

Autofocus Guide



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Types of Focus Modes

- **Single Shot:** The camera locks focus with a half press of the shutter button and maintains that focus lock until the shutter is released or a photo is taken.
- **Continuous:** The camera does not lock focus, instead continuously adjusting focus for the moving subject(s) in the scene. The camera continues to track focus until the shutter is released or a photo is taken. If you maintain a half press on the shutter after taking a photo the camera will continue to track focus.
- **Hybrid:** A combination of Single Shot and Continuous. In this mode if the subject is still the camera will behave as if in single shot mode. If the subject starts moving, the camera will automatically switch to continuous focus and attempt to track the subject.
- **Tracking*:** An enhancement of Continuous focus. With tracking the camera tries to identify the moving subject you want in focus and follows that subject, attempting to ignore any other moving or non moving subjects in the scene.

*not available on all cameras, and not necessarily better than just continuous AF. If your camera offers tracking, make sure to test it.

Changing Your Focus Mode

- **Dedicated Button:** Many cameras have a dedicated button, typically marked "AF" (not to be confused with the "AF-L" button). Check your manual under "Focus Mode" if you're not sure if your camera has a button.
- Quick Menu: All modern cameras offer the option to change the focus mode via the Quick Menu.

Focus Modes by Manufacturer

Canon

Single Shot:	ONE SHOT
Continuous:	AI SERVO
Hybrid:	AI FOCUS

Fuji

Single Shot:	AF-S
Continuous:	AF-C
Hybrid:	AF-A

Nikon

Single Shot:	AF-S
Continuous:	AF-C
Hybrid:	AF-A

Olympus

Single Shot:	S-AF
Continuous:	C-AF
Hybrid:	N/A
Tracking:	C-AF+TR

Panasonic

Single Shot:	AFS
Continuous:	AFC
Hybrid:	AFF

Pentax

AF.S
AF.C
AF.A

Sony

Single Shot:	AF-S
Continuous:	AF-C

Types of Focus Points

- **Single Type:** This type of focus point can only detect contrast in one direction, either horizontally or vertically. Single type focus points are typically slower to focus and less accurate.
- **Cross Type:** This type of focus point can detect contrast horizontally and vertically, making them faster and more accurate.

Low Light Focus Sensitivity

- Given as an exposure value. (Example, the Canon 60D has low light focus sensitivity of -0.5 EV)
- Indicates how good the camera is at focusing in low light.
- The lower the exposure value rating, the better the camera is able to focus in low light situations.
- Is also helpful in comparing cameras. (*Example, The 60D's low light sensitivity is -0.5 EV. The 6D's low light sensitivity is -3 EV. This indicates the 6D is much better at focusing in low light.*)
- Most cameras will have focus points with varying levels of sensitivity. Typically the center focus point(s) are more sensitive

Aperture Focus Sensitivity

- Given as an Aperture number. (*Example, all Canon EOS cameras have an aperture focus sensitivity of f5.6*)
- Indicates the smallest maximum aperture a lens can have that will allow the focus points to detect light. *(Example, with a rating of f5.6, Canon cameras using a 150-600mm f5-6.3 lens might have some trouble*

focusing. At some point along the zoom range of that lens the largest aperture available will be f6.3, which is outside the rating for Canon cameras)

- Some cameras have focus points with varying aperture sensitivity. (Example, the center focus point of the the 60D becomes low light sensitive to -1 EV when used with an f2.8 or larger aperture lens.)
- The aperture rating is important to know when considering teleconverter and lens combinations and will let you determine if a particular lens will be able to focus with a teleconverter. (Example. A 70-200mm f2.8 lens with a 2x teleconverter becomes a 140-400mm f5.6 lens and will still focus on Canon cameras. A 150-600mm f5-6.3 lens with a 2x teleconverter becomes a 300-1200mm f10-13 lens and will not focus.)
- This is unclear but it seems that f5.6 is the standard aperture focus sensitivity on most cameras.

Focus Areas

What Are Focus Areas?

- Focus Areas are groupings of focus points that can be selected for use instead of being forced to choose between all focus points or just one focus point.
- Focus areas are useful when shooting moving subjects by restricting focus to a smaller area while taking advantage of multiple focus points.
- On some cameras tracking focus is only available when using a focus point area in combination with continuous autofocus.
- On many cameras the areas are set by the manufacturer, but on some cameras you can set a custom focus area.

PRINTABLE CHEAT SHEET

Choosing a Focus Mode

Single Shot:	Use for general shooting of non moving subjects.
(still	life, landscape, nature, most portraits, etc)

Continuous: Use for moving subjects. (sports and other action, kids, wildlife, etc...)

Hybrid: Use for still subjects that might start moving. *(wildlife, kids, pets)*

Choosing a Focus Point or Focus Point Area***

- When shooting non moving subjects, choosing a single focus point gives you the ability to control exactly where the camera will focus.
- If the camera is struggling to focus use the center focus point for the best possible results.
- Figure out which of your focus points are cross type and when you need fast and accurate focus, limit your use to cross type points.
- Be aware of the low light and aperture focus sensitivity of your camera and select lenses that maximize these ratings
- When shooting moving subjects, an auto focus area in combination with continuous focus will be most likely to give you good focus results.
- When shooting in low light have a flashlight handy, because if all else fails, shining a light on the subject can help your camera focus.

***With so many cameras and so many options, be sure to test how your camera's autofocus performs so that you know what your camera is capable of.

Conclusion

I am excited to help you in your your photography journey, and I am really looking forward to seeing what you can do with your camera, but using your camera for amazing photos is much more than just understanding your Aperture setting, so if you want to truly master your camera and use it to take amazing photos that will match the vision you see in your mind, check out my <u>Guide to Shooting in Manual Mode</u>.

The Guide expands upon what we've covered in this book, and much more, including:

- How cameras work, including more in depth explanations of ISO, Aperture, and Shutter Speed
- · Exactly how to change your ISO, Aperture, and Shutter Speed settings
- An in depth look at exactly how changing ISO, Aperture, and Shutter Speed will change your photos
- · Exactly how to get Shallow Depth of Field when you want it
- The secret to my I Am Shooting method, which will help you choose the right settings for the photo you want to take every single time
- · How to take sharp photos and avoid those crappy blurry photos we never want to take
- and much more...

Go check it out, and then...

