

Autofocus: How Your Camera Decides What's Important

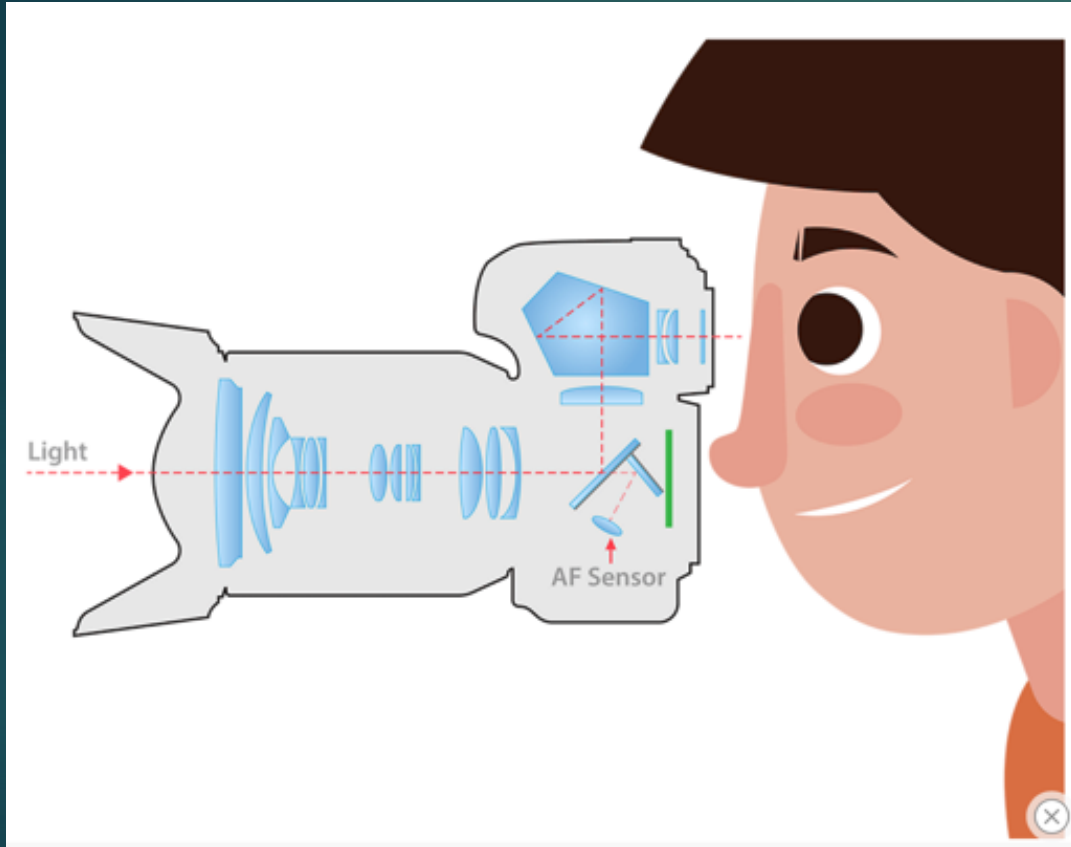
PRESENTED BY JACK SPEAKER, TAKEN FROM AN ARTICLE PUBLISHED IN
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Autofocus Types

