Videography 101

Fundamentals, Gear & Camera Settings

Ben Ellis, September 11, 2022

What you should look for when buying a camera, lenses, lights, mics, and so on?

5 Most Important Factors when Choosing a New Camera

1. Image quality that's better than your camera phone*
2. Ergonomics that suits your hands
3. Size that suits your habits
4. Availability of lenses that suit your budget and future needs
5. The latest model within your budget

The best camera is the one you have with you.

DSLR Cameras

- DSLR stands for "Digital Single Lens Reflex", which basically means that the camera uses the same lens for framing, focusing and taking a photograph.
- DSLR cameras are still the most popular camera for amateurs and professional photographers here in 2022.
- On the minus side, they're bigger, heavier, and don't offer the best in auto-focus (and various other) technologies, like the other types of cameras.
- DSLR cameras feature APS-C or "full frame sensors".

Mention compact cameras and fixed lenses vs. interchangeable lenses
Mention fixed focal length vs. variable focal length
APS-C is crop sensor, vs. full frame sensor

Mirrorless Cameras

- A mirrorless camera doesn't have the mirror that's found inside a DSLR camera, which gives it various advantages. They can have fixed or interchangeable lenses.
- They're usually smaller and lighter than DSLRs, making them a great choice if you travel a lot.
- The general consensus is that mirrorless cameras are the future, and DSLRs are a dying breed... but that's not to say the technology is perfect yet.
- For the advantages they offer, mirrorless models suffer from poor battery life (around half the duration of the equivalent DSLR), and a shooting experience that's a little... well... soulless!
- However, if shooting with a 'mini computer' doesn't deter you, my recommendation would be to go for a mirrorless camera, whether it's your first camera or you're upgrading.

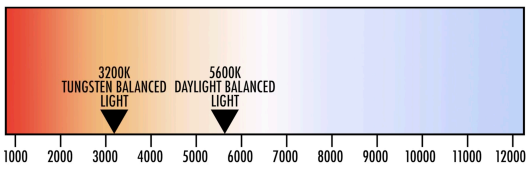
"In general, image quality increases the more you spend on a camera, up to around the $1,000 mark. From this price upwards, any improvement in image quality becomes more vague, except when shooting in low light."

Mark Condon

What to look for when buying lighting

1. Daylight balanced light (5,600 K)

Color Temperature is measured in degrees of Kelvin (K)



What to look for when buying lighting

1. Daylight balanced light (5,600 K)
2. CRI
3. Diffusion

CRI – Color Rendering Index is a scaled form 0 to 100 percent indication how accurate a “given” light source is at rendering color. The higher the CRI number, the better. Poor would be anything with a CRI of 55 or below. Good is 60 to about 85. Excellent is 90 to 100.

What to look for when buying microphones

1. Anything that records separate from the camera
2. Lightweight, easy to hide if on subject
3. Portable

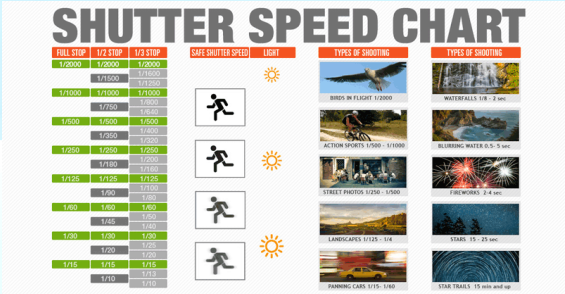
Basic Camera Settings

Okay, I’ve got my camera, how do I use it?
My goal is to get you using manual mode on your camera.

3 settings that control the light in a video.

- Shutter Speed
- Aperture
- ISO

Shutter Speed



Shutter speed should always be double the frame rate for video.

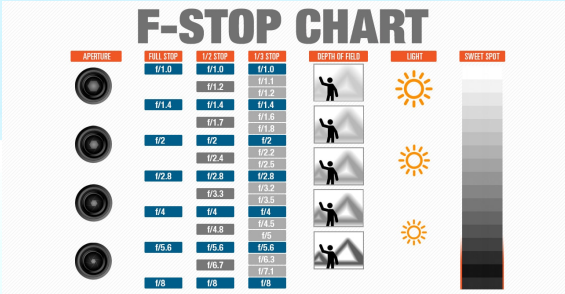
Shutter Speed

- 24 fps = 48 (50) shutter speed
- 29.94 fps (30 fps) = 60 shutter speed
- 59.94 fps (60 fps) = 120 shutter speed

3 settings that control the light in a video.

- Shutter Speed
- Aperture
- ISO

Aperture

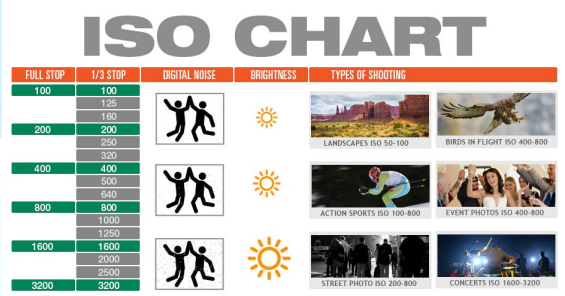


Aperture is the opening that allows light in through the lens.
It has two functions, wide open allows the most amount of light in, and the depth of field is great.
More closed allows less light, and decreases the depth of field, allowing you to see more in focus

3 settings that control the light in a video.

- Shutter Speed
- Aperture
- ISO

ISO



ISO is digital Light (how sensitive is the sensor to light)

Other Basic Settings

- White Balance
- Focus Modes

Different white balance settings (Kelvin)
Manual vs auto-focus (track subject)

Question/Comments