

## CAN YOU BUY YOUR WAY TO BETTER PHOTOGRAPHY?

This is the big question. Much like upgrades in phones, computers etc., and the expectation is always that this will improve my present level of use.

Buying a new camera can be an expensive step and before you buy you should consider a few things. Is it that you want to have more features on your camera? Is it that you find your present camera difficult to master? If so is buying a new model going to free you from these difficulties. Should you have studied the capabilities of your present camera more before rushing to buy the latest technology? And most important, Can you increase your creativity with a camera that allows it to grow? Remember its not the camera that makes the photograph, it makes the image.

Our beginner's classes have stressed the importance of taking control. By this we mean that you as the artist should be able to decide on the nature of the photograph, be it depicting a general full landscape or focusing in on a narrow field of focus to emphasise maybe a face or a petal on a flower. Whatever the photographer's requirements it is important that the technology being used will allow that to happen.

While most point-and-shoot cameras have the ability to take nice clean, in focus sharp images, they are however limited in allowing the user take control. So, while they have a purpose they will not meet the needs of the photographer as s/he improves the level of skills.

CPS is not in the business of suggesting specific models of camera, or to suggest that one model is superior to the next. Ask a number of members about their gear and you will realize that the range is quite diverse, and is dictated to more by the individual's taste and experience. So below I hope to outline a few of the important differences between different types of camera to help you make the big decision. Remember, if you are upgrading think about holding on to your present pocket compact and use it for travel photography. Remember buying the latest DSLR with a range of three to four lenses will seriously curtail your ability to travel light and unnoticed in a crowd.

Also worth noting, the camera body can only record what it sees through the lens, so the quality of the lens is the most important element in upgrading your gear.

### **Types of Camera**

**1Digital SLR Cameras:** (aka Digital Single Lens Reflex Cameras or DSLR cameras): Digital SLR

cameras are the most versatile and advanced type cameras available on the consumer market.

One of the most important features of Digital Slr cameras is that you can change the camera lens to fit different situations. For instance you can use a fixed focal length 28mm lens for wide angle scenes, then remove that lens and put on a

200mm fixed focal length telephoto lens to pull the scene in closer. You also have the option to use a variety of zoom lenses with different zoom ranges.

The lenses for Digital Slr cameras will generally be of a better quality than those found on compact cameras which will result in better image quality. Read the tutorial, Camera Lens Types for more details about the importance of the camera lens.

Another big difference between Digital Slr cameras and compact cameras is the image sensor size. Digital SLR cameras have larger image sensors which will generally produce better quality images. If you are not familiar with camera sensors, please read the Digital Camera Image Sensors tutorial.

With a Digital Slr camera you can set the camera to the automatic mode and just start taking pictures. However, you also have the option of taking pictures in the full manual mode, as well as in the Aperture Priority, Shutter Priority or program modes. The most important thing to remember about using a Digital Single Lens Reflex camera is that you have more control over the way the picture will be taken as far as exposure settings.



Nikon D3300  
DSLR Camera

**Compact Digital Cameras:** Digital compact cameras, which are also known as Point and Shoot cameras, vary in features, price, and styles. Their smaller size and ease of use is the main appeal of these types of digital cameras. Today's digital compact cameras come with a fully automatic mode which is great for beginners or those who just want to "point and shoot" when taking pictures.

In addition to the automatic mode, digital compact cameras come equipped with a number of scene modes such as landscape, beach, sports and fireworks among others. Those scene modes make it easy to adapt to different types of picture taking situations.

Manual adjustments to camera settings like the shutter speed or lens aperture setting can't be done on a basic digital compact camera. Those functions are set automatically when you take the picture. So once again, compact cameras are made for ease of use rather than giving the photographer full control over every camera setting.



Canon Powershot Elf  
150 IS

**Bridge Compact Digital Cameras:** Bridge cameras, also known as Advanced Compact cameras are a step up from the Basic Compact camera.

The main difference between Bridge cameras and Basic Compact cameras is that they allow the photographer to have more control over the camera's exposure settings. Bridge cameras will have semi automatic Aperture Priority, Shutter priority, and Program modes. Most will also have a Manual mode that will allow the photographer to have full control over the camera exposure settings.

Many Bridge cameras also have lenses with a much longer zoom range than many other cameras. For instance, instead of a three to five time zoom lens range, the zoom lens range for some Bridge cameras might be as high as forty times (40X). The Panasonic Lumix FZ200 shown above has a (24X) optical zoom lens.

The lens on a Bridge camera is "fixed" and cannot be removed and replaced with a different one the way you can change the lens on a Digital Slr camera. Also, most Bridge cameras will have a smaller image sensor and a smaller lens than the ones found on a Digital Slr camera.

Many bridge cameras are larger than basic point and shoot cameras. Some bridge cameras are also shaped similar to Digital SLR cameras, but many are shaped like digital compact cameras. (just slightly larger). Take a look at the Nikon CoolPix P340 as an example.

Bridge cameras are great for photographers who want a little more control over the camera exposure settings and perhaps a longer zoom range without having to pay the purchase price of a Digital Slr camera.



Panasonic  
FZ200

**Compact System Cameras/Mirrorless Interchangeable Lens Cameras:** These types of digital cameras are very similar to Digital Slr cameras.

Mirrorless Interchangeable Lens cameras allow the photographer to use the camera in full manual or automatic modes the same way Digital Slr cameras can be operated. These type cameras are also commonly referred to as Mirrorless cameras or Compact System Cameras.

Also, as you have probably noticed by the name of this type camera, the lens can be changed just like on a Digital Slr Camera. The biggest difference between the two type cameras is that Mirrorless cameras are much smaller than Digital Slr cameras. Their camera body size is closer to the size of compact cameras. The reason the body size is so much smaller is because they do not have optical viewfinders like the Digital Slr type cameras.

Optical viewfinders that are found on Digital Slr cameras use a system of mirrors and pentaprism to show the scene that will be photographed. Mirrorless interchangeable lens cameras do not have a mirror system. They are equipped with an LCD screen and/or Electronic Viewfinder for previewing the scene that is about to be photographed.

The mirrors in a Digital Slr camera take up a lot of space in the body of the camera, so the elimination of the mirrors allows for a smaller body to be used for the mirrorless camera. (similar to the Sony Alpha NEX 6L shown below)

As we previously mentioned, the lens on the mirrorless camera can be changed. However, they use smaller lens sizes than Digital Slr cameras. (some Digital Slr lenses can be used on the mirrorless camera if an adapter is used.)



Sony Alpha  
NEX 6L

**Next Week: Lenses**