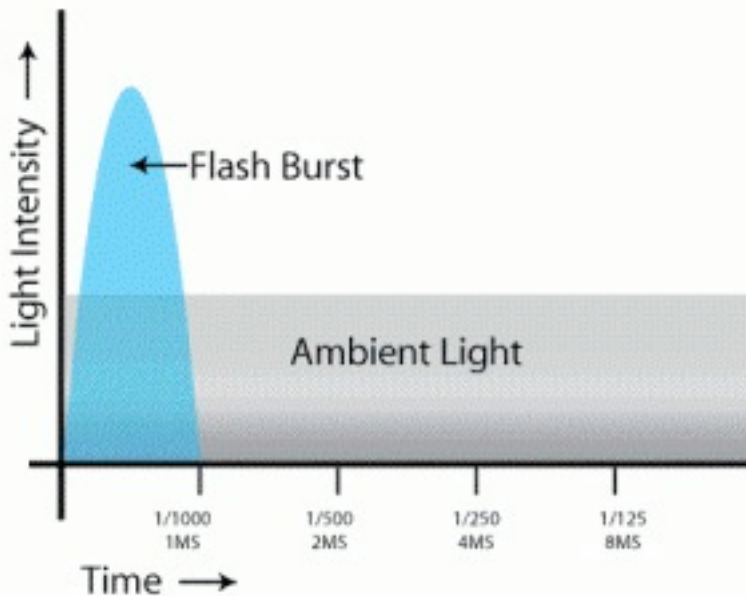


Flash Photography Part two

Flash and Ambient light

When using ambient light only, you use ISO, Aperture and Shutter speed to get the correct exposure. Changing any one of the three will effect your exposure.

If you add in the flash, you now are in effect doing two exposures at the same time. One is the shutter speed time for the ambient light, the other is flash which is almost instantaneous at the start or end of the exposure.



With this diagram you have time along the bottom. As the shutter opens (lets say 1/125th Sec) the flash fires within 1/1000th sec, the shutter stays open until it gets to the set time letting in ambient light.

So no matter how long your shutter speed is, the flash exposure stays the same and only the ambient light changes.

If you change the ISO or aperture you affect both the flash and ambient light exposures, so we use the shutter speed to alter the ambient light exposure. As long as you are at your cameras sync speed or slower the flash exposure will not change.

The common use for using a flash with ambient light is when shooting a subject inside and you can see the exterior through the window. Below is what most cameras will do with this shot, expose for the exterior (so inside will be dark) or expose for inside (and over expose the exterior)



The simplest way to solve this problem is using a flash. Try following the steps below.

Step one: Set the camera on a tripod. Set the shutter speed to 1/125th sec

Step two: Aim the camera out the window and alter the aperture until you get the correct exposure. Lets say I get an f8

If I take a shot now at 1/125th at f8 I get a well exposed image of the outside.

Step three: Set up your flash. Then set the flash to give you f8, many new flashes you can set to Auto and let the camera tell the flash what setting to use. (Note: make sure the flash is off camera and to one side so you dont get the flash reflection in the window and diffused) Position your subject

Now if you take a shot both outside and inside at f8 will be well exposed.



Step four: Normally a shot like this it is more natural to have the outside slightly brighter than inside. So change your shutter speed to 1/90th which means the shutter will be open longer letting more ambient light into the camera.

Take a shot and you will see the subject is the same exposure but the exterior is lighter.

Try changing your shutter speed to 1/200th sec and see what happens. Is the background lighter or darker.

Now go back to 1/125th (which will give us both subject and ext the same exposure) and change the aperture to f4 now what happens to the flash and ext exposure? Did both change?

So knowing you can alter the ambient light exposure with the shutter speed this can be a great tool to use. Hiding unwanted areas in the background just by under exposing the ambient light (use a faster shutter speed) or if you want more background detail use a longer shutter speed.

Happy Flashing.

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