Focus Modes

In this tutorial, we are going to look at the various focus modes and tools available on your camera. We will also see which situations they are best suited to.

Finally, we'll look at how to focus on a landscape scene to ensure that everything from the foreground to the background is sharp.

Autofocus Points

Adobe Stock



When you look through your camera's viewfinder or at the back screen you will see a number of autofocus points like the ones in the picture above. There can be anything from 3 to over a hundred. You use these points to tell your camera exactly where it should focus on in any given scene.

If you set the autofocus point selection to automatic, your camera will examine the scene and focus where it thinks is the correct place. When you half press your shutter you will see the focus point(s) the camera has selected light up or change colour.

This can obviously be a risky way of focusing as your camera can get it wrong and you end up with the most important part of your photograph being out of focus. I much prefer to choose my focus point manually to ensure that what I want be sharp is actually sharp. Check your camera's manual to see how to do this.

Using this method, you simply select an autofocus point that is closest to where you want the focus

to be. Hover that point over the exact spot you want to focus on and half-press the shutter to lock the focus on that location.

While keeping the shutter half pressed you can then slightly re-compose the shot to create the exact composition you wish to use. Even though you have moved the camera slightly, it will stay focused on the spot where you half-pressed the shutter. Press the shutter fully down to take the shot.

There are 3 main autofocus modes available on most cameras:

Single Focus / One Shot Focus

This is the most straightforward of the autofocus modes. You simply choose your focus point and take your shot in the way I described above. This is perfect for mostly **static scenes** such as landscapes, architecture or me sleeping on the couch after a large meal.



In this photo, I used single focus/one shot focus mode and selected the focus point you see in green. In this case the focus point was sitting exactly over the spot where I wanted to focus. If this was not the case, I could have slightly recomposed after half pressing the shutter with the focus point over the same spot.

Al Servo Focus / Continuous Focus

This mode is perfect for **moving subjects**. You lock focus in the same way as before by choosing a focus point and half pressing the shutter. This time however, your camera follows the moving subject and keeps the focus locked onto it as you track it with your camera.

AI servo/continuous focus is particularly useful for wildlife and sports photography where the subjects can move quickly.

If you were photographing me playing football or even just running however, single focus would probably get the job done.



Al servo/continuous focus mode is an essential tool for sports photographers (by Jeffrey F Lin).

Automatic Autofocus / AI Focus

This mode is a **combination of the previous two focus modes**. The camera will use single focus mode if it detects that the subject is static.

It can then automatically switch to Al servo / continuous mode if the subject suddenly moves or if you move your camera's focus from a static to a moving subject or vice versa.



Baseball (by John Torcasio)

This mode could be useful while photographing a batter at a baseball game (or batsman at a cricket match for my English readers). The batter will be relatively static while hitting the ball and then will suddenly start running.

Automatic autofocus will switch from single focus to AI servo/continuous focus at this point allowing you to keep focus on the batter as he runs without having to manually switch modes.

My knowledge of both baseball and cricket is extremely limited. Cricket is the one with horses right?

Manual Focus



Autofocus/Manual Focus Switch

You can also switch your camera to manual focus and focus by turning the **focus ring** on the lens (pictured below). You can do this by eye and keep turning the ring until your subject is sharp. You need excellent eyesight for this however!



Alternatively, you can set focus by calculating the **hyperfocal distance** and manually setting the focus ring (pictured above) to this distance. This is a more advanced technique however. For those interested in learning how it works, I have covered it in the next tutorial.

Diopter Wheel

Very few of us have perfect eyesight and this is where the diopter wheel comes in. This is located right beside your viewfinder. You can turn it until the subject looks sharp in your viewfinder. It basically adjusts your viewfinder until it roughly matches your glasses prescription.



Live View Focus

Focusing with live view on the back screen is another way of focusing on your subject. You simply **tap the location where you want the focus point to be with your finger**.

You can then move the focus point as required by dragging it on the screen or simply by tapping on a different location. I find this tool very useful for landscape photography. It makes focusing on the exact spot I want very easy.

Face Detection Focus



Most back screens also have a face detection focus tool that will **automatically lock focus on a face** in a scene. Many are so accurate that they focus not just on the face but on the eyes to ensure maximum sharpness.

Back Button Focus

The back button focus allows you to **separate the shutter button from the focusing process**. Instead of locking focus by half pressing the shutter, you simply press the back button instead. The shutter is then only used to take the shot.



Pressing the back button once, sets focus using single focus mode. Holding down the back button switches your focus to AI servo/continuous focus mode. It could be used as an alternative option in the baseball photograph example. The difference is that you, rather than your camera choose the moment you switch from one mode to the other.

Depth of Field Preview

This button will **set the lens to your chosen aperture** as you preview the image through your viewfinder or in live view on the back screen. This gives you a more accurate idea of how the final photograph will look.

This is especially useful when using a wide aperture to achieve a shallow depth of field. It allows us see if we have enough depth of field to keep our main subject sharp while deliberately blurring the background and/or foreground.

Where to Set Focus?

In the tutorial on aperture, we saw that setting focus when shooting portraits, sports or wildlife is relatively straightforward. We simply focus on our main subject.

In the case of portraits, we focus on the eyes. Often, we may not be concerned about the rest of the scene being particularly sharp. In fact, we may deliberately want the rest of the scene to be out of focus.

When shooting landscapes however, we generally want everything from the foreground to the background to be sharp. Where do we set focus in this case?

A good general rule of thumb is to set focus on a spot that is about 1/3 up from the bottom of the frame. We learnt in the aperture tutorial that there is about twice as much depth of field behind the point of focus than in front of it. This means that setting the focus 1/3 up from the bottom of the frame and using a narrow aperture should result in the whole scene from the foreground to background being in focus and acceptably sharp. This is the method I use 99% of the time.



For this photograph of a restaurant on St. Mark's Square in Venice, I focused on the point where the red dot is. This ensures that everything from the restaurant chairs and tables to St. Mark's Basilica in the distance is acceptably sharp.

Hyperfocal Distance

As mentioned earlier, calculating the **hyperfocal distance** is another way of setting focus in this situation. Done properly, it is a very effective and accurate method of focusing.

It is useful in a number of situations when simply focusing on a point 1/3 up from the frame may not be accurate enough for the scene in question. It may even be impossible to use autofocus if using a very dark neutral density filter on your lens.

We will look at how to calculate the hyperfocal distance and use it to set focus in the next tutorial.