

Ask a Photographer: Why buy a dSLR?

Posted At : November 23, 2009 6:06 PM | Posted By : Steven Erat

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I'm often asked about my opinion on camera selection, i.e. "What camera should I buy?". That's a really hard question to answer because it all depends on what you want to do with the camera. Today a more narrow question was asked that's a little easier to discuss, and that is: "What are the advantages of a dSLR over a point-and-shoot camera?". Since my reply ran on a bit, I thought it would make a good blog topic, so here you go...

The first advantage that comes to mind for reasons why to get a dSLR is that the lenses are interchangeable. Often, lenses are worth more than the camera body for good reason, but sometimes you can find good inexpensive ones.

There are several factors that make a lens good. The most interesting reason is that the well built ones have a very wide aperture, which is the F number. The lower the number, the wider the aperture, the larger the opening. This is important because wide apertures produce shallow depth of field (DOF). Shallow DOF causes the subject to be in sharp focus but other things in the foreground or in the background become blurry and abstract. The lower the number, the more blurry other things become. This makes for a more artistic photograph. Bright items that are blurry typically produce a distinct pattern known as bokeh, and this is considered desirable in much photography.

Professional lenses often go as low as F1.8 or F1.2. Many less expensive hobbyist lenses go to F4 or F2.8. If you can find an F2.8 lens I'd go for it. Zoom lens quality is also judged by the ability to use that low aperture regardless of whether you're on wide angle or zoomed way in, say F2.8 at 24mm and also F2.8 when zoomed to 70mm. Less expensive lenses have variable minimum aperture so they might be at F2.8 at 24mm but only able to open up to F5.6 at 70mm. Portraiture is often best when using mid-range zoom lenses cover at least 80mm to 130mm. When using those longer focal lengths the smaller F number becomes more pronounced, making the subject appear to be sharp with the background out of focus. Wider lenses like 10 to 50mm don't make good portrait lenses because they introduce distortion that is not flattering to people's faces, and it's harder to produce a good shallow DOF (meaning the background and foreground will be more in focus even at low F numbers).

Another advantage of wide apertures is that they are better able to shoot good images in darker places without using a flash. For example, by increasing the ISO to a higher number (say 400 or 800) and opening to F2.8 or 1.8, you can shoot in a dark church without using flash at all, giving you the ability to capture the scene the way your eyes see it naturally. By not using the flash you're better able to be more discreet by not drawing attention to yourself and not annoying people around you. The downside of a dSLR is that the shutter is audible. If it's very quiet then people around you will hear the shutter's click-clack.

Here's some examples of bokeh and shallow DOF

- <http://www.flickr.com/photos/polvero/4107661449/>

- <http://www.flickr.com/photos/xosara/3926969822/>
- <http://www.flickr.com/photos/polvero/4035932371/>
- <http://www.flickr.com/photos/ttlphoto/3195480451/>

Lens interchangeability is pretty useful to optimize for different situations. There may be times when you're in a narrow space like a small kitchen. With a dSLR you can put on a wide angle lens (say 10-22mm) and be able to take group photos from just 3 or 4 feet away. Then you head off to a soccer game and you put on a 100-300mm F4 lens instead so that you can take a photo of your kid in the middle of the soccer field and get them to stand out from everyone around them.

Professional lenses are made of higher quality metal in weather proof housings, but you can find good lenses that have plastic housings instead for less money. Sometimes that's all you need. I have several lenses that cost \$2000 each, but I also have other lenses I like just as much that cost \$75 to \$300.

Digital point-n-shoot cameras are really increasing in quality all the time, and there are some that approach the quality of a dSLR (but don't have interchangeable lenses). For example the Canon G11 is a p-n-s that pros use as an secondary or backup camera since it can shoot RAW.

The ability to shoot RAW images is also a very important decision in a camera purchase. Using RAW is a little like being able to re-take a photo after you've taken it. It captures so much information that later using a program like Adobe Photoshop or Lightroom if you discover the photo is too dark or too bright or too something, you have the ability to rescue or change the image to be the way you want it to be **without** losing image quality. When you're done correcting the color or exposure, you can export RAW as your favorite format for the web or for print such as JPG or TIF. P-n-S camera often shoot only JPG (but sometimes TIF), and those image times don't contain as much information as RAW, so if you want to correct the exposure in a very unique photo, you're probably out of luck because the image will automatically lose quality when you attempt to correct it.

There's other advantages to shooting dSLR over a point-n-shoot, but I think lens selection and RAW images are two of the most important reasons to use one.