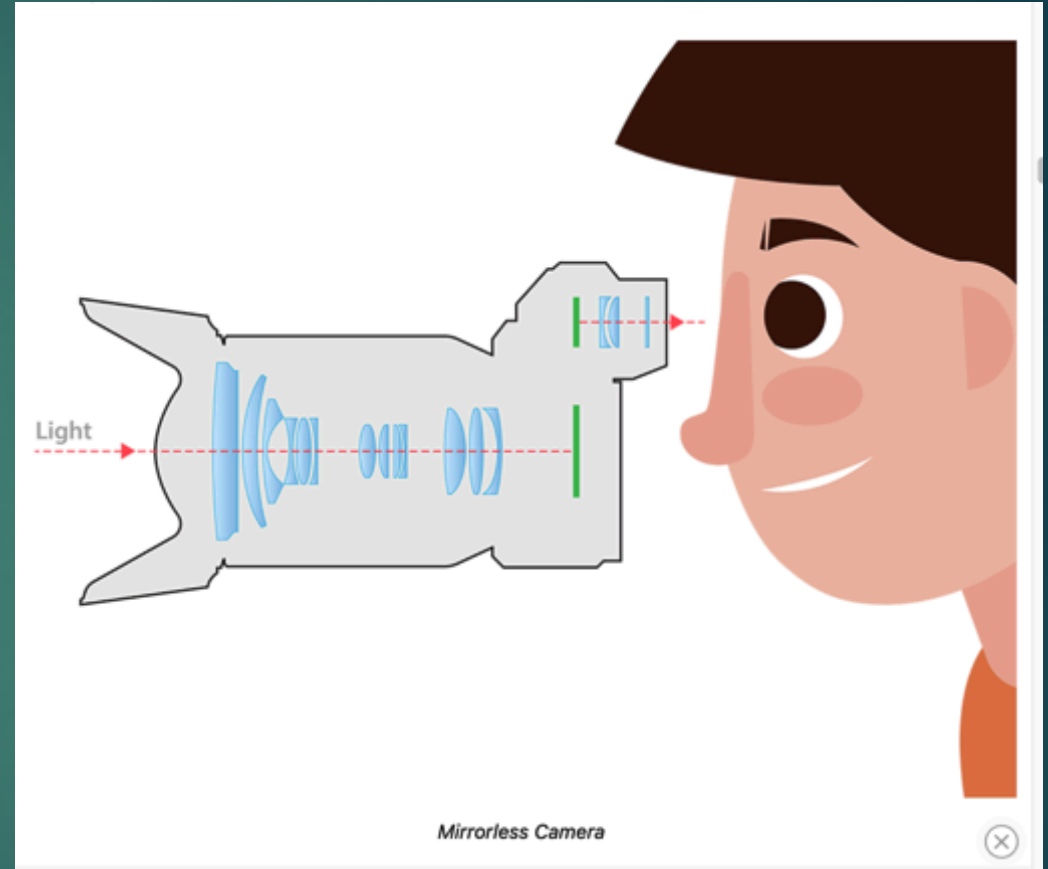
- ▶ Passive v Active
- ▶ Active sound and/aux light
 - ▶ Polaroid Sonar System
 - ▶ Autofocus Assist Lamp

Passive Autofocus

- ▶ Phase detection
 - ▶ Is faster, suitable of moving subject
- ▶ Contrast Detection
 - ▶ Slower, can be more accurate, needs good contrast and light
- ▶ Almost all cameras use a hybrid of both with proprietary logic to determine best mix
- ▶ A DSLR is at a disadvantage for Live View and Video as the mirror is up and can't use the sophisticated Autofocus Module



Traditional DSLR



Mirrorless

Focus Points

- ▶ More is better AND more cost
- ▶ All systems work best with more light and contrast
- ▶ Teleconverters can reduce autofocus performance

Autofocus modes (Single)

- ▶ Single AF or One-Shot AF
 - ▶ Single is:
 - ▶ Useful for things that don't move i.e. Portraits, Landscape etc.
 - ▶ Many cameras have special MODES, Eye, Faces etc.

Continuous AF or AI Servo

- ▶ Continuous is useful for moving subject, Sport, Wildlife
 - ▶ Much more complex
 - ▶ May be less accurate, A lower percentage of “Keepers”
- ▶ Hybrid Modes
 - ▶ Many different modes
 - ▶ Tracking, 3D, Auto
 - ▶ User Selectable focus points
 - ▶ Really takes some time and practice to learn the capabilities and best uses of these

Selecting A specific Point for Autofocus

- ▶ Is needed when what you wish to be in focus, is not in the center of your frame
 - ▶ Method 1- Focus-Recompose-Shoot. Place your focus point over the place you wish to focus, depress focus (either half-press shutter or use Back Button), carefully reposition to frame your shot, Depress shutter.
 - ▶ Method 2-Most Cameras will allow to change the actual focus point (See your cameras instructions). I often use this on Portrait oriented shots, or Wide landscapes where I want the foreground in focus

Further Reading

Here is the link to the article and one more which explains in detail
Phase detect Autofocus

<https://photographylife.com/autofocus-modes>

<https://photographylife.com/how-phase-detection-autofocus-works>