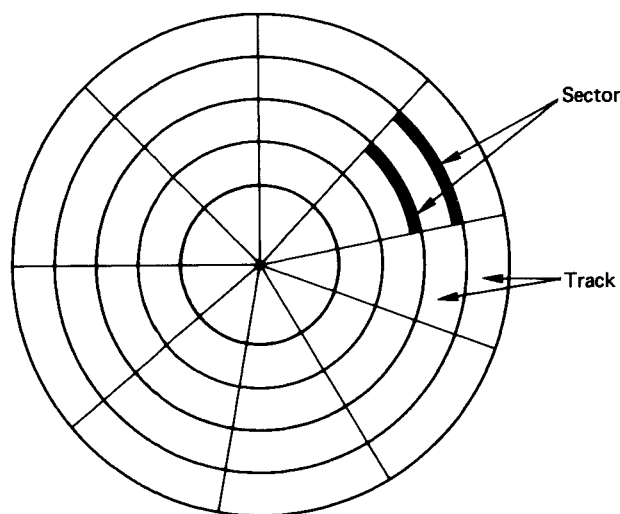


# LESSON SEVEN

In this lesson you will learn to :

- \* use the **FORMAT** command
- \* use **FORMAT/S**, **FORMAT/V** and **FORMAT/B**
- \* use the **SYS** program

When you buy a box of floppy disks from your supplier they are not ready to use straight away. Before you can use them they have to be "formatted". This is a process that writes (electronically) a series of "tracks" and "sectors" onto the disk. It is by means of these tracks and sectors that DOS knows where to find the files on a disk. How it works is really quite simple. The disk works rather like a piece of magnetic recording tape. To find a particular piece of music you need to know the reading on the tape counter when the music starts. Once you wind the tape onto that "address" you will locate the music. A  $5\frac{1}{4}$  inch floppy disk is divided into forty separate tracks on each side, numbered 0 to 39, and nine sectors numbered 0 to 8. This is shown in the diagram.



Any "address" is given in terms of the track and sector numbers. The outer tracks of each disk are reserved for directory entries and these consist of the name of the file, the address where its start can be found (in terms of track and sector), its length, and the date and time of its creation. You see most of this information when you obtain a directory listing.

It is interesting to note that when a file is deleted its name is taken out of the directory. The actual file does not get destroyed. What happens is that when it becomes an "un-file", the space it takes up on the disk is made available for another file to be written over it. This does mean that if you accidentally delete a

file there are ways and means of recovering it, provided you have not saved another file onto the disk in the mean time. There are companies that specialise in recovery of deleted or corrupted files. The techniques they use are outside the scope of this book. If a file is renamed, it is the directory entry that is renamed.

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## FORMATTING A DISK

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In order to format a new disk you must first make sure that the format program is available. If you have a hard disk then this program should be in the current directory. If you have a twin floppy disk system then the master DOS disk (or rather a copy of it) should be in the currently logged drive. It can be in either drive A or drive B so long as the appropriate prompt is displayed. However, the instructions that follow are if the master disk is in drive A.

### If you are using a twin floppy disk system

<i>Action</i>	<i>Result</i>
1. Make sure the master DOS disk is in drive A and that the A> prompt is displayed and that the disk is "write-protected." If you are using 5¼ inch floppy disks, you can do this by covering the notch in the side of the cover with one of the pieces of sticky tape supplied in the box of disks. If you are using 3½ inch disks in their plastic case, then make sure that the slider in one of the top corners has been moved to expose the hole. Key in  <b>FORMAT B:</b>	<b>Insert new diskette in drive B: and press ENTER when ready</b>
2. Place a disk in the drive as requested, close the door and press the <b>ENTER</b> (Return) key.	Eventually you will get the message  <b>Format complete</b>  362496 bytes total disk space 362496 bytes available on disk  <b>Format another (Y/N) ?</b>