



## HOW TO MAKE GREAT MOVIES FROM YOUR VIDEOTAPES

**BEST SOLUTION:** Buy a digital camcorder (MiniDV or Digital 8 format); a computer with a reasonably fast processor, two hard drives (one of which is large, strictly for video files) and an internal Firewire (IEEE 1394) card; and Pinnacle Studio video-editing software

### IF YOU DO NOT HAVE A COMPUTER AND DO NOT WANT A COMPUTER

**1. Buy an edit controller**, a 'black box' which connects to your camcorder and VCR and helps automate the editing and movie-making process. This solution is somewhat faster, especially when making duplicate "original" movies, than editing without an edit controller. With a full-featured edit controller, you can insert transitions, graphics and titles. --OR--

**2. Use your camcorder, VCR and TV.** This is a slow, totally manual process, but it works. Connect your camcorder to your VCR so that the TV displays your video when the camcorder plays the tape in the camcorder's VCR mode. With a blank tape in the VCR, play the camcorder tape and find the desired scenes on your camcorder tape; record them onto the blank tape in your VCR, pausing between recorded scenes.

*Note: Only a more-expensive VCR with a flying-erase head will produce 'glitch'-free movies without a computer.*

### COMPUTER SOLUTIONS

- **IF YOU HAVE A DIGITAL CAMCORDER (MiniDV or Digital 8 format):** Unless your computer already has a Firewire/IEEE 1394 port, you need a hardware/software solution that includes a Firewire card (which you install in an empty PCI slot inside your computer) and software to capture and edit your digital video and make your completed movie onto videotape or other format. *Recommendation: Pinnacle Studio DV Version 8 (Firewire card and software), list \$130, or Pinnacle Studio Version 8 (software only), list \$100. Web—<http://www.pinnaclesys.com>.*
- **IF YOU HAVE AN ANALOG CAMCORDER (VHS, VHS-C, SVHS, SVHS-C, 8mm or Hi-8 format) and you are not planning to buy a digital camcorder:** You need hardware to capture your analog video and convert it into digital format, and software to edit the video and make your completed movie onto videotape or other format. *Recommendation: Pinnacle Studio AV Version 8, list \$130. Web—<http://www.pinnaclesys.com>.*
- **IF YOU HAVE BOTH ANALOG AND DIGITAL CAMCORDERS, OR IF YOU HAVE AN ANALOG CAMCORDER NOW AND PLAN TO BUY A DIGITAL CAMCORDER:** Obtain a system that includes conversion hardware (to convert analog to digital), a Firewire card (for digital video) and editing software. A complete system would allow you to easily input and edit both analog and digital videotape. *Recommendation: Pinnacle Studio Deluxe, list \$300. Web—<http://www.pinnaclesys.com>. Note: Many digital camcorders will accept input from analog camcorders, so a digital camcorder can be your analog-to-digital conversion device; you would still need a Firewire/IEEE 1394 card in your computer to accept the resultant digital video.*

## GENERAL COMMENTS

Any reasonably new PC should be able to adequately run modern video-editing software, although you do need a relatively big hard drive because video files are so large (13GB for one hour of digital video). Pinnacle's minimum recommendations for hardware include a PC with a Pentium II 300MHz processor or faster with at least 64MB of RAM (128MB recommended), running Windows 98 SE, ME, 2000 or XP. Note that any computer sold during the last year or so probably easily exceeds this minimum recommendation.

Of course, more power is always better with computers, especially for extremely processor-intensive tasks such as video editing. Also, more RAM (Random Access Memory) is always better.

The process of editing videos and making finished movies works best if the computer has a second internal hard drive that is used strictly for the captured video files. A small system drive (say, 4-6GB) for all of your application programs (including the video-editing software), documents and data is fine, but it is highly desirable to also have a second internal drive of at least 20GB for video. External hard drives are relatively inexpensive nowadays, especially during the weekly sales at local electronics stores such as CompUSA, BestBuy, CircuitCity and Staples.

Consumer-level video-editing software is also relatively inexpensive and is sometimes offered at sale prices by local electronics stores or by online stores. The best video-editing software displays a thumbnail photo of each scene after capture from your camcorder and includes numerous transitions, video effects, titles, sound effects and music. You can drag and drop video clips, transitions, effects and titles onto a timeline or storyboard. You can add music from CDs, or you can even automatically generate music that exactly matches the length of a desired movie segment. These features can make your movies sparkle.

My experience has been only with Pinnacle Studio video-editing software, which I highly recommend. Pinnacle's latest version, Studio 8, is amazingly easy to use but is also incredibly sophisticated, with features that will satisfy almost every videographer. Studio 8 includes DVD authoring, so users with a DVD burner can put their movies on DVD. The program consistently receives the highest marks in magazine reviews of consumer-level video-editing software. Professional-level software, such as Adobe Premiere, costs much more and is not nearly as easy to use.

Rest assured: It does not take long to make a quick movie, especially if you want to use "as is" most of the scenes on your videotape. But ... and this is a big BUT ... it can take quite a bit of time to:

- Review your captured scenes,
- Decide which scenes to include in your movie,
- Trim those scenes to your satisfaction,
- Select transitions and video effects for use between certain scenes,
- Decide on titles, and
- Select what, if any, music and sound effects to add to your movie.

If you have any questions, I will be glad to try to answer them. Please feel free to send me an e-mail at [rzumbro@gmu.edu](mailto:rzumbro@gmu.edu).