5 Reasons to Ditch Your Digital SLR

Charlie Sorrel ✉ January 15, 2010

There's a new camera category in town. It's EVIL, and it's going to kick your DSLR's ass. EVIL stands for Electronic Viewfinder Interchangeable Lens, and is our favorite acronym for cameras like the Olympus Pen, the Lumix GF1 and the Samsung NX10. These small, mirrorless, finderless cameras can fit in a pocket and outperform bulky DSLRs. Here's why your next camera will probably be EVIL.

They're Small

DSLRs are bulky. Their design comes from the film days when the only way to see the exact image that would hit the film was to divert the light coming through the lens with a mirror and send it to a viewfinder. This mirror meant the body needed to be deep, and the lenses — further away from the film than those in a mirrorless rangefinder — were also bigger.

Now we can see what the sensor sees either on a screen, or through an electronic finder. With the mirror gone, the body can be a lot smaller, just like a compact digicam. This means you can carry it with you everywhere, fit it in a jacket pocket and be ready for *that* picture, wherever you are.

They Take Great Pictures

The trick with the new EVIL cams is that they have large sensors. In the case of the Samsung NX10, this sensor is the same size as you'd find in a DSLR, and the others use the Micro Four Thirds format, a sensor which is half the size of a 35mm frame, but a lot bigger than the pinkie-nail-sized sensor in a typical compact. This gives the high image quality and low-light sensitivity of a DSLR. And because they have large sensors, the depth of field is shallower, and you can throw a distracting background out of focus.

For most people, that is more than good enough.

You Can Change Lenses

Let's be honest. If you're not a pro, you probably bought your fancy DSLR, fixed on the kit zoom lens, and that was it. You probably spend 90 percent, if not all of your time, shooting with this on your camera.

With an EVIL camera, you can do this too. It's more likely though, given the tiny pocket-sized lenses for these cameras, that you will actually carry them with you. Better still, with an adapter you can use all your current DSLR lenses on the newer, smaller body.

They're Fast

Compacts have lost out to DSLRs by being slow. Slow to power up, slow to zoom and slow to actually respond to your trigger finger. EVIL cameras have fixed this, and are as responsive as any entry-level DSLR. Watch out which model you go for, though. The current generation still has some trouble focusing as fast as a bigger camera, although some models, like the Panasonic GF1, have this nailed.

They Don't Scream "Look at Me"

With a smaller camera, you can blend in. With an EVIL camera, you can blend in and still get great shots. This combination of size and quality was the reason the Leica M series was the camera of choice for both street shooters and war reporters, from Henri Cartier Bresson to Sebastião Salgado. And because there is no mirror to flip, they're quiet, too.

The Con

As a new category, the EVIL is still relatively expensive, and you'll pay as much for a body and lens as you would for a prosumer level DSLR. For many, even pros, the size difference alone is enough to justify this. For everyone else, you could wait until the likes of Canon and Nikon inevitably enter this sector. Then prices will start to fall, and things will get really interesting.

Unless you have a specific use that these cameras can't meet, or you need the very highest level of performance only a Canon 1D or Nikon D3 can bring, you have no reason to buy a DSLR. Instead, consider being EVIL. You might like it.

Ron Rogers comments:

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I think the EVIL cameras are a new and interesting design. Considering cost, they may be very attractive to amateurs who would like better image quality from digital cameras. The larger sensors available in these cameras and most DSLRs are clearly superior in terms of sensitivity. In the past film cameras exploited high ISO sensitivity ranges for film from about 400 through 3200. The films that were available in these higher ranges gave a very rough image with high granularity. Many of today's DSLRs are capable of shooting between 12,800 and 25,000 (some even bragging ISOs as high as 100,000). What is amazing, is the lack of noise (the electronic equivalent of film grain) and color accuracy even in dim light. So yes, this will be a huge advantage to these smaller and lighter cameras. And as the article mentioned, the lack of a mirror box and optical viewfinder not only significantly reduce the size but also the cost, assuming the design becomes more widespread in the future.

But professional photographers have other ergonomic concerns. The EVIL cameras force one to consult the LCD screen on the back of the camera. Even a fairly large 3 inch to 3 1/2 inch screen is rather small difficult to see if the image is truly sharp and well composed. Certainly you can enlarge the image to check sharpness but that also wastes time. Because visual acuity is much sharper through an optical viewfinder you can tell more easily, at the time of taking, whether or not the image was sharp without consulting the viewfinder. One develops a very good sensitivity to image quality through a viewfinder.

