Radio Days – 2011-09-03

Discussion – Photo Software

Introduction

Digital photography is fast becoming the most-used application for computer users. This is in part because digital cameras have become so cheap that they are now almost an impulse buy and partly because the programs to manipulate your photos have become so good (and free in many cases) that you can make many changes very quickly and with very little effort.

There is no substitute for trying a camera (perhaps in the store) and then downloading and using one of these programs to see just how digital photography works in practice. You might like to work with a friend and both of you can learn at the same time and encourage the other when the going gets tough!

Digital Images

Most people take photos in JPEG. This stands for *Joint Photographic Experts Group* and is a compressed file format for photos. JPEG images are very small compared to other formats because some of the information is lost during compression, and more data is lost each time you make a change to your image. For this reason it is best to convert your JPEG images into a no-loss format like TIFF before you make any changes. This can be done easily using a free program like Irfanview.

 Most compact (cigarette-pack sized) cameras will only take JPEG photos. This is an excellent choice for those people who only want postcard-sized prints or the ability to email their photos to friends.

If you are the sort of photographer who wants to make larger prints or who wants to do a lot of manipulation of their photos then it is better to buy a camera which will store your photos in raw format. Raw format takes all the information from your camera's sensor and does very little manipulation of the image. JPEG photos have had a lot of manipulation of the image before it is stored on your camera's memory card, and this manipulation loses quite a lot of the original information taken by the camera's sensor.

This information loss is not noticeable in small prints and small photos which are suitable for emailing, but as soon as you enlarge the image to A4 (or even larger) you will start to notice the loss of detail in the image. JPEG images will also lose definition as you manipulate them.

Image Sensors

Not all camera sensors are created equal. All digital cameras have a sensor to capture the image from the lens, but that is where the similarity ends. Larger sensors have a better time capturing the light from the lens because there are fewer compromises in the construction of the sensor.

It is for this reason that professional photographers use larger cameras to capture the better images needed by their clients. They may also use a smaller camera for their personal photos, but their professional work is always done with a camera with a larger sensor.

Please be aware of the differences between the various types of cameras (compact, prosumer and DSLR) before spend money on a camera which may not be suitable for your needs. You might like to join a good camera club (and there are many around) to help you choose a camera and a program (or programs) to edit your photos. Because of the nature of digital photography almost all images are improved by the judicious use of an editing program.

There are many programs for photo manipulation. Here is a partial list for you to try. You might care to check reviews on the internet before downloading and installing a program as they all have good and bad points.

- **Irfanview** is my favourite program for viewing images. It has many functions, but for me its main attraction is that it displays all sorts of images quickly and easily. It can also change an image's size and crop an image to select the best part of the image for sending to your friends (or enemies!).

  I also find Irfanview very useful for changing the format of a digital image. If your camera captures images in JPEG format and you need to manipulate the image, you will get better results if you first convert your image into the TIFF format. This means that you will lose no information during the manipulation phase of your photography.

- **Picasa** is Google's free photo editing program. This program is probably the king of the heap for free photo-editing programs. It has many automatic actions like red-eye removal and both automatic and manual changes to your photographs. It is also an excellent program for copying photos from camera to computer, automatically placing your photographs into folders named for the date they were taken. This last will only work if your camera's internal date is set correctly!

  Another strength for Picasa is that it can show you all your photos in an album organised by date taken. For this to work you will need to ensure that your camera's date and time are set correctly.

- **Paint.net** is a free imaging program. It started life as a university project sponsored by Microsoft and has now morphed into a powerful image manipulation program. It is still free to download and use, and has a simple interface. It was originally designed as a replacement for Microsoft's wimpy free Paint program which comes with Windows. Paint.net is so much better than Paint that I suggest you to download it for simple graphic tasks.
- **Picnik** is a website which allows you to do all sorts of common photo tasks, and may be all that you need to make that changes which you need for your images. You can work with photos from the net and with photos stored on your computer. It has a simple interface and you can install Picnik into Google's Chrome browser to make life even easier for your photos!
- **Serif PhotoPlus** is another free program (yes, there is an expensive version) which you can download and use to do just about anything with your photographs. This program, like all photo-editing programs, will take some time to learn how to use in the most productive way. It is, however, an excellent alternative to expensive program like Photoshop and Photoshop Elements. These are the professional's tools of choice, but will take hours to learn how to use and, especially in the case of Photoshop, hundreds of dollars to purchase.

Further Information

Irfanview	www.irfanview.com
Picasa	picasa.google.com
Paint.net	www.getpaint.com
Picnik	www.picnik.com
Serif PhotoPlus	www.serif.com