

KNOW YOUR CAMERA (2) – FLASH

Most cameras these days have a flash that pops up from time to time when the light gets poor. Many allow the connection of an external flash gun that integrates with and uses the camera's exposure metering system. As you already know these metering systems measure the light entering the lens and falling on the film or CCD sensor and are known generally as "Through The Lens" (TTL) or "Evaluative TTL" (ETTL) systems.

Both of these integrated flash systems work the same way and give extremely good results when running in auto mode – but not always. Your camera/flash system works as follows:

The camera meters the light reflecting from the subject matter and sets an exposure. If the light is poor, it pops the flash and the flash fires automatically when you take the picture to illuminate the **foreground** subjects and brighten them. If these subjects were back lit, the camera is clever enough to add enough flash light that the foreground is brightened to match the lighting of the brighter background.

Warning: Most internal flash units have a reach limited to about 3 to 4 metres (100 ISO), double that with 400 ISO film. Even very expensive external flash units have limited reach, typically about 6 to 8 meters with a 100 ISO setting.

Having said all this it is necessary to emphasise that these flash systems are not really much good as primary sources of light. Used this way the results are harshly lit, hard shadows are thrown and highlights are flat and uninteresting. However, they come into their own when used to supplement the main lighting. The results can be exceptional. This kind of lighting is often called "Fill-in Flash".

Fill-in flash is used to put some light into shadow areas in foreground subjects, thrown by oblique sunlight or by other shadows falling on them. Or, perhaps, you want to illuminate the interior of a room so that it balances nicely with the sunlit scene outside a window. As mentioned before, it is effective to brighten back lit subjects.

Warning: In my opinion most camera/flash systems overdo the fill-in and the end result is properly exposed but too flat. It is necessary to reduce the amount of light from the flash by about 1 stop but to suit your taste.

Finally, camera/flash systems are quite sensitive to the amount of light reflected by white or light coloured surfaces with the result that whites are often rendered as dirty grey. Even evaluative metering systems that handle normal lighting well will, on light toned subjects, under expose the same subject when lit with a flash.

How do you cope with all this? Take a series of experimental photographs to find out:

1. The reach of your flash.
2. The extent to which you need to reduce flash exposure when shooting light subjects.
3. The extent to which you need to reduce flash exposure when using fill-in flash.

Remember that with most camera systems, you can and must adjust the flash exposure independently from the camera's own shutter speed and aperture settings. You are not trying to adjust the overall exposure, merely the amount of light contributed by the flash so that it balances correctly with the main source of illumination in your picture.

Experiment and learn to know your camera and your flash system. Experience counts!