**DSLR VIDEO TIPS**

Many DSLR cameras (Digital Single Lens Reflex) today are capable of shooting full 720p or 1080i HD video at a variety of frame rates. Two of the biggest differences between these cameras and traditional camcorders is that they use interchangeable lenses and require the user to be a little more aware of how to operate the camera. The trade-off, however, is the ability to produce stunning, cinema-quality video.

Shooting DSLR video is different from shooting video on a standard camcorder. The camera must be operated in manual mode because auto mode will make focus, shutter speed, etc., inconsistent. In this sense, DSLR video works more like shooting film, and the operator must learn to more fully use and understand the camera, rather than allowing automation to control settings.

*Shooting Basics*

**ISO** = how sensitive the camera’s image sensor is to light. The old term for this is ‘film speed.’

**Shutter Speed** (or exposure) = the length of time the camera’s shutter is open while taking an image (measured in fractions of a second, i.e., 1/100, 1/250, 1/1200, etc.).

**Aperture** (or f-stop, or just ‘stops’) = how much light is admitted to the image plane in a camera, and how focused its rays are. A low (or narrow) aperture setting results in a shallow depth of field, bringing foreground objects into a high focus -- this type of setting will give your video a more professional look. A high (or wide) aperture setting results in a wider depth of field, thus producing a ‘flatter’ image. This can be good for wide shots in which you want everything in the camera’s view to be equally focused. How many stops are available depends on the lens being used.

For DSLR video, a constant shutter speed of ‘50’ should be used, to provide continuity of motion.

A relatively low f-stop (aperture) is typically used to provide a shallow depth of field, though that also depends on your ISO and what kind of shot you’re trying to achieve. Your monitor will indicate underexposed or overexposed areas.

For video, certain ISO settings should be avoided to prevent images gathering noise, artifacts, etc. Generally speaking, higher ISOs (800+) will tend to introduce noise to the image. Certain kinds of shots or lighting scenarios may, however, may enable their use.
ISO to avoid (multiples of 125): 125, 250, 500, 1000, etc.
ISO to use (multiples of 160): 160, 320, 640, 1250, 2500, etc.

Lighting is crucial in DSLR video. Without adequate light, motion will appear stilted and unnatural. While natural light outdoors can provide enough light to work with, shooting DSLR video indoors will almost always require artificial light.

As a rule, DSLR video must be shot on a tripod, monopod, or some other kind of stabilizer. Handheld shots by and large do not work without the aid of a shoulder mount, Steadicam, etc. In a pinch, an operator can use the shoulder strap to attempt to get a mostly stable shot, or place their elbows on a table while steadying the camera.

Most DSLR cameras record video to a CF card, and can record continuous video for up to 15 minutes before a new file must be created on the card. If you exceed 15 minutes, the recording will stop and will need to re-start, so plan on recording shorter takes for your scenes (generally that is a good idea in any event).

CF cards with a large storage capacity and a high data transfer rate must be used in order to record full HD video (90 mb/s and 16-32 GB). Transferring video from the camera to a computer works via a USB cable and may be done via a variety of programs including iPhoto, Final Cut, Premiere, or the camera’s native software.

Once transferred, your video files can be edited with any number of editing programs (iMovie, etc.). It is worth mentioning that certain editing programs require that the DSLR footage be transcoded before editing, due to the way the video is compressed on the camera. This can be often by downloading a plug-in from the camera manufacturer’s website, using a program such a Apple’s Compressor or MPEG Streamclip (the latter is free, dual-platform: www.squared5.com). If you’re uncertain how to proceed, ask someone who knows!

A Few Notes on In-Camera Menu Settings

Any DSLR camera will have an extensive menu system, though mostly you only need to learn a few things:

- Video format (720p or 1080i)
- Frame rate (24 or 30 for most people)
- Sound (can be turned off or on)
- Picture format (there are presets, though whatever the standard setting is usually is the one most often used)
- AWB (White Balance) – AWB, or auto white balance, is often used in a variety of settings. There are other presets however for instances in which
things aren’t looking the way you want in a particular lighting scenario or environment.

As with all things, the best way to learn these things is to experiment with the camera and try things out. If you are preparing for a big project, it’s always a good idea to give yourself time in advance to learn the camera’s features and get to a good comfort level. In addition, asking people who know how to shoot DSLR video can be an enormous help, and can save you a great deal of time in your learning process.