Basic Flash Photography
Session One
On Camera Flash

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Basic Flash Photography

On Camera Flash
Tonight
→

Off Camera Flash
Next session
←

We will explore On-camera flash this session

- The importance of understanding the basics so you can have more options.

- We'll discuss the techniques to successfully use on-camera flash and use the through the lens (TTL) style of on camera flash which gives good results, and provides flexibility.

- The second session we'll talk about

  Off-camera flash

Uses for On Camera Flash

- Events-great way to cover family or social events, sports, snapshots of kids or while traveling. The goal is to fill in the light to enhance the ambient light or give light when there isn't enough for an image.

- Two roles for flash in such situations-*fill in* some light onto the subject to draw attention to it or to *illuminate the subject*.


Fill Flash

Illuminate the scene

The basics- Attaching and connecting to your camera

- Its important to know your **maximum shutter synch speed** for your particular camera. This is the highest shutter speed your camera can use for flash (it will be in your manual} You can use lower ones, but not higher ones.
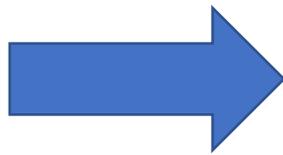
The Exposure Triangle-

Key to exposure-All three can be manipulated and will Impact flash. Aperture and shutter speed will be the most important. Trading off different sides of triangle will impact the impact of the image.


