

Bracketing

and

Focus Stacking

# Bracketing

# A. What is “bracketing?”

1. Taking multiple exposures of the same subject with one press of the shutter release resulting in different settings.

2. What settings can vary?

Exposure

Flash

White Balance

ADL

In this presentation we will concentrate on Exposure –  
or “AE”

## B. Why use “bracketing?”

- Many photo opportunities present difficult decisions as to setting your exposure. One exposure might be good for some parts of the picture but not great for other parts.
- The most rudimentary reason to bracket is to be able to choose the best overall exposure to start with before post-processing.
- A more sophisticated reason for bracketing is to then be able to merge all of the images you have in post-processing, where you let the post-processing software decide which images have the best exposure for the various parts of the scene and then create one “perfect” image. This is called HDR - but HDR in post-processing, not within the camera itself.

# C. How do you set up “bracketing?”

1. Go to “PHOTO SHOOTING MENU”  
You will see “Auto bracketing set” - will probably be set to AEF (flash symbol)
2. On most Nikons the “Bracketing” button is on the left front under the “Flash” button. On older models the “Bracketing” button might be on the left upper rear of the body.
3. Press the “BKT” button and you should see on your LCD that you can adjust the “Increment” by rotating the front command dial and adjust the “Number of shots” by rotating the rear command dial.
4. The increments are in stops: 1/3 2/3 1 2 3
5. The number of shots are: +3 -3 +2 -2 0 3 5 7 9

6. “0” means that bracketing is turned off
  - +3: will take 3 exposures, going up from your setting
  - 3: will take 3 exposures, going down from your setting
  - +2 and -2: same concept as above
  - 3: will take 3 exposures, your initial setting plus 1 up and 1 down
  - 5, 7 and 9: same concept as above
7. The “Release Mode” must be set to Continuous High, and you must hold the shutter release down to take all images. And don’t worry, the shutter will only take the number of pictures you have told it to above!

## D. And.....

1. In AE or AEF mode, images can be taken in RAW.
2. In WB mode, images must be in JPEG



**-1 EV**



**-2/3 EV**



**-1/3 EV**



**0 EV**



**+ 1 EV**

**+ 2/3 EV**

**+ 1/3 EV**



**0 EV**



**0 EV**



**MERGED**



**-1 EV**

**-2/3 EV**

**-1/3 EV**



**-0EV**



**+1 EV**

**+2/3 EV**

**+1/3 EV**



**0 EV**



**0 EV**



**MERGED**

# Focus Stacking

## E. What is “Focus Stacking?”

1. I had never heard of it before taking on this topic!
2. Focus Stacking is sort of a first cousin to HDR (process-wise, that is). You take multiple shots of the same scene with differing focal points and merge them all in post-processing.
3. But in Bracketing, your objective is to create an image with the best exposure in the varying parts of the image, whereas in Focus Stacking your objective is to create an image with sharp focus throughout the varying parts of the image.

## F. Why?

1. You want to achieve the sharpest focus possible on your subject from front to back.
2. But can't you achieve that by shooting at f22 or f36?
3. NO, because:
  - a. In **Landscape Photography**, you may well not have enough light to shoot at that small an aperture, and
  - b. Shooting at such a small aperture results in Diffraction, which will affect the sharpness of your image.
  - c. In **Macro Photography** your Depth of Field is more limited the closer you are to your subject.

# G. When to Use

1. When your ultimate product is to be a large printed image with important subject matter in both the foreground and background. And especially when there is a significant distance between these .
2. Probably MOST of the time in macro photography.

# H. Getting Started

1. With most cameras, you will have to manually change your point of focus, and in post-processing you will have wanted your camera not to have moved even the slightest little bit (more on this later), so **you should have your camera mounted on a tripod and use a remote shutter switch.**
2. It is best to set your camera to LIVE VIEW because it will be easier to determine your front and rear points of focus and change your focus point between shots.



**As Metered @ f32**



**Stacked @ f11**



Metered @ f32



Stacked @ f11



**METERED @ f24**



**FOCUS STACKED @ f10**