VIDEOGRAPHY



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 (23.976) is film-like. Use for interviews; slow or no action
- 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 look at the menus again



SHUTTER SPEED – use 180 degree rule

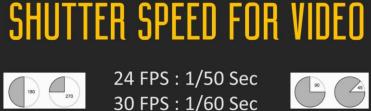
- 24 fps use shutter speed of 1/50th
- 30 fps use shutter speed of $1/60^{\text{th}}$ •
- 60 fps use shutter speed of 1/125th
- Faster shutter speeds work but motion may look choppy, especially when panning

APERTURE

Smaller aperture isolates subject better •



Aperture F/1.4



90 245

The 180 Degree rule

Aperture F/8

Focusing – Auto Focus, Manual, both

- Most of today's cameras now auto focus while taking video
- Check your manual for AF methods. Some use face recognition. Some allow you to touch a spot on the LCD and the camera will focus on that spot and then track the subject from there. Some use zone focusing, etc.
- Advanced shooting switch to Manual focus unless shooting high speed action

AF operationSERVO AFAF methodAF ℃ IIISubject to detectNo priorityEye detectionEnableContinuous AFDisableMovie Servo AFEnableTouch & drag AF settings

ISO

If lighting might change (clouds/sun, etc.), use Auto ISO. Otherwise, use lowest ISO possible

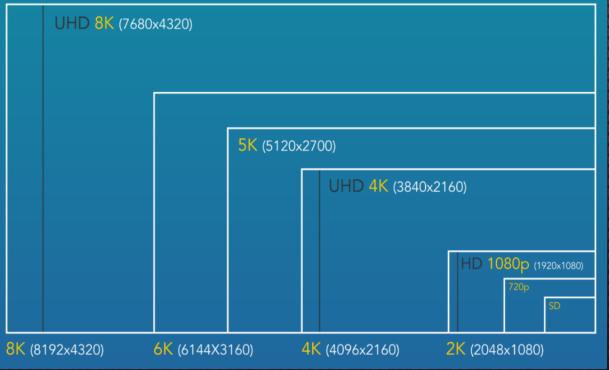
Resolution – The higher the resolution, the more data and card space used

- 7680 × 4320 is 8K
- 3840 x 2160 pixel is 4K
- 1920 x 1080 is full HD
- 1280 x 720 often allows higher frame rates and takes up less space on your memory card

RESOLUTION

Why use 4K or 8K when most TVs/monitors can't view it?

RESOLUTION COMPARISON CHART

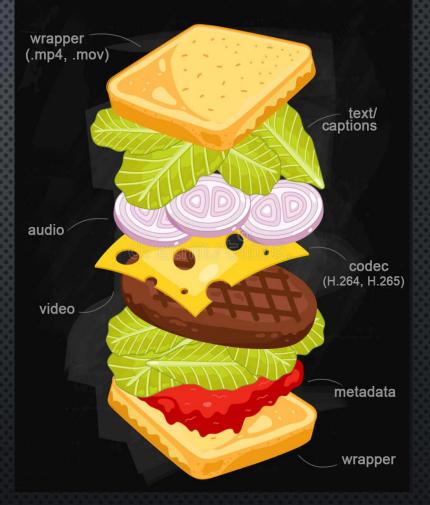


ABILITY TO CROP IN POST PRODUCTION

- In camera sharpening OFF it leads to electronic looking, eye fatiguing footage
- High ISO Noise Reduction OFF
- Highlight tone priority (Canon) or Active D Lighting (Nikon) OFF shifts dynamic range toward the highlights
- Displaying a grid line on the LCD helps you keep horizons level
- AF Tracking Sensitivity How sensitive AF is to interruptions of the subject usually a range of Slow - Responsive
- AF Drive Speed How quickly the focus change is made. Start with Normal or Slow unless filming fast moving action

MOVIE FORMATS - MADE UP OF WRAPPERS AND CODECS

- MP4 format is the best choice if you want to share your videos with a wider range of devices, as it is a more widely accepted format on devices like mobile phones, tablets and smart televisions
- MOV based movie files are the best option if you want to produce the highest video quality
- H.264 or MPEG-4 are examples of codecs (a mashup of "compression" and "decompression") refers to the way your camera compresses video footage as it saves it to the memory card
- 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



EQUIPMENT

LENSES

 Lenses with a really wide aperture, f/1.4 – f/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

FILTERS

 Neutral Density (ND) filter(s) – for bright, outdoor, lighting, an ND filter will help you keep a wide aperture. Can get either a variable ND or multiple ND filters

MICROPHONES

- External mic Greatly improves sound quality. Cuts out sound of lens' AF or image stabilization motors. Reduces ambient noise. Plugs into a mic input on your camera
- Good external mics Rode brand shotgun mics
- For the best sound of people talking on your video, a Lavalier mic will give you the best sound.



EQUIPMENT

MEMORY CARDS

- Have a fast enough memory card
- At least 32GB of space
- Video recording speed of at least V30 or probably V60 (a sustained write speed of 60Mbps). Check your camera manual for the minimum card speed needed for the resolution (HD, 4K, 8K) you plan to shoot

TRIPOD/MONOPOD

- A must have for quality footage
- A monopod is easier to move around. Get one with feet
- Get a fluid head for smoother panning and tilting



BEST PRACTICES WHEN SHOOTING

- Three most important factors Light, Light, Light Window/natural light is best
- Don't leave too much head room above subject
- Count to 5 at the beginning and end of each clip. It will make editing easier
- Minimize zooming. It is difficult to do smoothly. It is better to move closer to subject
- Add motion to shots if possible forwards, back, side to side
- Some cameras will overheat with continuous 4K or 8K shooting and/or in hot weather. To avoid, open battery door; pull LCD away from body; shoot in segments if possible, letting camera cool in between segments

Too much room above

BEST PRACTICES WHEN SHOOTING

If shooting handheld, stabilize your shooting

- Use camera's image stabilization (can use up batteries faster)
- Hold elbows close to your body
- Use mini tripod against your body
- Use camera strap and pull camera to keep strap tight against your body





