

# Flash & Flash-Fill Exposure

- Flash Placement** Not on camera hot-shoe  
Hot-shoe causes undesirable shadows and red eye.  
Use L bracket-- the higher the better. This requires a PC cord .  
Bounce light if possible -- the larger the effective light source the softer the shadows (use ceiling or wall if possible).  
Use bounce card or small softbox
- Dedicated Flash** These units are brand-specific, i.e. dedicated to Nikon or Canon etc.  
The flash fires and the camera measures illumination at the film, or digital capture, plane.  
When the interior sensor has received enough light for proper exposure, the camera cuts the flash power.  
Choose shutter priority and camera sets aperture automatically.
- Daylight Flash Fill**
- Stop down one f/stop from indicated flash exposure  
or  
Set flash ISO 1 stop higher than true film speed (100 set to 200)
  - In bright sun set camera shutter speed to highest possible sync speed.  
(In this situation cameras with fast sync speed are helpful.)
- Flash with No Background Detail in Low Light**  
With this method little to no background will be visible, depending on the available light  
Set shutter to camera sync speed.  
For f/stop use either:
- Chart on back of flash
  - Automatic flash
  - Flash meter
- Flash with Background Detail**
- Determine f/stop for subject/flash distance
  - Calculate shutter speed for background based on f/stop dictated by flash
  - Slow Synch: some dedicated strobes adjust the shutter speed automatically to compensate for low light level backgrounds.
- High Speed Sync (Canon) or FP Sync (Nikon)**  
Flash will synchronize at all speeds on focal plane shutter.  
Flash pulses thousands of times per second to produce an essentially continuous beam of light (for brief periods).  
Only certain flashes and cameras have this capability.
- Special Effects** Combination of a stopped action figure and a ghost image of same figure.  
Requires low light level, moving subject, and/or low ISO setting.
- Determine f/stop by one of these methods:
    - Chart on back of flash
    - Automatic flash
    - Flash meter
  - Set shutter speed on B or T  
Duration determined by f/stop and available light.
- Rear-Curtain Flash Sync  
With normal flash synchronization the flash fires as soon as the shutter is tripped. With some long shutter speeds available light obscures a moving subject. Using rear-curtain sync the flash fires at the end of the exposure, rather than the beginning.