The other problem with LCD viewfinders is that they easily washout in bright light and it is difficult to tell what is on the screen. That's not the case with the optical viewfinder because it is internal and your eye is viewing through a shaded viewer. The image is always sharp, clear and bright through an optical viewfinder. Now that may change somewhat when the Japanese finally start using OLED (organic light emitting diode) screens. This technology was originally developed by Kodak about 20 years ago but is now just starting to find its way into the camera and video market. Actually some smart phones are now coming with the OLED displays. The advantage is that they can be easily viewed even in bright light and they are capable of rendering millions as opposed to thousands of colors. That change will make the EVIL cameras even more attractive as well as their smaller and less expensive pocketable digital cameras.

Going back to the optical viewfinder - they give the impression that you are viewing at a much longer distance so they're fairly easy on the eyes. LCD screens force one to focus much closer. This is harder on the eyes and almost impossible as you get over 40! Also it is much more difficult to compose an image when you're having to hold the camera 1-2 feet away from your face. Again reflections off the screen are a problem and your muscles tend to shake a bit more and that makes holding a longer telephoto lens that much more difficult.

Which gets into the next issue, and that is interchangeable lenses. One of the advantages for professionals currently using DSLR cameras is the huge variety of lenses available to them for almost any situation. I suspect there will be fewer lenses available for the EVIL cameras. I believe the people that would buy these cameras would also

want smaller and more compact lenses because of weight and portability. But sometimes the pro doesn't have much choice. They may have to go into a situation that requires a 500 mm - 800 mm optic; that's a big piece of glass.

Larger sensors also require larger lenses. This is true of any camera design whether film or digital. So if one has a full frame sensor (a sensor that is exactly the same size as its film counterpart), the lenses will be physically bigger. So those bigger, larger lenses that you see on typical professional DSLR cameras would be about the same size on a EVIL camera with the same size sensor. So if one wanted the equivalent of a 28 mm to 300 mm zoom lens, it would render the EVIL camera heavier, bulkier and definitely not pocketable.

The last issue of ergonomics is about holding the camera. The advantage of contemporary design for DSLR cameras is that they allow one to press the camera to the face and an elbow to the chest creating a kind of triangle of bracing which helps to hold longer telephoto lenses with a less shake. Even with image stabilization bracing the lens against the body allows even lower shutter speeds and sharp images. It's also easier to compose a shot because you're able to adjust with finer precision.

One area, however, where the EVIL cameras will certainly have an advantage is when they are attached to other instruments like microscopes or telescopes. Here one is usually viewing the results on a projected image or on a computer screen for easier viewing. The smaller size and lighter weight will definitely be an advantage there.

One last area where the traditional DSLR designs are probably more appropriate is when it comes to electronic flash. Most pros require flash units that can reach out 30-70 feet. By comparison, most small pocketable digital cameras have flash units that are only good to about 10 feet. But more powerful flash units also require larger electronics, so they can be 2-3 times bigger than a small, compact, pocketable digital camera. Again, it's a matter of physics, there's no way to make powerful flash units smaller. So when you attach one of these units to a smaller pocketable camera they become very unbalanced and difficult to handle. The extra bulk of a larger camera body counterweights the flash unit and allows the photographer to work more efficiently.

But I don't expect to see the traditional SLR design going away yet. Should the EVIL cameras become serious competitors, I believe manufacturers will find ways to make the current designs smaller and lighter. That may sacrifice some of their bulletproof advantage but I know many pros who have opted for smaller and lighter DSLR designs over the big, rugged and heavy pro cameras that cost $5000-$8000 just for the camera body. One can currently pick up a fairly small and light Canon Rebel DSLR with 15 megapixels of resolution for about $600 (body only). At that price, one could have a number of backup camera bodies and still be thousands of dollars ahead. You also have more money to spend on higher quality lenses.

Of course it does depend on the kind of shooting you do as a professional. Sports photographers generally require heavy-duty, well sealed weatherproof designs that are capable of shooting at very high speeds and have the fastest and most capable focusing systems for action environments. This is also true for military photographers who shoot under very fast-paced and often dirty conditions.

So there you have it, my assessment of the new design. Some of these companies, like Panasonic and Samsung, are attempting to leverage their way into the larger photography market by rethinking camera design. Although I applaud them for thinking outside the box, they are attempting to change the course of a design that has proven well for photographers since the 1950s. Ultimately for professionals, the proof is in the pudding - will the new design work better than their current designs at less cost. And actually, professionals have never let expense get in the way if they felt owning expensive equipmentt gave them a better product and market advantage!

Ron Rogers