

# [ Shooting In Manual ]

## Lesson 5: Exposure

Understanding how to shoot in manual is the foundation for creating the images you really want. Leaving your camera in auto is like asking it to read your mind. You may have an idea of what you want your picture to look like, but until you can control the settings and tell your camera what to do, it's just calculating the information in front of it and guessing. The image you get might look okay, but you can't guarantee it will turn out the way you want.

We've already looked at a few parts of your camera. Now we'll dive into maybe the most important part of shooting in manual - understanding exposure.



Let's start with a few definitions.

**Exposure** - Exposure refers to how much light your camera's sensor (the part of your camera that reads the light) is getting. This is determined by how fast your shutter speed is (**shutter speed**), how sensitive your sensor is to light (**ISO**), and how wide your lens opening is (**aperture**).

**Exposure Level Indicator** - This looks like a bar graph and is your camera's way of telling you if your picture will be too bright (**overexposed**), too dark (**underexposed**), or just right (correctly exposed).

This bar graph can usually be found in two places, underneath your picture when you look through the viewfinder and in the control window on the top of your camera (if your camera has one). Here is an example of the indicator in a control window on the top of a camera's body:



Let's talk about how this bar graph works. You should notice that there is a plus symbol on one side of the bar graph and a minus symbol on the other, with another symbol to indicate the center of the graph. There is also an arrow or hashmark that moves along the graph.

Different camera manufacturers use different directions with their graphs. For Canon brand cameras, the plus is on the right side and the minus on the left. These are opposite on a Nikon. There are many more camera manufacturers out there. Just know that the camera you are using now may have slightly different controls than one you may use later.

When the hashmark moves towards the plus side, this means that **your image will be too bright (overexposed)**. When it moves towards the minus, **it will be too dark (underexposed)**. In the following lessons, we will learn how to adjust your settings to get the hashmark right in the middle of the bar graph, so that your pictures will be correctly exposed.

## Correct Exposure

a picture is correctly exposed when the arrow is in the center of the indicator



Canon

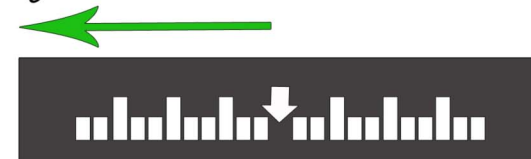
+ overexposed  
(too light)



underexposed -  
(too dark)

Nikon

overexposed +  
(too light)



- underexposed  
(too dark)

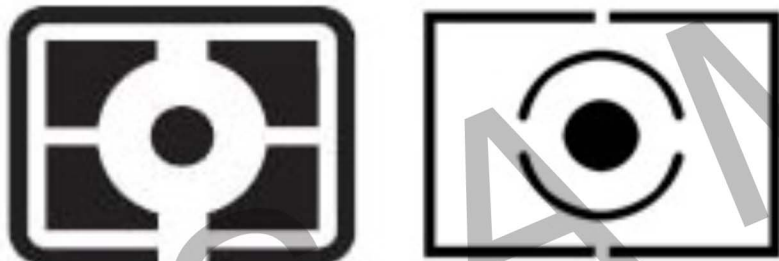


Okay, let's look at a few more definitions.

**Metering** - This is how your camera determines how much light is being received by your sensor. Most cameras have four metering options: Evaluative (also called Matrix), Partial, Spot, and Center Weighted.

Here is a description of each metering mode:

Evaluative (Matrix) - The camera takes into account light from several places in your image window, placing emphasis on the focus point you use, and then averages it all out. Here are the symbols for Matrix metering in a Nikon (left) and a Canon (right).



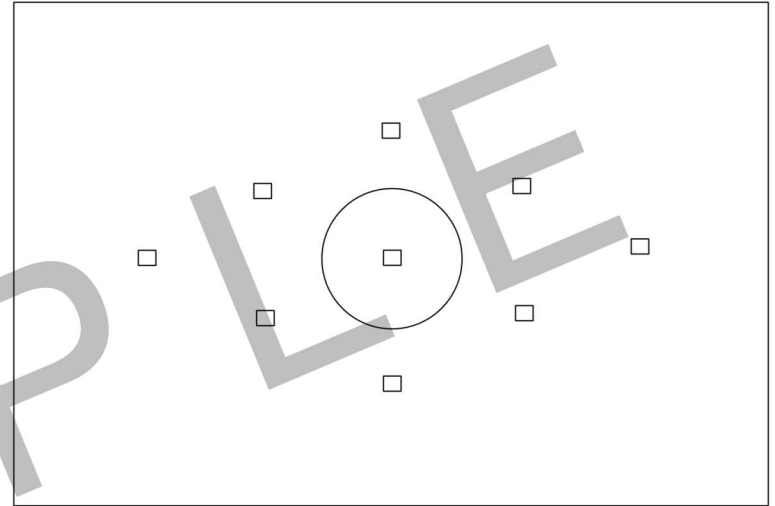
Partial - The camera takes into account light from 15% of your image window around the focus point you use.

Spot - The camera takes into account light from 5% of your image window around the focus point you use.

Center Weighted - The camera takes into account light from 70% of the frame, but is focused around the center of your image window, not a focus point.

The "safest" option for most lighting situations is Evaluative or Matrix Metering.

Before we move on to the assignment, let's talk about autofocus (AF) points one more time.



Autofocus points play a big part in metering because the camera reads the information around the focus point that you use, then uses this information to tell you if you have a correct exposure.

Alright, that's about it for our exposure definitions. As we move forward, we'll look at shutter speed, ISO, and aperture - the settings you adjust to get a correct exposure. For now, go to the Shooting Assignments folder and look at Assignment 8: Exposure Controls.

Assignments for this lesson:

**Assignment 8: Exposure Controls**