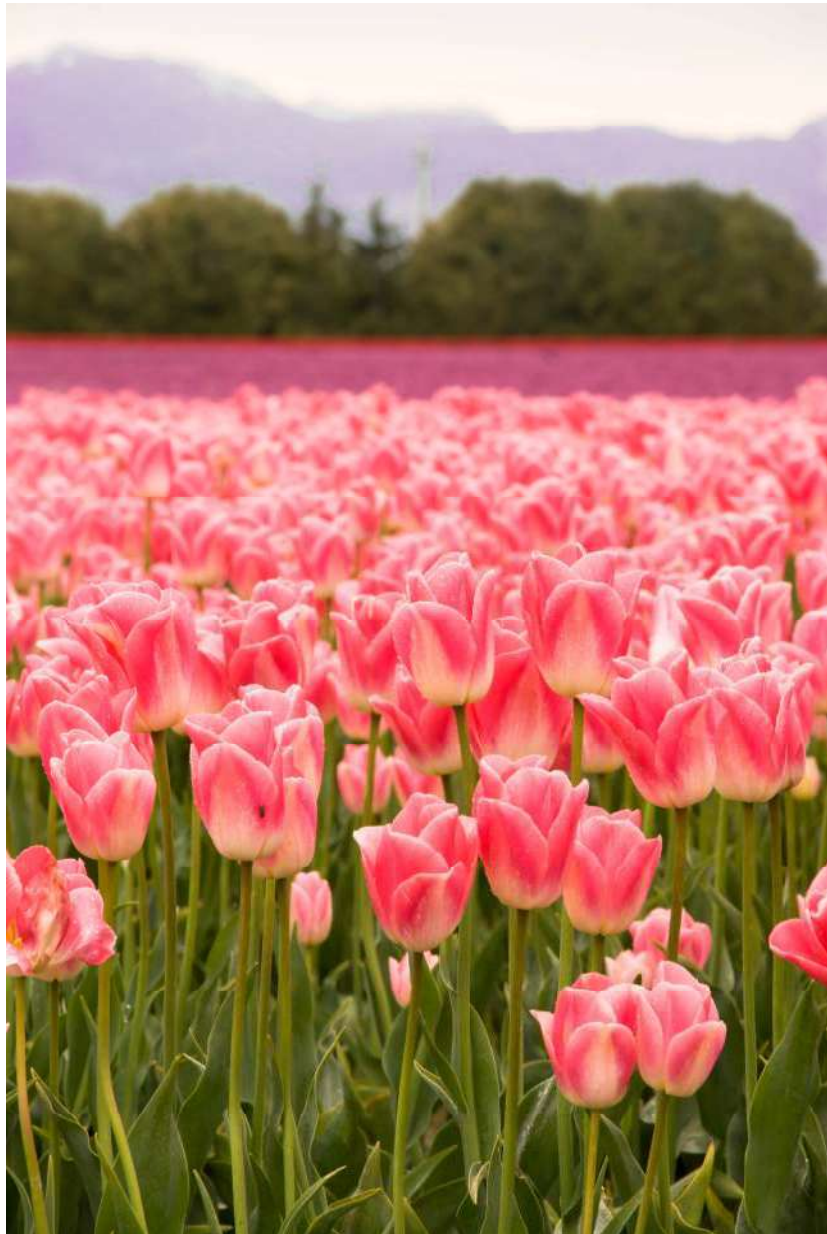# My Five Easy Steps to Shoot in Manual

Through the Lens of
**Kimberly Gauthier**
KIMBERLY GAUTHIER PHOTOGRAPHY

I owned my DSLR camera for a year before I understood aperture, shutter speed, exposure, ISO, and white balance (boy, that's a mouthful); and how they worked together.  By the end of one day I was shooting in manual and my photos were good.



I did fall off the wagon, but I didn't fall far.  I shot in aperture and shutter speed priority modes until I was more comfortable, then I jumped back into the deep end and I've been shooting in manual ever since.

# Five Easy Steps to Shoot in Manual

I was going to explain the terms I mentioned above first, but I'd rather skip to how I was able to shoot in manual so quickly. There were five steps that I followed for each shot; I practiced this all day until it became second nature. Yep, I was the girl, with the camera, mumbling to myself at the tulip festival.



50mm lens, Aperture f/3.2, Shutter Speed 1/20 second, Exposure +0.7, ISO 400

1. **Identify what you want to shoot -** I wanted a bright shot of Jaffrey that showed that he was sun bathing.

2. **Compose your shot -** I got on the ground with my cat and aimed the camera. Landscape or portrait? What's in the background, foreground? Do I want him to be centered?

3. **Adjust your camera settings –** Aperture f/3.2 (background is now out of focus), Shutter Speed 1/20 second (increase the light), Exposure +0.7 (frame Jaffrey in light), ISO 400

4. **Take your picture –** Click

5. **Review –** Love it.

# First things second!

Do you understand any of the terms I mentioned on page 2? If not, don't worry; I'll share my harebrained explanations next. My explanations are short and sweet; with the goal of getting you familiar with the terms; which will make following photography books a lot easier.

