

# Tips for Exposure

## ISO

Compiled by Bob Spalding

Exposure is the basic element of any photograph. It is how much light your photo was exposed to, and this will reflect on what is produced in your final image. Exposure is determined by three essential elements; Aperture, Shutter Speed and ISO. This is one of three fact sheets discussing each element individually.

The acronym ISO stands for 'International Organization for Standardization'. ISO was initially used for Film Cameras; it was adopted by the digital camera manufacturers with the purpose of maintaining similar brightness levels as it related to film.

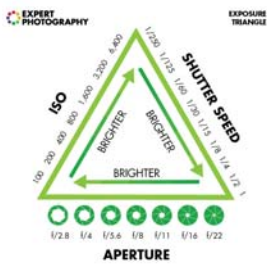
The ISO Setting controls of the camera's sensors as it related to the sensitivity of light. The higher the ISO, the more sensitive your photo is to light. Most of the newer dSLR's as well as the Mirrorless cameras, the ISO can range from 100 to as high as 250,000+.

**ISO 100** → **ISO 1600**

Higher Quality                      Lower Quality

Less Grain/Noise                      More Grain/Noise

You should always use the lowest ISO possible. Doing this you will avoid what film photographers called Grain; however in the digital world we call it Noise. Basically noise will make your photo look grainy. The higher the ISO, the more noise you photo may have. Today's higher end cameras can be shot at a higher ISO with small amount of noise. Each generation of new cameras, the higher ISO's produce less noise



Tying Aperture, Shutter Speed and ISO together; if you need a specific Aperture setting and/or Shutter Speed, you can increase your ISO speed to obtain what is needed, or visa-versa.

One highlight of a Digital Camera is that you can shoot one photo at one specific ISO and then shoot the next photo at a different ISO. You could not do that with a Film Camera. With a Film Camera, once you set your ISO (film speed), you had to shoot the whole roll of film at that speed.

In summary:

The higher the F-Stop, the more DOF you get.

The higher the Shutter Speed, this will Stop Action / lower shutter speed will show movement.

The higher the ISO, the more noise you will get in your photo.