3 Camera Controls to make an image
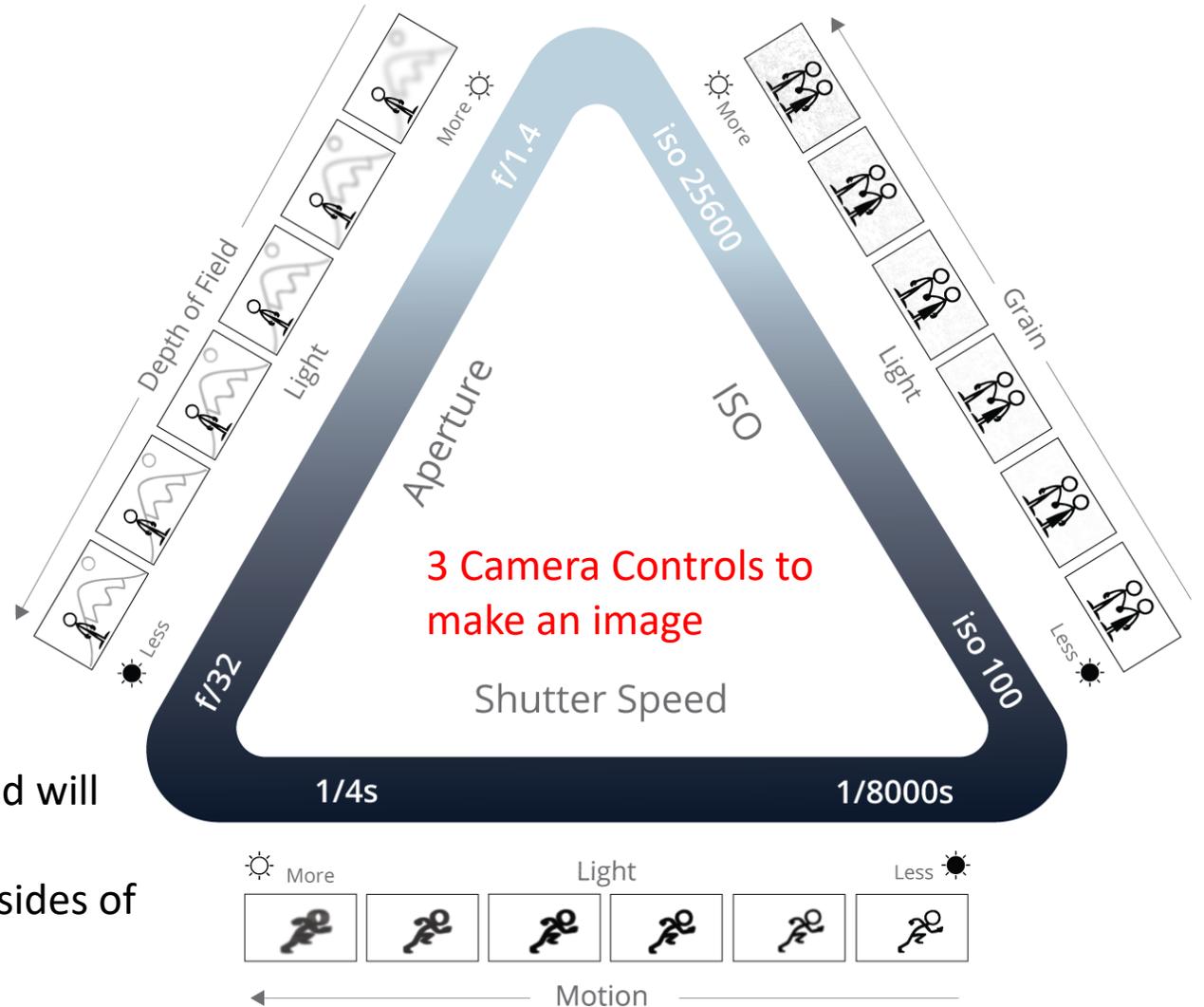
To Connect your flash on the hotshoe of the camera, you will need to do three things:
1. Turn on the camera and then the flash to see if they are talking to each other.
2. Go into the camera's menus, usually there is a flash menu page, to be sure