

The 5 variables of Off Camera Flash

Shutter Speed

- Controls Ambient Exposure. - Sky, window light, lamps, continuous light sources, etc.
- Limit is the Camera Sync Speed (typically 1/200 with triggers)

Aperture

- Controls Flash Exposure – Amount of light entering camera in a fixed time.

ISO

- Changes sensitivity - Increases sensitivity of light as ISO is increased

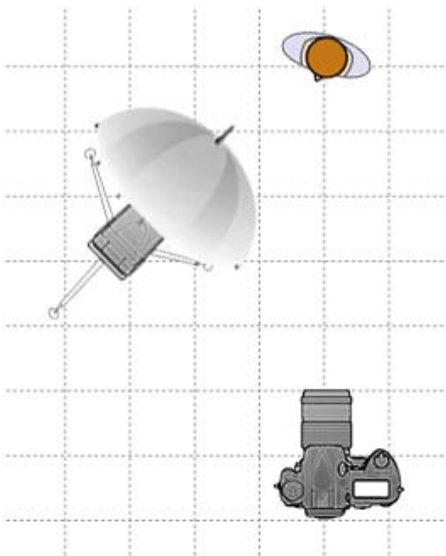
Flash Power

- Manual Adjustment of power settings. 1/1 (full), 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/128. One f stop difference.

Flash-to-Subject distance

- Doubling the flash-to-subject distance reduces the light falling on the subject by one quarter. The inverse square law.

Basic Single Light Start Point



Start Settings

- Know your actual camera Sync Speed. It's always your starting point.
- Set camera to ISO 100 or 200 (not auto ISO)
- Set camera to Manual Exposure mode. Select 1/200 Shutter speed (typical Sync with wireless triggers).
- Set Aperture to f5.6
- Set Flash power to 1/8 (or 1/16)
- Position light as shown, take a shot and adjust settings according to what the picture shows. Look at camera histogram to understand how the shot is exposed.

Understand variables in action

- Vary Shutter Speed from Sync to burn in more ambient light.
- Vary Aperture to alter flash exposure
- Vary Flash-to-subject distance to see how it will alter exposure on subject
- Vary Flash power
- Move Flash to see how the position of the light source can alter the shadows

The Next Step

- Vary subject-to-background distance
- Change light modifier: Softbox, Shoot through umbrella, Bounce umbrella, bare flash.
- Add reflector to fill shadows, etc.
- Add a second Flash for background separation, hair light, etc.

Resources

- <http://www.strobist.com>
 - Lighting 101
 - Lighting 102
- <http://www.flickr.com/groups/strobist/>
- <http://www.flickr.com/groups/ukstrobists/>
- <http://www.flickr.com/groups/leeds-strobist/>

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Questions? Please post in <http://www.flickr.com/groups/leeds-strobist/>
<http://www.flickr.com/groups/exposureleeds/>