

Chapter 9: Lenses

Focal Length is the measurement of the lens in mm. There are two types of lenses; Prime and Zoom, and three categories; Telephoto, 50 (Normal), and Wide.

- Prime lenses
 - Have only one focal length
- Zoom lenses
 - Have multiple focal lengths (multifocal)

Three Categories

- Telephoto
- 50 (normal)
- Wide

Going up in focal length narrows the field of view (FOV), while going down in focal length widens the FOV.

- Examples:
 - 200mm telephoto -> 85mm -> 50 (normal) -> 40mm -> 35mm -> 28mm -> 18mm wide -> 12mm fisheye -> 8mm.
- Trade offs: for wide angles, it can cause distortion, so the subjects in the frame look farther apart. For telephoto, it can narrow the FOV, making it harder to frame shots & require a higher shutter speed to avoid camera shake.

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