the flash is talking to the camera. You will likely see a choice of TTL or Manual for how to take the pictures.
3. Check to be sure the flash menu is set in TTL as well and on the LED on the flash.
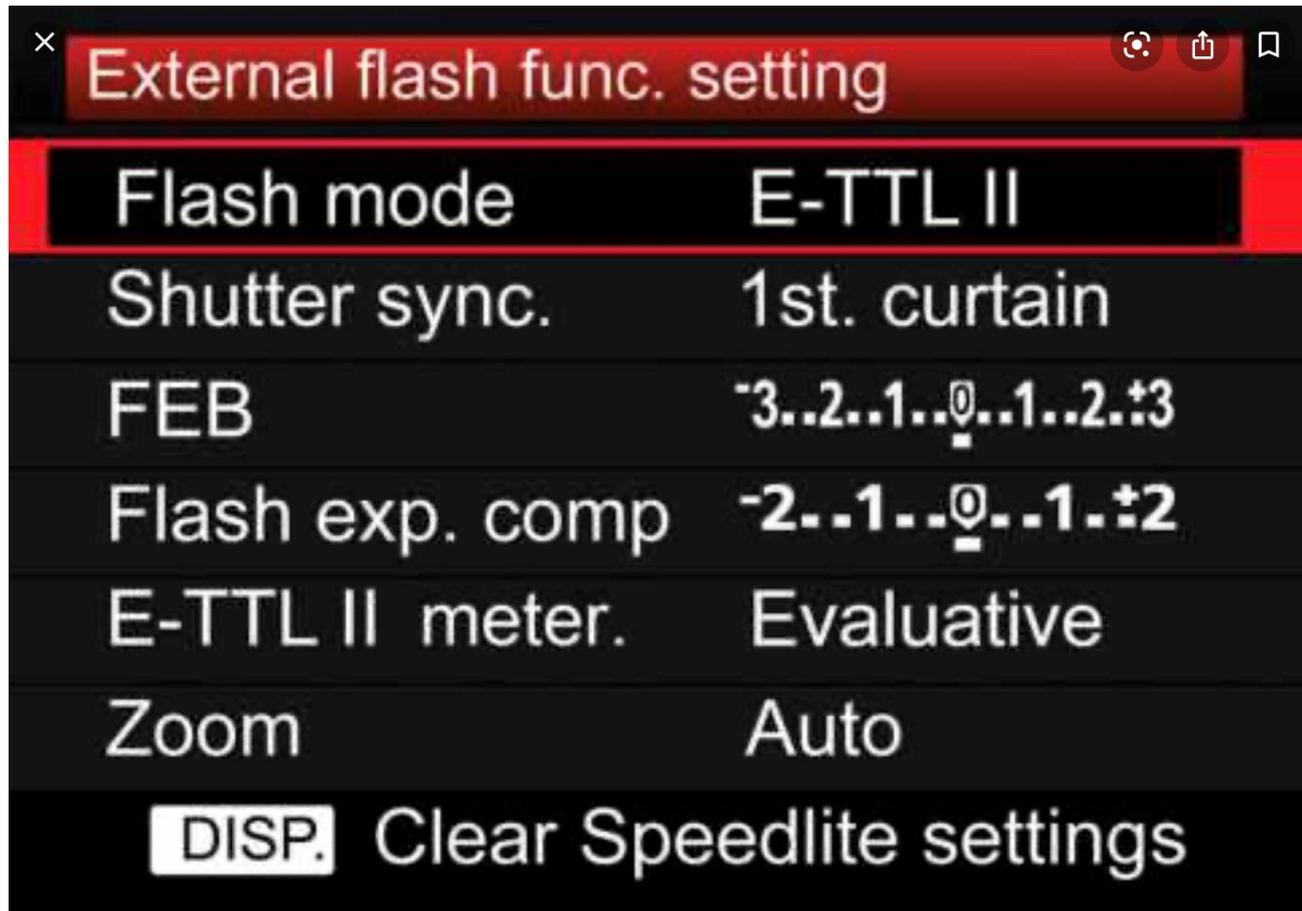
For TTL This is a Canon. Nikon is called I-TTL and others use different terms.

