



# Digital Video Recording

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Five general principles for better video:

- 🎧 Always use a tripod – always.
- 🎧 Use good microphones and check your audio levels.
- 🎧 Be aware of lighting and seek more light.
- 🎧 Use the “rule of thirds” to frame your subject.
- 🎧 Make pan/tilt movements slowly and deliberately.
- 🎧 Don’t shoot directly against a wall.
- 🎧 Label your recordings.

## Tripods

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An inexpensive tripod is markedly better than shooting by hand. Use a tripod that is easy to level (look for ones with a leveling bubble) and use it for every shot.

## Audio

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Remember that this is an audiovisual medium! Use an external microphone when you are recording, not the built-in video recorder microphone. Studies have shown that viewers who watch video with poor audio quality will actually perceive the image as more inferior than it actually is, so good sound is crucial.

The camera will automatically disable built-in microphones when you plug in an external. There are several choices for microphones.

## Microphones

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There are several types of microphones to choose from:

- 🎧 Omnidirectional
- 🎧 Unidirectional
- 🎧 Lavalier
- 🎧 Shotgun
- 🎧 Handheld

In choosing microphones you will need to make a decision to use a wired or a wireless system. Hardwired systems are inexpensive and dependable. Just plug one end of the cord into the microphone and the other into the recording device. Limitations of wired systems:

- Dragging the cord around on the floor causes it to accumulate dirt, which could result in equipment damage or signal distortion.
- Hiding the wiring when recording can be problematic.
- You may pick up a low hum if you inadvertently run audio wiring in a parallel path with electrical wiring.

Wireless systems combat some of the wired system's problems but have limitations of their own:

- They consume battery power very quickly.
- The transmitter can be hard to fasten conveniently and unobtrusively to clothing.
- Radio and/or cell phone interference is occasionally possible.

## Lighting

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Lighting is something that is often ignored but can make a big difference in the image captured on video. Considerations begin by evaluating natural lighting options and then move to bringing in additional lighting. Adding lighting can be done inexpensively with good effect.

### Tips for lighting

- 💡 Your eyes and brain can quickly adapt to mixed lighting situations – such as tungsten, daylight, and fluorescent – but your camcorder has a much more difficult time. Fluorescent lights often cause a greenish cast, while tungsten makes things orangish; even daylight can color your scene blue if you're in the shade or next to an open window. The best solution is to try to limit your light sources, and then use your camcorder's *white balance* setting to adjust for the dominant light source.
- 💡 Turn on as many lights as possible when shooting indoors. The image may look decent in the small viewfinder, but dark video is noisy and lacks detail. The darker someone's complexion, the more light needed to allow the camera to properly focus and record.
- 💡 Be aware of "washout" when shooting outdoors or near windows. If a subject sits next to a window, one side (the bright side) may wash out compared to the shaded side. Strive for *even* lighting.

Source: [http://oreilly.com/pub/a/mac/2002/10/22/digi\\_photo\\_tips.html](http://oreilly.com/pub/a/mac/2002/10/22/digi_photo_tips.html)

A cheap solution can be to use a reflector, which can be handheld or mounted on a stand. These generally come with several disc options:

- Silver increases the specular highlights and yields a high-contrast image.
- Gold produces a natural, golden fill.
- White produces an even, neutral-colored bounce light that works beautifully as a fill light source.
- Black is used as a flag to block light or can be used to subtract light.
- Translucent fabric is used to diffuse light, producing a broad light source and a soft, wraparound effect.

A helpful site for learning more about additional lighting placement for interviews is [lowel.com/edu/](http://lowel.com/edu/).

## Media: Recording Systems

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The most confusing part of buying a camcorder can be choosing among the four types of recording media available: MiniDV tapes, removable MiniDVDs, hard disk drives, and flash memory cards. The choice is really about convenience, price, and personal preference. Here are some pros and cons.

### MiniDV tape

**Pros:** compact; affordable; able to preserve original image quality without compression; good software to support editing.

