Instead of using COPY CON, you may also use a word processing application to create and save the file.

---

### Note



The AUTOEXEC.BAT file must be saved in the root directory of the hard disc you use to start your computer. If you do not save it in the root directory, it will not be executed properly. The directions given here copy and save the file in your root directory.

---

## Before Creating the File

Before you can create an AUTOEXEC.BAT file, you must complete the following tasks:

1. Turn on your computer. If it is already on, hold down **CTRL** and **ALT**, and press **DEL** at the same time. The PAM Main Menu is displayed.
2. Select and start the **MS-DOS COMMANDS** application.
3. If you start your computer from a hard disc, you will see the C> prompt. If you start your computer with a flexible disc, you will see the A> prompt.
4. At the MS-DOS prompt, type:

```
TYPE AUTOEXEC.BAT
```

and press **Enter**.

5. If you do not have an AUTOEXEC.BAT file, you will see the following message:

```
File not found
```

Do you see the above message?

- **YES.** Skip to the next section, "Using COPY CON to Create Your File."
- **NO.** Make a backup copy of your current AUTOEXEC.BAT file by typing the following at the MS-DOS prompt:

```
COPY AUTOEXEC.BAT AUTOEXEC.SAV
```

Press **Enter**.

If you make a mistake when you create a new AUTOEXEC.BAT, you will still have a copy of your original AUTOEXEC.BAT file (named AUTOEXEC.SAV).

## Using COPY CON to Create Your File

To create a new AUTOEXEC.BAT file with COPY CON, do the following:



1. At the MS-DOS prompt, type:

```
COPY AUTOEXEC.BAT + CON AUTOEXEC.BAT
```

and press **Enter**. Lines similar to the following are displayed:

```
AUTOEXEC.BAT  
CON
```

2. Type in the two parts of the MODE command to direct output and set the parameters of your serial port. An example of what you might type is shown below. Press **Enter** at the end of each line to go to the next line.

```
MODE COM1:9600,N,8,1,P  
MODE LPT1:=COM1:
```

3. When finished, hold down **CTRL** and press **Z** once. You will see the control character and Z displayed on the screen. Then press **Enter**. You should see this message:

```
1 File(s) copied
```



4. Your new AUTOEXEC.BAT file has been created. Next, activate the MODE commands in the file by restarting your computer. To restart your computer, hold down **CTRL** and **Alt**, and press **DEL** at the same time.

You should now be able to print files and text screens from the MS-DOS environment.



Printed in Singapore 07/88  
Part Number 45951-90179