

Factors In CD Duplication

The process of writing data to a recordable CD can be a complex process, as it demands a lot from both hardware and software programs. Much of this complexity is hidden from the user by the program, although you should be aware of these factors.

Data

The total amount of data you are writing is much less important than whether or not it contains large or several small files. If there are a lot of small files, the system may have problems with locating and opening the files quickly enough to send them smoothly to the CD recording drive.

The computer

Any interruption that may occur is fatal to CD duplication, so you should ensure that your CONFIG.SYS and AUTOEXEC.BAT don't load any TSR utilities which may interrupt operations. Screen savers, alarms and reminders, or incoming faxes may also kill disc writing. You should also turn off network sharing so no one will access the files that you are trying to write, as this could also kill your disc recording.

Hard Disk Speed

To write an image to the CD, the hard disk from which you are writing must have a transfer rate that is fast enough to keep the memory buffer full in the CD recorder. This normally means an average hard disk access time of 19 MS or better.

Defrag

If your hard drive has to search everywhere over a fragmented hard drive for the data to be written, it can cause the operation to slow down or even cause a fatal error. Therefore, always be sure to defragment your hard disk drive.

Recording speed

Most new CD recorders and even some older ones,

are capable of writing at two (sometimes even four) times the standard playback. It should be possible for you to select the speed; as even though fast recording is a time saver, it can also cause some bad situations.

When you copy an ISO (image file) from the hard disk to a CD, the speed is rarely a problem as the image is already one large file in which the files and structures are already in order and divided into CD-ROM sectors.

When you write from a virtual image, things can get a bit trickier. In order to copy to CD, the program must consult with the database to find where each file should go in the image and where it is actually stored on the hard disk drive.

Then, it must open the file, divide it into CD-ROM sectors, at the same time sending the data in a smooth continuous stream to the recorder. Locating and opening the file is a bit more time consuming, as writing is more difficult if you have a lot of small files.

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