

Shooting Video with your DSLR

Mode

- Manual – this is the preferred method for shooting video.
- Shutter Priority can also be used but most pros use manual

Video Frame rate

- 24fps is film-like
- 30fps (29.97) is what TV shows use
- 60-120fps is great if you want smooth slow motion out of your video

If you can't find the video settings in the camera's menu, remember that on many cameras there are different menus when in the movie mode. Switch your camera to movie/video mode and then look at the menus again.

Shutter speed is important – There is no shutter moving while shooting video but shutter speed is still important. Use a shutter speed that is twice the frame rate. This will make motion blur in the video look correct, leaving enough blur for the viewer to perceive motion.

- 24 fps – use shutter speed of 1/50th
- 30 fps – use shutter speed of 1/60th
- 60 fps – use shutter speed of 1/125th

You can use faster shutter speeds but too fast, and the video can look choppy, especially when panning.

Shooting is done using Live View

Aperture – use an aperture setting like you would in still shots to blur or sharpen the background. Keep in mind, the more shallow the depth of field, the harder it will be to keep the subject in focus. Keep the camera as steady as possible with wide apertures.

ISO – If there is plenty of light, keep ISO at 100-200. Some studies say 160 has the least amount of noise, and multiples of 160.

Resolution

- 1920 x 1080 is full HD
- 1280 x 720 often allows higher frame rates and takes up less space on your memory card

Image Stabilization – You can leave on to help smooth out your movement but know that IS can stay on the entire time you are shooting, thus speeding up battery usage.

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Focusing – Manual, AF, both

- Some cameras do not AF while taking video
- For those that do AF, check your manual for AF methods. Some use face recognition, some allow you to move a box around on the LCD and the camera will focus on that spot and then track the subject from there, some use zone focusing, etc.

Your camera may give you the choice between recording 'i' (interlaced) or 'p' (progressive). These are just different ways in which the frames are captured within the video clip. Interlaced footage is only really suited for playback on a TV, while progressive is best for viewing on a computer monitor. If you're just starting out in video and you're unsure which to use, **I'd recommend setting your DSLR to progressive.**

The exception to this recommendation is if you are predominantly recording something that is moving fast: a sporting match or birds at the seashore, etc. Progressive recording will still probably be the right choice, but it is possible 60i will give you the smooth motion you're looking for.

Movie formats

- .MOV or .MPEG-4; The term codec (a mashup of "compression" and "decompression") refers to the way your camera saves video footage to the memory card. Many DSLRs use the H.264/MPEG-4 AVC codec with an .MOV container. Think of the container as the bread in a sandwich and the codec is what you want on the sandwich. With the H.264 and .MOV combo, you should be able to use modern video editing software without converting to another file format. Sony and Panasonic use the AVCHD format, which is more efficient in terms of storage space and image quality, but it uses a less common structure, so it can be more difficult to play back and edit.
- .MOV based movie files are the best option if you want to edit your footage afterwards and produce the highest video quality. If you want to share your videos with a wider range of devices, the MP4 format is a better choice, as it is a more widely accepted format on devices like mobile phones, tablets and smart televisions.
- For Canon cameras, Using the All-I format will provide the best video although it will create files 3 time larger than the alternative IPB method.

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Microphones

- The mic built into the cameras can be used for video. Beware that they typically pick up a lot of ambient noise coming from all directions. They can also pick up the sound of the motors in the lenses. Check your menus for an option to reduce wind noise and ambient noise when using your camera's built-in mic. If it does, you might also find that the noise reduction is not in your headphones, but the effect will be on the recording
- External mic - cuts out sound of lens' AF or image stabilization motors. Reduces ambient noise. Plugs into a mic input on your camera. Some also let you plug in headphones so you can hear what your mic is picking up.
- Good external mics for recording – Rode brand shotgun mic
- For the best sound of people talking on your video, a Lavalier mic will give you the best sound.

Lenses

- Lenses with a really wide aperture, 1.4-2.8, work well indoors so you can keep the shutter speed where you want and it will have the shallow DOF that we often see in TV.

In camera sharpening – OFF – it leads to electronic looking, eye fatiguing footage

High ISO speed NR – OFF

Highlight tone priority (Canon) or Active D Lighting (Nikon) – OFF – shifts dynamic range toward the highlights

Auto Lighting Optimizer – OFF – If not turned on it can override manual control

Have a fast enough memory card (at least Class 6 but for action, go with at least Class 10) and card with at least 32GB. You will need very fast memory cards. With 4K, 1 min of video is usually over 1Gb. For 4K, 1000x is bare minimum, 2000x is best.

Turn off automatic LCD brightness - Set this to manual for more accurate judgement of shot exposure using the LCD. If it is turned on it will affect your footage.

Highlight Display on Nikon is like the “blinkies” for still shots

Look for cropped sensor options

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Use custom function for video setup

Set Mode and ISO to one of the following:

- Shutter mode with auto ISO
- Manual Mode with fixed ISO

Some cameras allow you to record still shots on one card and video on the other card in your camera

Additional lighting – Variable LED lights

Shooting 4k requires you have the right software for editing it. Adobe Premiere Pro or Final Cut Pro are good. For your computer, make sure you have a fast processor and a video card with at least 1Gb of memory on it.

Displaying a grid line on the LCD helps you keep horizons level

Use a tripod whenever possible. A fluid head is best.

If you are making a movie, develop a plan of what you want before you start shooting. In any case, shoot several extra seconds at the end of each clip to allow editing.

Try Hoodman's Hoodloupe for viewing the LCD. It is a magnifier that fits over the LCD and blocks out external light, making it easier to see the LCD.

Shooting setup review

- Switch the camera over to full manual or shutter priority mode and dial in a shutter speed of twice the frame rate
- Set the ISO to the lowest possible setting (usually 100)
- Adjust the aperture accordingly to achieve a correct exposure by using live view as a guide.
- Have fun!