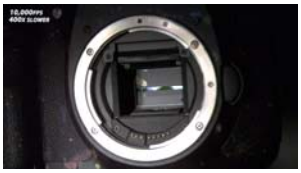
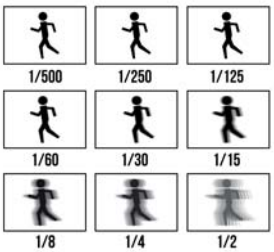
Tips for Exposure
Shutter Speed

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.

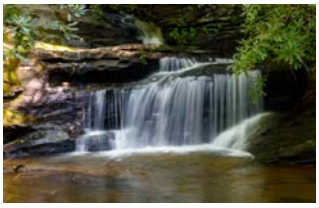


Shutter Speed refers to how long the camera's shutter will remind open and it turn how long light is allowed to enter the camera.



Shutter Speed is measured in fractions; 1/60 or 1/125 or higher or lower. This number relates to the timing that the shutter is left open. For example, a shutter speed of 1/60 means that the shutter will remain open for 1 sixtieths of a second.

Shutter Speed really deals with movement. If you want to stop the action, you will need a high shutter speed, such as 1/1000 of a second. However, if you want to slow the motion down, you would use a low shutter speed, such as 1/15 of a second. In many cases where a person would like to show water in slow motion (milky), they may choose a shutter speed at 1 second or more.



You can also blur motion by panning your camera. You will move your camera as you follow the action. The background which will move relative to your camera will be naturally blurred. This is a common technique if you want to convey a sense of movement.

Here is a rule of thumb for hand holding your camera with various focal lengths lenses as it relates to shutter speed.

24-35 mm - 1/30 second
50 mm - 1/60 second
105 mm - 1/25 second
200 mm - 1/250 second
500 mm - 1/500 second

Most good landscape photographers will us a tripod and a shutter release cable in order to get a Tack-Sharp Photo, no matter what F-stop or Shutter Speed they are using.

If you a re in a really bright light situation and you can not get your shutter speed low enough for what you want to shoot, you may have to use a Variable Neutral Density Filter. This is a filter that will screw onto the front of the lens. It can be adjusted to limit the amount of light entering your camera. Most Nature Photographers will this type of filter when they are shooting a water related photos.

Shutter Speed and Aperture are Totally Connected to each other. You can not change one without affecting the other. If you want a high DOF, you may have to use a slow shutter to achieve this or visa versa. The way you can get around this is to use in Manual Mode, that way you have total control of the camera.

The other factor related to Shutter Speed and/or DOF is your camera's ISO. Hhhhny7uj