

One problem: Even with compression, video files can be many megabytes in size, so how do you get that five-megabyte letter to your sister in Alaska? One solution is to use one of the video codecs that lets you trade off the degree of compression with the level of quality. Most codecs offer a compressor setting for quality that goes from 0 to 100 percent. It's typically set somewhere between 65 and 85 percent, but you could set it lower and further compress your file. The other solution would be to optimize the way you send your document. Many backup programs will let you split a large file onto many floppies, or you could send a backup tape to someone who's using the same kind of tape backup system.

At this point, desktop video is still in its infancy. With the initial release of Video for Windows, all you could practically do was 160 x 120 videos. Now, with the improved Video for Windows and QuickTime for Windows codecs, most new PCs can handle 320 x 240 videos, with 640 x 480 videos just around the corner. And with powerful programs such as Adobe Premiere and the soon-to-be-shipping Passport Producer for Windows, the world of PC-based digital video editing is finally opening up to the casual user.

Video Playback Performance with the Indeo 3.0 Codec

Processor	640 x 480	320 x 240	160 x 120
486SX/25	1 fps	15 fps	30 fps
486DX/66	10 fps	30 fps	30 fps
Pentium	20 fps	30 fps	30 fps

Sidebar: Desktop Video Glossary

AVI. Short for Audio/Video Interleaved. The video file format used by Video for Windows.

codec. Short for compression/decompression. A driver used by Video for Windows or QuickTime for Windows that compresses and decompresses video files.

compression. The process of reducing the size of a video file either with no loss of quality (lossless) or with some limited loss of quality (lossy). See also lossy and lossless.

desktop video. Computer-based digital video usually associated with high-end full-screen video production. Much as the term desktop publishing is used to describe the ability to create, edit, and store text-based documents with a personal computer, desktop video is used to describe the ability to record, manipulate, and store video with a personal computer.

fps. Short for frames per second. The speed at which a sequence of pictures is played back. Frame rates higher than about 15 fps give the illusion that a series of still pictures is actually a continuously moving image. Standard frame rates include U.S. video at 30 fps, European video at 28 fps, sound film at 24 fps, and silent film at 16 fps to 24 fps.

lossless. A compression method that allows compressed files to be decompressed to their original form with no loss of quality. Because it doesn't sacrifice quality, a lossless method of compression will generally result in a much larger file than a lossy method of compression. See also lossy. lossy. A compression method that compresses files with some limited loss of quality. Because it sacrifices quality, a lossy method of compression will generally result in a much smaller file than a lossless method of compression. See also lossless.

MOV. Short for movie. The video file format used by QuickTime for Windows.

QuickTime for Windows. A set of software programs from Apple that allows Windows to play motion video sequences on a personal computer without specialized hardware. QuickTime for Windows has its own set of compression/decompression drivers (called codecs), similar to those found in Video for Windows, and plays video files with the MOV extension. See also codec, Video for Windows, and MOV.

Video for Windows. A set of software programs from Microsoft that allows Windows to play motion video sequences on a personal computer without specialized hardware. Video for Windows has its own set of compression/decompression drivers (called codecs), similar to those found in QuickTime for Windows, and plays video files with the AVI extension. See also codec, QuickTime for Windows, and AVI.