

tools

For some photographers, the joy of photography occurs in camera stores. They need the newest, fastest, coolest toys.

Working photographers, especially location photographers like myself, are usually minimalists. We buy just enough gear to do our job – only the things we really need. When you bring your studio with you, keeping the equipment to as minimum isn't just good for your bank account, it is also good for your back.

cameras - film

When you are looking for an entry-level camera, there are a few things to look for.

Manual settings: Shutter, aperture and focus can be set to manual, so you can make all the decisions. Better cameras have a metering system so you can set the camera to the proper exposure while looking through the viewfinder.

Batteries: If you are on vacation to some lush, idyllic surroundings, the last thing you want is to have to go searching for batteries for your camera. Some older cameras can function without batteries. Better cameras (for avid photographers) use the ubiquitous AA battery. If you buy a camera with another type of battery, make sure you carry spares – especially if you are traveling.

System: One of the coolest things with SLRs is that they have interchangeable parts. You can switch lenses, add flashes, with some cameras, even attach motor drives. You can slowly build a camera system to meet your needs.

Camera companies all make top-of-the-line “professional” level cameras. Rugged. Big. Heavy. Expensive. But the camera has little to do with the quality of your images. Many pros, like National Geographic photographer Steve McCurry, choose to use lighter amateur-level cameras.

If you think you might want to get serious about photography, it is a good idea to think about your needs before you go camera shopping.

Canon and Nikon are the two leading brands for pros.

Both companies make a large selection of quality lenses and flashes,

a wide range of cameras from beginner to pro, and have repair centres in major cities of the world. Rental houses are usually stocked with wide selections of Nikon and Canon equipment, to cover every conceivable need.

Nikon: You can take your mother's 25-year-old Nikon FM, and attach many of the newest Nikon lenses to it, and make pictures. You will have to focus manually, but it will work. Nikon incrementally adapted its technology.

Canon: In the 1970s, Canon began a rivalry with Nikon that lasts to this day, and it built a wide ranging system of cameras and lenses. In 1987, Canon introduced its technologically advanced EOS auto focus system and discontinued its FD series of manual focus cameras and lenses. Canon remains the state-of-the-art camera system.

New or used: bodies

If you have \$450 and want to become a good photographer? I'd suggest you get a \$250 used camera and a lot of film.

New cameras have a lot of great features, including auto focus, auto-exposure, pop-up flashes and great zoom lenses. They also come with manuals thicker than phone books, they rely on batteries.

The "modern" 35mm SLR camera first appeared in the late 1950s. Cameras from this era were built like tanks: solid and utterly lacking in frills. There are a lot of great used cameras available.

Cheapest is probably Pentax K1000 (30 years old and still solid as a tank and great optics.) Lots of bargain-priced used lenses available. They were favorites of college photo departments, because of the quality, and abuse-resistant construction.

Best value: Olympus OM-1 or OM-2 (\$150-200) and Canon AT-1 or FTb (\$200-\$225). Well designed, well built, and there is a mountain of affordable used lenses and flash units available, but both lines of cameras have been discontinued.

Classic: Nikon FM or FM2. Light, but built to last. More expensive (\$300-400), but these cameras are compatible with the current Nikon system.

Note: Because they were built quarter of a century ago, parts aren't available, so if one breaks, it is usually cheaper to buy a replacement than repair it. The prices in brackets are from used camera stores. If

you buy from a reputable camera store, the cameras will be checked out (by a technician and by the police) and usually sold with a guarantee. Prices are cheaper at yard sales and from pawn shops or EBay, but it is **buyer-beware**.

Lenses:

Old camera systems came with a fast standard f1.8 50mm lens. These have a perspective similar to our eyes. Newer cameras come with a zoom lens covering wide to moderate telephoto, but are slower at f4 or f5.6.

The type of lenses you need to buy depends on the type of photography you prefer. And on your budget.

In the camera bag:

Henri Cartier-Bresson, the great documentary photographer, carried one camera, a Leica rangefinder with a fast 50mm lens. His specialty of street photography relied on his ability to be inconspicuous, so carried he barest minimum of equipment.

Portrait photographers usually prefer faster prime lenses: short telephotos (85mm to 100mm) and moderately wide lenses (35mm). About 50 per cent of my portrait work is shot with a 35mm lens, 30 per cent with an 85mm lens.

Shoot a lot of sports or nature, and you need a 300, 400mm or 500mm telephoto lens.

Shoot landscapes, and you will usually want an extremely wide lens, 20 or 24mm at minimum.

Dabble in a lot of fields, like a press photographer, then you need a range of lenses. News photographers today usually carry a wide zoom (16-35 or 17-35 f2.8) and a telephoto (70-200 f2.8). For sports, they'll add a 300mm or 400mm f2.8 telephoto.

After shooting a lot of images, you will develop a style – a way that you look at the world. Look in the bags of 10 photographers, and all will carry a vastly different set of tools, all based on their particular style of photography.

Almost all serious photographers have two camera bodies: one as a back-up. As for lenses, some people like zooms, some primes.

The range:

Fisheye: 8 to 16mm

Superwide: 14 to 20mm

Wide: 24, 28, 35 mm

Standard: 50 mm

Short telephoto: 85, 100, 135

Telephoto: 200, 300, 400, 500, 600, 800

(**Bold** are lenses focal lengths favored by many photographers).

If you are looking to add lenses to your collection, and don't know which to buy, a good rule of thumb is to double or halve the focal length of your existing lens. For example, if you have a standard 50 mm lens and want to get a wide angle, a 24 mm is usually a good choice. If you do portraits, a 100 mm will be effective.

Things to remember: The faster the f-stop, the bigger the cost and the heavier the lens.

The bag

If you spend \$1000 on a new camera and zoom lens, it's not a great idea to keep it in the plastic bag you brought it home in. A good camera bag is like an insurance policy. It's not the place to save money.

First thing to consider is what kind of photography you want to pursue.

For extreme sports fans, there are photo backpacks and fanny packs that allow you to protect your gear from the elements, and let you ski or hike.

News photographers usually favor canvas or nylon shoulder bags (Domke makes some great ones) that have less padding, but are lighter to carry all day. Also great for tourists. They look very generic, without any bold NIKON or CANON logos that advertise your wares to thieves.

If you spend time in a boat, you might want to consider a Pelican case, heavy plastic, sealed with an o-ring. It floats (I once witnessed

my Hasselblad system stay dry as it floated above ankle deep water.) But these cases are VERY heavy. Not something to take on a walking tour through Paris.

FLASH

A bigger unit, that attaches to your camera's hotshoe is a great addition, if you plan to do much shooting in dim light.

Camera manufacturers make dedicated flashes for most of their camera models, ranging from \$250 to \$500.

Vivitar and Metz are the best know makers of flashes that work with a variety of cameras.

FILTERS

For portrait photography:

The most common filters are **diffusers**. As seen on soap operas, romantic movies with older leading ladies. The guys are all in sharp focus, the women glow.

Caused by a slightly opaque filter placed over the lens. You can get the same effect with a pair of women's nylons. Just take one and use a rubber band to attach to the lens.

Disguises blemishes and wrinkles. Tends to be cheesy if

For landscape photography:

A **polarizer** works just like Polaroid sunglasses. Blocks some light waves, causing blue skies to become darker and richer. Also stops reflections from windows and water.

Graduated filters are usually a gray, blue or "tobacco" color, and designed to darken just part of an image. The top of the filter is colored, changing "gradually" to clear on the bottom.