

Recommended Settings for Digital Video with Audio

Calvin College Audio-Visual & Calvin College Information Technology

| Category | HD Editing Quality | SD Editing Quality | High Quality Viewing | PowerPoint |
|--------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------|
| Typical Use | Exporting to edit in High Definition on another system | Exporting to edit in Standard Definition on another system | portable media players (iPods), web downloads, YouTube & Vimeo | Insert into PPT presentations |
| File Format & Codec | .mov file & ProRes422 codec | .dv file & DV-NTSC codec | .mp4 file & H.264 codec | .wmv file & WMV codec (Mac users: see footnote) |
| Constant Bitrate (lower setting makes smaller file) | 140Mbps | 25Mbps | 1Mbps for SD 4Mbps for HD | 320 kbps |
| Video Resolution | 1920x1080 or 1280x720 | 720x480 | 640 x 360 (SD widescreen) 640 x 480 (SD square screen) 1280 x 720 (HD widescreen) | 320 x 180 (widescreen) 320 x 240 (square screen) |
| Video Frame Rate | 29.97fps | 29.97fps | 30fps | 15fps |
| Audio Codec | PCM | PCM | AAC | WMA |
| Audio Bit Depth | 24 | 16 | 16 | 16 |
| Audio Bitrate | 2.75Mbps | 1.5Mbps | 128 kbps | 64 kbps |
| Audio Sample Rate | 48khz | 48khz | 48 khz | 24 khz |
| File Size / Minute | 1.3GB/min | 233MB/min | 8.4MB/min | 2.8MB/min |

PPT for Mac users: The WMV format works well for Powerpoint in Windows. To use it on a Macintosh, a free plug-in called *Flip4Mac* must be installed. It is already installed on Macintosh computers provided by Calvin College. If you want to play WMV video in Powerpoint on someone else's Macintosh, you must install *Flip4Mac* onto it. The free download is available at: www.flip4mac.com/download.htm

AVI for Mac users: If your Macintosh has trouble playing .avi files, download and install the free Perian codec from www.perian.org/

AVCHD video from tapeless cameras, such as Sony, can't be imported into some editors, such as iMovie. In that case, it should be converted to .mov or .dv so it can be imported into an editor.

Flip video cameras record High Definition video in .mp4 format, 3.5GB per hour.