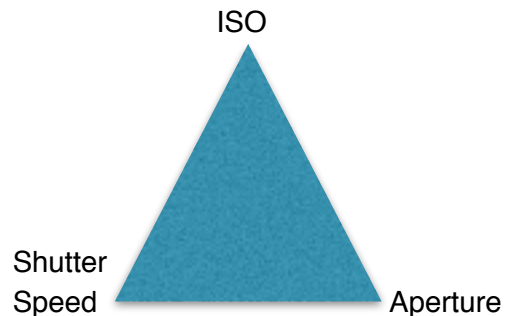


Exposure Basics

Controls of Exposure

Three factors control exposure:

- the ISO sensitivity,
- the shutter speed (time value),
- and the aperture (*f*-stop).



ISO

The ISO rating sets the sensitivity level of the sensor. A low number will require more light than a higher number. Higher numbers also increase the noise evident in your image (think digital “graininess”). The lowest ISO that is appropriate for your subject will give the clearest, sharpest image.

Shutter Speed

The shutter controls the time the light strikes the sensor. Most images are captured in a fraction of a second to stop action, but longer exposures can be used in low light and to show motion.

Aperture

The aperture controls the volume of light striking the sensor. When wide-open a large volume of light is recorded, allowing a faster shutter speed. A small aperture will require more time, but also increase sharpness .

The rule of reciprocity

When setting the proper exposure your choice of any one of the three controllers effects the choices of the other two. And once your determine the proper exposure level a change to one will require a change to at least one of the others. E.g., if you double the ISO rating from 200 to 400, then you must double the shutter speed or reduce the aperture size.