

# Flash Photography

By Dwain Cox

## Why use a flash...

- To control the amount and direction of light.
- Balancing the light to illuminate multiple subjects.

## Why use a flash out side...

- in the sunlight to show detail in the shadow areas.
- to enhance the color of nearby objects on overcast days.

## Why use a flash inside...

- to add light.
- to get truer color.

## Definitions

**TYPES** Dedicated, Non-Dedicated flash units

**MODES:** Manual, Auto, TTL, E TTL

The duration of light from modern flash units is from about 400<sup>th</sup> of a second at full power to about 50,000/sec at minimum power. The unit fires the same "strength" of light at all power settings, but the duration of the light changes as the power level decreases. The older flash bulbs required about a 30/sec for full light. You had to use a blue bulb for color photos to correct the color. A clear or white bulb could be used for B/W.

## Equipment Descriptions

On Camera	Off Camera
Built in flash	PC corded
Hot shoe mounted	Bracket and extension cords
	Wireless, slaves, radio and IR

## Techniques

Direct	Bounce	Fill
Diffusers	Gels	Time Exposures with single or multiple flashes
Reflectors	1st curtain sync	2nd curtain sync

## Color Correction

Your typical Daylight film is color balanced to the sun. Even if your camera indicates enough light is available for an indoor photo, Incandescent light bulbs will tint your photos brown. Fluorescent lighting can leave you with a green tint. The camera flash unit is color balanced to correct these color variations. Different sources of light will create a wide variety of colors.

**LIGHTING--GOOD LIGHT MEANS GOOD COLOR, GOOD CONTRAST.** For people shots, keep the sun behind your subject. This prevents eye-squint and can give a nice highlight effect on your subjects hair and shoulders. Use a flash to give better color and to light up those shadows. Most built-in camera flashes are best between 3 to 12 feet. Using a higher speed (ASA/ISO) film will allow you to increase the range of you flash. (These figures are average and will vary from camera to camera.)

<i>Built-in Flash Range (may vary by camera)</i>		
<b>100</b>	<b>3-9 feet</b>	<b>200 3-12 feet 400 3-15 feet</b>
The more powerful <i>mounted</i> flashes can achieve much greater distances		
<b>100 to 25 feet</b>	<b>200 to 35 feet</b>	<b>400 to 50 feet</b>

According to the Sunny f/16 Rule, a midtoned subject, when exposed in full sunlight, will be correctly exposed at an aperture of f/16 and a shutter speed of the reciprocal of the film ISO (1/ISO). In other words, a film with a speed of ISO 100 should correctly expose a midtoned subject at 1/100 second at f/16 in full sunlight.