A general guide to recording your own VCDs, SVCDs and DVDs. By Eric Wiese

The ultimate thrill

Remember the day when you got your CD writer? Well, that is nothing compared to making your own DVDs!

Video is generally recorded on a magnetic medium i.e. videotape. Tape can stretch, snap, crinkle and wear out with excessive playback and recording. Plenty of mechanical moving parts are required to load a videotape out of its cassette, thread it around the video recording drum, and mechanical parts need servicing. To top it all, video material – audio and video is stored magnetically on tape, and this degrades over a period of time. Videotape is therefore not a good archiving medium!

ENTER VIDEO CD AND DVD DISCS

Why put video onto Compact Disc (CD) or DVD? Data recorded on disc is digital and capable of far better quality than analogue VHS. In the corporate environment more and more people require a video programme on disc so that this can be integrated with multimedia presentations on a PC. This can then be shown to an audience using a Data projector.

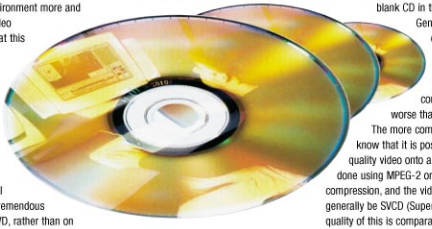
Discs are small, take less storage space and are easier to post than a VHS cassette. Video rental stores are experiencing tremendous demand for movies on DVD, rather than on VHS. It has almost become old fashioned to give someone a video on VHS cassette!

CD or DVD discs provide a medium that is resistant to degradation over time and is ideal for archiving. Video and filmmakers have realised the advantages of digital, and this is the way the industry is going, so read on!

RECORDING VCDs (VIDEO COMPACT DISCS)

Video can be recorded onto blank CDs, effectively producing a VCD, (video CD) or onto blank DVD discs. VCDs are a cheaper alternative to DVDs and are well established in Asia. Those that have travelled to the Far East will know that blockbuster movies are available on the street from vendors at a fraction of the price of the DVD that you would purchase locally in South Africa. What a bargain, you might think! Upon opening your purchase you may well find that the movie you have purchased is spread over two or maybe more discs.

One reason for this is that the discs are the same blank CDs you use on your PC, generally 700 MB (Megabyte). You would have purchased a VCD or Video CD copy of the original DVD – bearing in mind that a blank DVD is capable of recording about 4,7 GB (Gigabyte), which is equal to seven 700 MB blank CDs!



Another reason relates to the compression. A full-length feature film can run from 90 minutes to two hours. It is impossible to squeeze two hours of audio, let alone video, onto a 700 MB CD.

COMPRESSION AND RENDERING TIME

When you eventually return home from your trip to the Far East, do not be surprised to see VHS or even worse quality on playback of your so-called 'bargain' blockbuster movie! Unlike poor quality VHS, which looks soft, or slightly out of focus, poor quality VCD looks blocky in appearance. The video and audio information has been electronically squeezed to fit onto the disc with a compression method called MPEG-1.

Far better quality is available when MPEG-2 is used, which is what DVD uses as its recording compression standard.

These (often illegal) copies of the original DVD have been produced using standard CD writers, with the appropriate software. The video and computer enthusiast will also know that one can transfer one's home videos onto CD, using a CD writer. To do this, one needs a video capture card in one's PC and one would play the video footage in the camcorder or VCR and record it onto the PC's hard drive. One needs plenty of hard drive space to do this. Once on the hard drive, the video data has to be rendered to MPEG-1 format using specific PC software. This rendering could take a whole day before one could finally 'burn' or write the data onto the blank CD in the CD writer.

Generally the compression is MPEG-1 resulting in a Video CD (VCD). Quality is comparable or slightly worse than VHS.

The more computer literate will know that it is possible to write good quality video onto a blank CD. This is done using MPEG-2 or MPEG-4 compression, and the video CD would generally be SVCD (Super Video CD). The quality of this is comparable to Super VHS, and will only play back on some PCs, and not on a DVD player. Compatibility of PC created VCDs and SVCDs is poor to say the least.

Remember the rule of thumb – the better the picture quality, the more space is required and therefore less running or recording time is available. To produce and play back SVCDs the necessary MPEG-2 software is required. One cannot create a DVD on a standard CD writer.

EASY, REAL TIME VIDEO DISC RECORDER

There is an easier method of producing