

Flash Units

- When turned on, generally build up a charge until a ready light shows.
- The duration of the flash is usually very short 1/1000 to 1/40,000 sec.
- Flash light is usually normal sunlight color (“5500K”) but sometimes needs to be warmed up a little. A warming filter is available.

Add-on Flash Units

- GN Guide Numbers measure the power of the flash unit in feet or meters. Bigger is better for range and bounce.
- TTL is the modern metering/exposure system
 - “Through The Lens”
 - Works with your camera’s computer to adjust for distance and exposure setting.

Hot Shoe Flash Unit

- Can calculate the focus distance, aperture with the amount of flash needed.
- Good for 100 ft or more depending on model.
- Can bounce light off of wall or ceiling for much better form.
- Still must watch out for shadows on background surface. (Move subject away from wall?)
- Can be connected with a cable for better control of direction of light (“off shoe”).

Built-in Flash

- Good for 20’ or so outdoors, a little more indoors.
- Flattens the image.
 - No side light to show form.
- Red eye is the light reflecting off of blood vessels in the back of the eyes.
- Usually no shadows showing (a little on edge?)
- Fine for fill-in flash.
 - Best if you can turn the intensity down or cover it.

Hot Shoe

- Mounting bracket and electrical contacts for an ad-on flash.

Flash Synchronization History

- Sync tricky on SLR film cameras because if you set the shutter speed to less than 1/60 sec, the two curtains that roll across might not have the whole image open! 1/125 might expose only 1/2 the film. Plus it had to fire exactly in the middle of the 1/60 sec the shutter was open!
- Sync speed was usually 1/60 sec or marked X on camera shutter control.