# Aperture

The dictionary says that an aperture is a hole or opening through which light travels. This makes perfect sense, because light is traveling to your lens. The wider the opening (i.e. f/1.4, f/2.8, etc) the more light you'll get; the smaller the opening (i.e. f/22) the less light you get.

I prefer to shoot at the lower end of the scale, because the DOF is fantastic (I used to think we got the background blur in Photoshop) and there's loads of light. My favorite lens is a 50mm f/2.8 prime/macro lens. The default setting I chose is f/4, because Scott Kelby "told me" that using the lowest aperture takes away sharpness, however, I don't live at f/4.
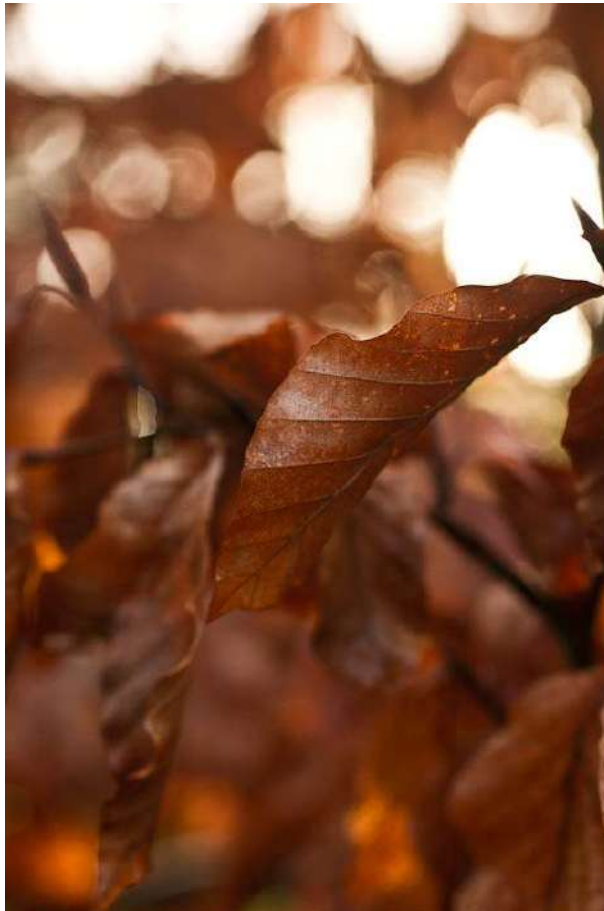


50mm lens, Aperture f/4, Shutter Speed 1/100 second, Exposure 0, ISO 200

# Shutter Speed

Shutter speed was easy for me to pick up.  It's how quickly the camera closes.  I think of the alligator symbols in elementary math class; remember the > and <?  This is silly, I know, but I think of an alligator's mouth snapping closed.  It closes fast at higher shutter speeds and slowly at lower shutter speeds.  If light is trying to travel up the lens to your camera's sensor, then it makes sense that higher shutter speeds (closing fast) would slow that travel down.

I shoot at lower shutter speeds when I don't have great light.  The light that is there is sluggishly traveling to my sensor so I need the shutter to stay open longer to give the light some time.  When I'm shooting outside, I ramp up the shutter speed – this allows me to freeze time and I love it.  This is very useful when photographing dogs that won't stay still for more than a millisecond.



85mm lens, Aperture f/5, Shutter Speed 1/25 second, Exposure 0, ISO 1600



50mm lens, Aperture f/4, **Shutter Speed 1/1000 second**, Exposure 0, ISO 200



50mm lens, Aperture f/36, **Shutter Speed 1/13 second**, Exposure 0, ISO 200



I need to write eBooks more often; they were exhausted after all the running.

# ISO

The ISO gives us a little more light to work with, however, the trade off is that with the higher ISO levels, we get more snow (graininess) in our images.



Notice how soft this image is?

90mm lens, Aperture f/5.6, Shutter Speed 1/4000 second, Exposure 0, **ISO 800**



Notice how much sharper this image is?

50mm lens, Aperture f/5, Shutter Speed 1/200 second, Exposure 0, **ISO 200**

I think of the ISO as lightning bugs in my camera. At 200, I only need a couple; at 1600, I need a lot. I shoot at 200 when I'm outside, my default setting is 400, and I will ramp it up to 1600 when I'm inside during the evenings.



50mm lens, Aperture f/4, Shutter Speed 1/640 second, Exposure 0, **ISO 200**



50mm lens, Aperture f/4, Shutter Speed 1/3200 second, Exposure 0, **ISO 800**



50mm lens, Aperture f/4, Shutter Speed 1/4000 second, Exposure 0, **ISO 1600**

Although I kept the aperture constant in the above shots, as I increased my ISO, I also had to increase my shutter speed. Why? Because increasing the ISO added more light to my shots, ultimately over exposing them; increasing the shutter speed reduced the amount of time allowed for the available light (daylight) to reach my camera's sensor. So the increase in shutter speed offset the increase in ISO.