Be sure your camera and flash are talking

Camera Flash Menu Page

Flash LED Sceen

TTL VS Manual Control of flash (on or off camera)

- **TTL (Through the Lens)**

- The camera will control as much of the aspects as you wish-shutter speed, aperture, ISO or all three.
- The systems are quite sophisticated
- Downside, it may be inconsistent in the exposures.

- **Manual mode:**

- You make all of the decisions on the three sides of the triangle.
- *You choose the power of the flash so* you'll likely have to do trial and error test shots.
- Your settings will be more consistent, but you need a good understanding of the exposure triangle and the flash's capability.

Let's start with TTL when using On-Camera Flash

How TTL works:

Pre-flash
The parts of the scene that are illuminated reflect some of the light through the lens before the picture is taken.

Exposure
TTL flash metering can take the distance from the subject into account, but it can be fooled by dark or reflective objects.
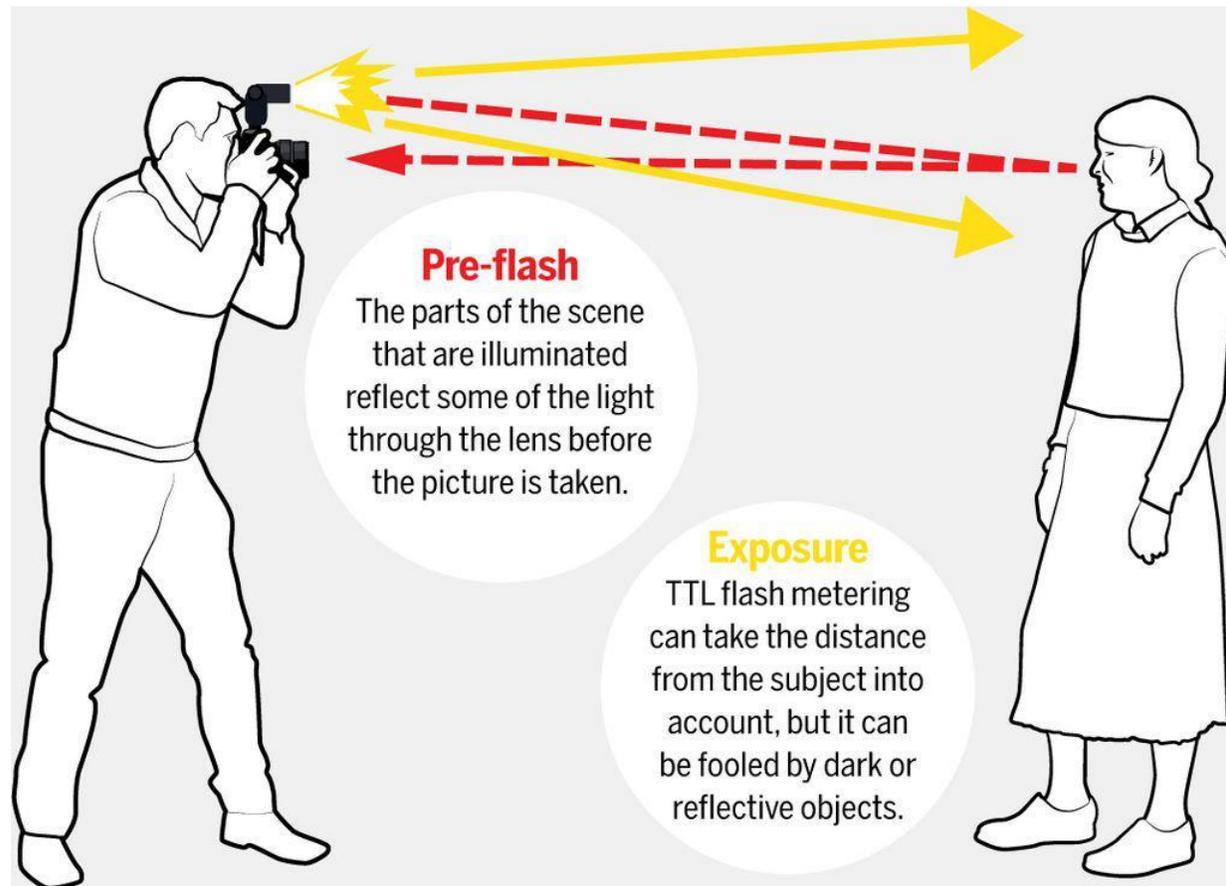
- A preflash is sent to the *subject* and then that information is used to calibrate the exposure.

- The camera will work with whatever aspects of the exposure triangle you manually set and change the other parts.

- You can also set all of them to auto and it will calculate everything.

Flash and Ambient (Available) Light

Critical Concept-
- Flash exposure is controlled by the *aperture*
- Ambient light exposure is controlled by the *shutter speed and/or ISO*

Your decision-do you want to illuminate the environment or have it go light or dark?

Available light often provides the context of the image

Flash needed to illuminate or fill in the light

Enhances available light

Flash can stop action

All Shot TTL and On-Camera Flash

Impact of Aperture, Shutter Speed and ISO

1/250, f 3.5,ISO 800 This is the default on my camera for full auto TTL

1/30, F 5/6, ISO 200- all three aspects of triangle set independently and TTL compensated for it. Note background is brighter as the 1/30th allows for more ambient light

Controlling Flash in TTL Mode

- **Exposure compensation** changes brightness of the **whole image** whether or not using flash

exposure compensation

(used when photos are too bright)   (used when photos are too dark)

-3   -2   -1   +1   +2   +3
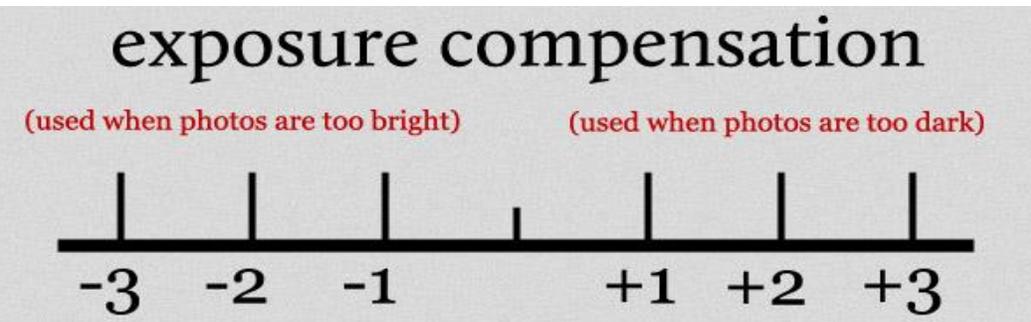
Flash exposure compensation
-tells flash to deliver *less* light than TTL would suggest
+Tells flash to deliver *more* than TTL would suggest