**Cons:** have to use camcorder for playback; winding/rewinding tape eventually degrades quality; need to transfer images to computer with large hard drive for editing.

## DVDs

**Pros:** random access to any clip; easier editing in-camera or on computer; rapid duplication of discs for sharing; convenient playback on computer, DVD players, even PlayStations.

**Cons:** recording time limited to one hour with single-sided discs, two hours with dual layer; images are compressed when stored to disc and quality is subtly affected; some discs allow only one use, others rewritable.

## Internal hard drives

**Pros:** with capacities up to 60GB, internal drives can hold 28 hours of video, far more than other formats; one-button burning of DVDs for easy sharing, transfer, playback; in-camera or in-computer editing.

**Cons:** still pricey; still require image compression; and what happens to your video if that big hard drive goes down?

## Flash memory cards

**Pros:** first offered as an extra storage option for still images on both tape and disk camcorders; now coming into use as primary storage media for video as well as stills, thereby eliminating moving parts, reducing size, increasing durability.

**Cons:** not yet supported by in-camera editing software; requires image compression; less storage than hard drives.

## Camcorders: Optical Systems

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There are a wide range of camcorders available, and the market changes rapidly with new models and prices appearing frequently. Some of the essential features for a video recorder include:

- Audio/video terminal
- Display and data code buttons
- DV terminal
- Exposure compensation control
- Headphone jack
- LCD screen
- Manual focus control
- Microphone jack
- Zoom control
- White balance control

Web sites which provide extensive reviews of video cameras include:

<http://reviews.cnet.com/best-camcorders/>

<http://www.smart-review.com/digitalcamcorders.html>

[http://www.intellireview.com/category/catalog\\_electronics\\_camera\\_camcorders/?aid=318&top=10&gclid=CMfNzomRuZcCFQ0xawod01d-TA](http://www.intellireview.com/category/catalog_electronics_camera_camcorders/?aid=318&top=10&gclid=CMfNzomRuZcCFQ0xawod01d-TA)

[http://www.epinions.com/Camcorders-price\\_range\\_900\\_47216](http://www.epinions.com/Camcorders-price_range_900_47216)



## Video Editing Software

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Once you have captured your oral history on video, there are many choices for video editing software to help you work with your video recordings. Below are several popular software programs and collections, covering a wide range of price and level of expertise required:

- Apple Final Cut Pro
- Adobe Premiere
- Avid Media Composer
- iMovie
- Sony Vegas
- Windows Live Moviemaker

## Additional Reading: Tips and Advice

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- 🔗 The Digital Video Information Network (a community forum) <http://www.dvinfo.net/conf/>
- 🔗 “Don’t Shoot! 10 Tips for Avoiding Bad Home Video” [http://reviews.cnet.com/4520-6500\\_7-5510172-1.html](http://reviews.cnet.com/4520-6500_7-5510172-1.html)
- 🔗 “Family Oral History Using Digital Tools” <http://familyoralhistory.us/news/C19>
- 🔗 “Learn Videography, Video Editing, and Lighting” <http://www.videomaker.com/learn/>
- 🔗 “Public Speaking: Tips for Television, Videotaping, and Videoconferencing:” <http://www.public-speaking.org/public-speaking-tvvideo-article.htm>
- 🔗 “Top Ten Digital Video Tips” [http://oreilly.com/pub/a/mac/2003/06/13/dv\\_tips.html](http://oreilly.com/pub/a/mac/2003/06/13/dv_tips.html)
- 🔗 “Ten Tips to Better Video” [http://www.camcorderinfo.com/content/ten\\_steps\\_better\\_video.htm#](http://www.camcorderinfo.com/content/ten_steps_better_video.htm#)
- 🔗 Lillian Brown, *Your Public Best: The Complete Guide to Making Successful Public Appearances in the Meeting Room, on the Platform and on TV*, (Newmarket Press: New York 1989).