

Exposing with the DSLR

All cameras use two controls for exposure, f-stop and shutter speed. The f-stop is like the iris of your eye controls the **amount** of light by opening up for low light levels and closing down to restrict the amount of light passing through for bright situations. The shutter speed controls the **duration** of the exposure by allowing shorter or longer exposure times. F-stop and shutter speed (SS) work together to give the sensor the correct exposure. Not enough or too much exposure may not produce a useable image or anything at all. In many cases there are many f-stop/SS combinations that may be correct and produce the same exposure. However, f-stops and SS not only change the exposure, **they change how a picture looks** and we will spend the next two weeks exploring these controls.

ISO is the sensitivity of the film or sensor. With film, we switch to emulsion that has a higher ISOs for low light. With the new technologies, ISO becomes a variable where it is set low (100-400) for bright situations, but is increased as necessary when there isn't much light. On most modest cameras, anything over ISO 1600 doesn't provide very good quality. You will find the ISO settings in the "shooting" menu on your camera.

Inside the viewfinder or on the LCD in Manual mode, a horizontal line will appear with zero in the middle and + on one side and - on the other. Pushing down the shutter half way activates the meter, and if the f-stop/SS controls do not produce the proper exposure, a second line will appear and show you if it's under or over exposed. Move the SS by turning the thumb dial or move the f-stop by holding a nearby button while moving the thumb dial. Move one or the other or both to get the meter to read zero.

Caveats:

Shutter Speeds (SS) below 1/30 sec. should not be used handheld and higher minimum speeds are essential for sharp images with long lenses, etc.

All f-stops are not on every camera and zoom lenses do not let in very much light. Shooting wide open (f-stop 3.5-5.6) will probably be necessary indoors. However, f-stops smaller than f-11 really degrade the image quality, so be careful in bright situations.

WATCH THE VIDEO TO SEE HOW THIS WORKS.