Flash exposure controls only the flash output and is *independent of the exposure compensation*

Flash Exp Comp

This is exposure comp.

Flash exposure comp.
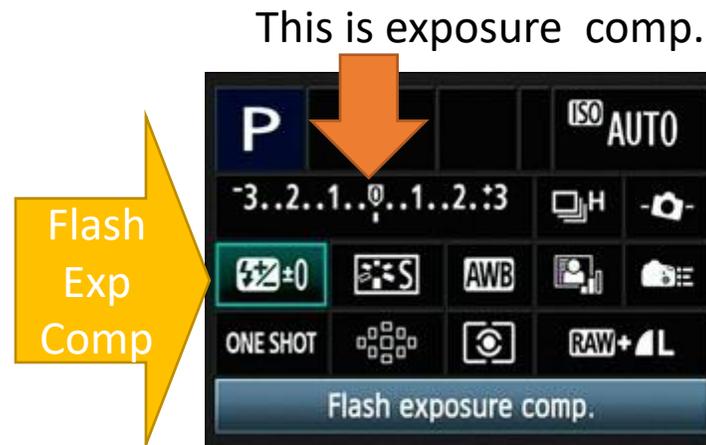
TTL and Flash exposure compensation

TTL Over exposed the image

Flash exposure -1, or as needed compensated on the flash, can be done on camera too

Recap-On Camera Flash

- Attach the speedlight to the camera hotshoe securely
- Turn on both parts-camera and flash
- Be sure that both are talking with each other by checking the flash menus in the camera.
- Set the camera and the speedlight (if required) to TTL.
  - Be sure the shutter speed is at or below synch speed (camera will likely default to this when both are turned on)
  - Put ISO and Aperture in Auto.
  - Adjust your autofocus keeping the _focus point on a part you want illuminated_
  - Take a flash picture and see how it comes out.
  - Experiment with changing the Aperture and a lower shutter speed so how the differences are found.

On camera flash-better when it's diffused

Options to diffuse the on-camera flash

- Bounce the flash off of other surfaces, if available
- Angle the flash at 45 degrees or 90 degrees by adding a flash card or diffuser. These help a lot to give better light. I always have this on my flash and sometimes can use both. TTL can compensate for these.

This card is likely already on your flash

www.MixMelot.com

Inexpensive-often Included with your flash or can get one to match Your flash

Examples of On Camera Flash

Direct flash no diffusion

On Camera, diffused with flash card at an angle
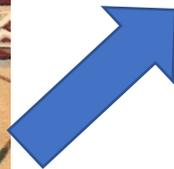
TTL-A great overall image

Flash bounced 90 degrees and/or to ceiling with the flash card and the diffuser added provided the best overall option.

Guideline for using Fill-Flash

- Set the flash exposure compensation to -1 so the flash doesn't overwhelm the image. That should be sufficient to give a nice fill in of the light.

- Diffuse the light and, if possible, bounce it.

- Put the white card up to add some light in the eyes.

Different angles of flash-Ugly and Better

"Run and Gun"-Pointed directly

Angled and bounced

Images in and outdoors-TTL auto mode

Bounced off ceiling

Angled with card

Flash directly ahead through
The window

Assignment

- Go out with your camera and on-camera flash and practice using TTL and the flash compensation, changing the aperture and shutter speeds, etc. to compare the differences.

- Next session will be off camera flash, please review what your manuals can tell you about camera and off camera flash.