

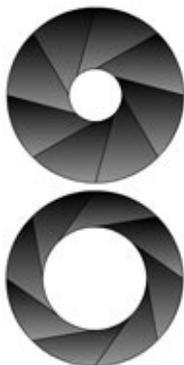
Photography Basics: Aperture

<http://www.digital-photo-secrets.com/tip/445/photography-basics-aperture/>

Picking an aperture is perhaps the most important decision you can make whenever you take a photo. Everything hinges on it. With different aperture values, you can create sharp stunning landscapes, or you can get up close and photograph faces. In many ways, the aperture determines the creative direction your images will take. That is why knowing what apertures are, and how they have an effect on your photography, should be priority number one.

This article is a summary of the detailed explanation I give in my Depth Of Field Secrets product. If you'd like a more thorough video explanation with lots of examples, I recommend you take a look at Depth of Field Secrets.

The aperture on a lens is basically a hole. That's it. Light enters the lens through the aperture and projects an image on the light sensor on the back. It's amazing that something as simple as a hole can have such a dramatic effect on the photos we take, but it really does. The degree to which we open or close the aperture on our cameras determines the depth of field, brightness, and darkness in every photo.



Of these three, depth of field is the most relevant to the creative direction you will take with your photos. In some very basic terms, the depth of field is the size of the part of the photo that is in focus. If you take a photo with a huge depth of field, everything in it will be in focus. On the other hand, if you take a photo with a shallow depth of field, only a small part of it will be in focus while everything else is blurred out.

The aperture in your lens corresponds to the different f-numbers. As the hole gets bigger (opens up more and more), the f-number goes DOWN, but as the aperture decreases, the f-number goes UP. This is often very counter-intuitive to most beginning photographers who are accustomed to thinking that bigger values should correspond to bigger things. Just remember that apertures are weird. An aperture that gets F2.8 is a lot bigger than an aperture that gets F5.6.

Using aperture to achieve a blur out

There are a variety of photographic effects you can achieve by picking the right aperture. With a very big aperture like F2.8 (remember, small f-number), you can create such a shallow depth of field that it effectively blocks out the background entirely. This can be very useful when you are creating portraits and don't want to distract your viewer from annoying twigs and other debris in the background. Because everything else is out of focus, you will only see your friend's face and almost nothing else.

One of our subscribers, Kátia Goretti, sent us this wonderful picture of her sister. Notice how you only see her sister while the background looks like impressionistic splotches of paint. This is the effect you get when you use your camera's aperture to blur

out the background.



The easiest way to set aperture in your camera is to use Aperture Mode.

This allows you to set the aperture (f-number) and your camera will set the rest of the settings to make sure you get a good photo.



What else needs to be changed? Well, with a lower aperture number, your camera will receive more light (bigger hole = more light!), so the shutter speed needs to be increased to take account for the greater amount of light. That's what your camera does automatically when you set Aperture Priority Mode.

Sharp landscapes that stretch for miles

You can also use your camera's aperture to keep everything in the photo in focus. This is best for landscape photography where depth draws viewers in and gives them a real sense of the scale of everything in the scene. Ideally, to take one of these photos, use Aperture Priority Mode again and set the aperture with as high a number as possible – like F22.

And again, like above, a higher F-number means a smaller hole so your camera needs to slow down the shutter speed to still let enough light in to take the photo. It will do this automatically when in Aperture Priority mode, but you will need to remember to make this change if you are in Manual Mode.

The following scene was sent in by Leon Visser, and it shows just what you can do with an almost fully closed aperture.



Notice how the entire photo is in focus, from the front of the plane all the way to the clouds in the background. This wouldn't be possible with a wide open aperture.

I should also note that whenever you increase the aperture this much (remember, smaller hole), you will want to use a tripod, or increase the ISO of the photo (to make the camera more sensitive). Because of the lower light getting into the camera, the shutter speed will need to be decreased which means your photo will be more susceptible to camera shake issues. It's not usually

a problem in bright sunlight like the above photo, but something to be aware of.

Aperture determines everything

I really want to stress the central role that aperture plays in making almost all of your creative decisions as a photographer. Whenever you pick up your camera and take a picture, think to yourself, "what aperture is appropriate for this shot?" If you are taking a portrait, pick a wide open aperture (low F-number). If you are shooting a landscape, go for something more closed (high F-number). For almost everything else, pick an aperture

between F8 and F11. These are known as the "I'm not sure apertures". As you get more experience as a photographer, you will know which ones work best in certain very specific situations.

There is so much to cover about aperture that I have only just covered the very basics. This ought to provide you with the basis to go forward and start seeing your camera's aperture in a new and exciting light. If you'd like further information on how to use Aperture to create better shots, I recommend my Depth Of Field Secrets course.