

Videography 101

Focal Lengths & Lenses

Ben Ellis, September 18, 2022



The Different Types of Lenses

There are two basic categories of camera lenses:

1. Prime lenses
2. Zoom lenses

Primes have a fixed lens focal length, making them faster and sharper. While prime lenses are less flexible due to the fixed focal length, they are also fast and lightweight, making them easy to travel with

Zooms use a series of lenses to allow different focal lengths from a single lens, making them more flexible but not as fast. They contain more glass, which aids in their flexibility, but they also tend to be bigger and heavier than prime lenses.

Common Lens Sizes and Specs

16mm Lens

- Angle of view: Very wide
- Description: Very wide view of the world. Great for landscape photography.
- Depth of field: Everything is in focus. Impossible to have a shallow depth of field.
- Distortion of space: Makes things seem farther away than they actually are. Exaggerates the size of anything very close to the camera.

35mm Lens

- Angle of view: Wide
- Description: Roughly what a cell phone would capture. Great for street photography.
- Depth of field: Pretty much everything is in focus unless your subject is very close to the camera.
- Distortion of space: Less spatial distortion than a very wide lens, but it still makes things seem farther away than they actually are.

50mm Lens

- Angle of view: Normal
- Description: Roughly the way the human eye sees the world. Good for just about any type of photography.
- Depth of field: Easy to have a shallow or deep depth of field, depending on aperture range.
- Distortion of space: Very little or none.

85mm Lens

- Angle of view: Medium telephoto
- Description: Great for isolating a subject from the background. Good for portrait photography.
- Depth of field: Easy to get a shallow depth of field.
- Distortion of space: Makes things seem closer than they actually are.

200mm Lens

- Angle of view: Telephoto
- Description: Ideal for picking out a distant subject, the way a telescope does. Good for compressing your subject and the background.
- Depth of field: Quite often has a shallow depth of field unless everything you're shooting is quite far away.
- Distortion of space: Makes things seem significantly closer than they actually are.

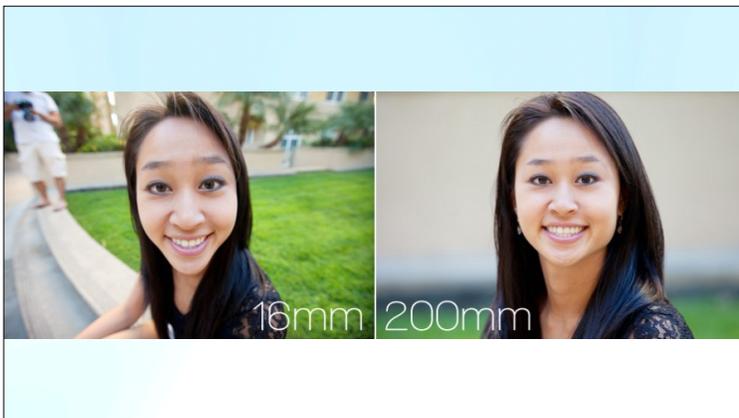
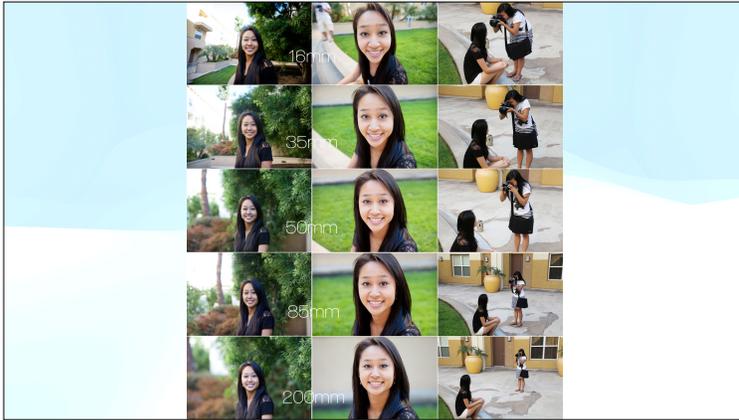


Image Stabilization
Autofocus

Some things to look for when purchasing lenses

Dolly Zoom

Getting Creative with Focal Lengths





Question/Comments