# Exposure

Have you noticed the scale when you peak through your camera's view finder?  I used to think that measure the distance I was to my subject and didn't think it was working right, because it wasn't useful at all.  See what happens when you toss the manual?
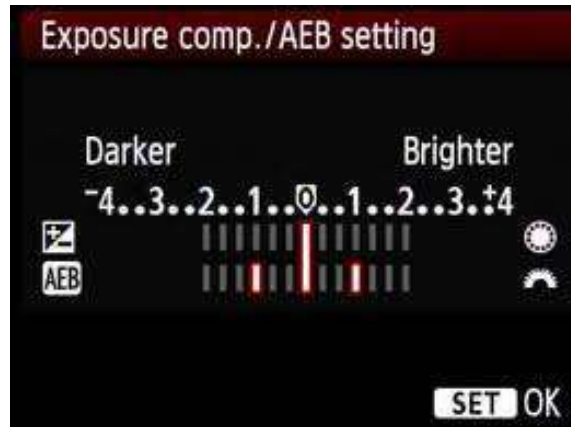


This is the exposure compensation scale and it lets us know when we have a properly exposed (lit) image.  When I was at the tulip festival, the bright sun made the arrow on my camera's scale shoot to the right, telling me that my image was way over exposed (way to bright).

Solution:  I dialed up the aperture, because I wanted to capture more of the field in the shot, and I dialed up the shutter speed to reduce the amount of light reaching my camera's sensor.



105mm lens, Aperture f/11, Shutter Speed 1/160 second, Exposure 0, ISO 200

When I take pictures in the house, in the evening, the arrow will shoot to the left, telling me that the image is under exposed (too dark). I can lower my aperture (but I don't go below f/4, personal choice), I lower the shutter speed (but I try not to go below 25, because I prefer hand held to using a tripod), and I increase my ISO.

# Metering

Metering can be a pain in the butt, but it's so necessary. I have four animals. Cosmo is orange and a dream to photograph. Jaffrey, Rodrigo and Sydney are black. When I photograph one of them, my camera will meter on their dark hair and under expose my shot, sometimes making it black. So I either meter on their white hair, push the shutter button to lock the shot, and then reframe the image, OR, I have to get fancy with the other settings. I included my cheat sheet towards the end to help you get fancy too.

I have the opposite experience with Cosmo; I meter on his white hair and over expose the image.

# White Balance

This is my least favorite part of photography and I wish everything could be "daylight," but it's not.  I'm not going to go into too much detail on white balance, because it's a big topic and I encourage you to take loads of pictures to check out what your camera does.

White balance removes color casts so that your whites actually look white.  I shoot with a Sony Alpha 550 and my white balance options are:

<div align="center">

AUTO

DAYLIGHT

SHADE

CLOUDY

INCANDESCENT

FLORESCENT

CUSTOM

</div>

If you get your white balance wrong, you can correct it with your editing software.  I do this all the time, sometimes only to see if there's a better option.  I mostly used the orange ones above; they've been good to me.

# My Cheat Sheet

**When I want brighter images…**

- DECREASE SHUTTER SPEED: this allows time for more light to reach your camera's sensor

- DECREASE APERTURE: this gives you a wider lens opening, allowing in more light; this also gives you a shallow depth of field (DOF)

- INCREASE ISO: remember the flash light lover's group?  this invites more flash lights to your party, giving you more light

**When I might want to do this…**

- When I'm taking pictures on an overcast, gloomy day

- When I'm taking pictures of a black cat or dog

- When I'm taking pictures in the evening, in a room with low light

**When I want to reduce the brightness, line on a sunny day…**

- INCREASE SHUTTER SPEED: this prevents too much light from reaching your camera's sensor

- INCREASE APERTURE: this creates a smaller lens opening, allowing in less light; I usually on increase up to an aperture of f/9, but sometimes I go higher when I'm outside based on how long I want the DOF to appear (how much of the background do I want in focus)

- DECREASE ISO: I shoot with an ISO of 200 and 400 regularly, only increasing it higher when I need more light

**When I might want to do this…**

- When I'm taking pictures on a bright sunny day (hint: don't take portraits at noon)

- When the natural reflectors are providing too much light (see image below)

- When I'm metering off a white object, like flowers.

# Back to: Five Easy Steps to Shoot in Manual

Now it's time for you to dial over to M and start shooting in manual. Choose something really simple, buy yourself some flowers, use a toy, or photograph an apple. You want an object that will remain still. Move the object to different areas of your house (to take advantage of the different lighting). And do this for an hour a day.

When you're ready, move outside and walk around your property or community and take pictures. I suggest going to a gardening nursery (ask if they're okay with photographers) or an arboretum. Take your time and take pictures.

When you're ready, start practicing on your family, taking posed and candid shots. This will help you with adjusting your settings on the fly. Don't worry if you don't nail it – you're practicing! If no one caught on, this wouldn't be the expensive hobby that we love.

And remember the following:

1. **Identify what you want to shoot**
2. **Compose your shot**
3. **Adjust your camera settings**
4. **Take your picture**
5. **Review**

If you have any questions or would like my thoughts on your images – please feel free to contact me at any time; my email address is kimberly@kimberlygauthier.com and I'm great about getting back to you quickly.

Good luck and have fun! I'm so excited and wish that I was shooting right at your side!