

UNDERSTANDING APERTURE BLUEPRINT

An aperture (f-stop) regulates the amount of light that can pass through a lens at any given shutter speed. It is a hole within a lens, through which light travels into the camera body.

There are two main effects that aperture has on photos and it's really important to understand them thoroughly. The most obvious one is the brightness (exposure) of images. As aperture changes in size, it alters the overall amount of light that reaches the camera sensor.

A large aperture (a wide opening) will pass a lot of light, resulting in a brighter photograph. A small aperture does the opposite, making a photo darker.

Another effect of aperture is known as depth of field. Depth of field is the amount of photograph that appears sharp from front to back. Large or wide aperture results in a shallow depth of field, while small or narrow aperture results in a sharp image.



On an LCD screen or viewfinder, the aperture will look something like this: f/2, f/4, f/8, and so on. These f-stops are a way of describing the size of the aperture (how open or closed the aperture blades are) for a particular photo.

It's crucial to remember that **small numbers** are **large apertures**, and **large numbers** are **small apertures**.



shallow depth of field



deep depth of field

When it comes to depth of field, you should recall that a **large aperture** like f/2.8 will result in a **large amount of background blur** (ideal for portraits), while **small apertures** like f/8, f/11, or f/16 will help you capture **sharp details** in both the foreground and background (ideal for many landscapes).

1 SETTING THE APERTURE

If you want to select your aperture manually for a photo, there are two modes which work - aperture-priority mode and manual mode.



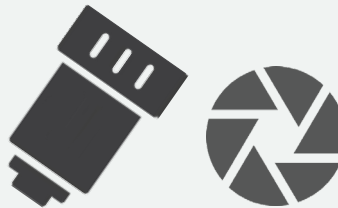
Aperture-priority mode is written as "A" or "Av" while manual is written as "M." Usually, you can find these two on the top dial of your camera.

TIP:

In Av mode, you select the aperture, and the camera selects your shutter speed. In M mode, you select both the aperture and shutter speed manually.

2 APERTURE RANGE

Every lens has a limit on how large or how small the aperture can get.



The maximum aperture is more important, because it tells you how much light the lens can capture at its maximum. The minimum aperture is not so important, because almost all modern lenses can provide at least f/16 as the minimum aperture.

TIP:

A lens with an aperture of f/1.4 or f/1.8 is considered a "fast" lens, because it can let through more light than a lens with a "slow" maximum aperture such as f/4.

3 THE ESSENTIALS APERTURE & EXPOSURE

Exposure is the amount of light falling upon the sensor and it is affected by aperture (as well as shutter speed and ISO).



For instance, if you're in a darker environment, you may want to use large apertures like f/2.8 to capture a photo of the proper brightness.

TIP:

If you often shoot in low light, it's a good idea to buy a "fast" prime lens, such as 35mm or 50mm with f/1.8.