

Chiltern U3A.

## PHOTOGRAPHY GROUP.

*Briefing Notes No 4.*

### FLAT BED SCANNING.

#### **A brief introduction to how and what SCANNERS are.**

Downloading hard copy documents to a computer is most easily, cost effectively and efficiently accomplished by using a SCANNER.

Old family black and white or colour prints can easily be downloaded by this method.

Colour slides, negative colour film strip and old black and white negatives can be accommodated by certain scanners that are a little more sophisticated than the cheapest, very basic units.

SCANNERS can be flat bed or film type, the item to be scanned being the deciding factor.

Flat bed scanners are quite capable of scanning both positive and negative film based images BUT for best results the flat bed scanner must be supplied with an "overhead" light source in addition to the under bed light source which is the basic necessity when scanning hard copy documents.

For film based scanning the standard variety flat bed scanners that are capable of this process will be supplied with a set of frames or masks, these are designed to hold the 35mm or 2 ¼" square film strip or slides in position while the scanning procedure is carried out. Although several image frames or colour slides can be loaded in each frame the scanning process usually only scans one image at a time and downloads all images after scanning is finished.

It can be quite a lengthy process to scan a large number of images in this way on a standard flat bed scanner. However, an added facility has now been introduced to some models of flat bed scanner in the form of a strip film feed facility located in the cover.

Dedicated film scanners are quicker but more expensive than flat beds and if a large quantity of images need to be copied to a computer a much better option is to have them commercially scanned and stored onto a CD or DVD disk for downloading much more swiftly to your computer.

**'Flat Bed'** refers to the nature of how the scanner operates.

Hard copy documents are loaded in exactly the same manner that a PHOTOCOPIER is used.

The LID is lifted the item to be scanned is laid on the glass screen, the lid closed and the scanning function initiated, either by the machine's own controls OR via a software programme loaded onto your PC or Laptop computer.

To locate a scanned item into a computer programme from a scanner it can either be "PUSHED" or "PULLED"

**PUSHED** – utilizes the scanner software package supplied with the unit to EXPORT a scanned image to a computer FILE of your choosing.

**PULLED** - is achieved by opening a software package already installed on the computer such as Photoshop Elements, Paint Shop Pro or Picasa, and IMPORTING the image from the scanner to the image album related to that programme.

Each scanner model will be supplied with a CD bearing a software operating programme which allows the computer in to which it is loaded, to recognize the scanner and facilitate its connection to and initializing of the scanners operating procedure.

All of the later Windows Operating Programmes from Windows 98 to Windows XP Pro and Home, will accept and run scanners. However check on compatibility between, scanner and computer software, not forgetting the new VISTA system, when matching either old or new hardware with software. (Windows 98 needs special care and the Win98SE driver may be needed as an essential to run some scanners.)

### **WHICH MAKER/MODEL ?**

It would appear that the scanner market offers a far less confusing range of choice than does the digital camera market, thank goodness !

All of the well known Japanese electronics names are represented HP, Epson, Canon being the most prolific and popular. Lexmark and Dell are less popular perhaps with good reason.

Price is probably the first guide to both quality and level of sophistication, from £50 to £500 covering the needs of basic family level up to serious club photographers.

Thereafter the choice between one or another manufacturer for a similar model, is best decided via a published "road test" from one of the popular photography magazines or an online source of comparison.

### **OPERATION.**

How simple or sophisticated this can be is again linked to cost related onboard facilities.

A mid range unit will offer an "automatic" operation choice to a variable settings choice in DPI and size of image selection facility.

Copy material whether 'hard copy' document or film based, is a simple loading matter.

Some supplied software systems will provide a range of facilities from, *copy to a digital manipulation software package, send direct as e-mail, print via direct printer link.*

All of the above would be operated as a PUSH system.

Using the IMPORT facility in Picasa will identify the scanner and ask you to select the listed scanner or a 'file' from which to import an image.

Scanned images, just like downloaded digital camera images, can be stored in an ALBUM such as the Microsoft "MY PICTURES" facility. In fact it is a sound security policy to use this facility as your PRIMARY FILE and when work is to be done on an image, draw it from the MP file and locate a "copy" in the software album in which the image will be manipulated.

### **CONCLUSION.**

Spending between £100 and £200 on an Epson A4 flat bed scanner is probably about the norm for the average home user.

Operation is straightforward if the instructions are followed.

Old family history can be preserved for future generations via the simple process of converting a hard copy image into an electronic image and a "lifetime" DVD archive used as a means of handing down treasured memories or pictorial records of ancestors long departed.

Reclamation of faded or damaged B&W prints can be carried out via specific facilities included in Photoshop or PSP once the original image has been scanned and downloaded to the computer.

Finally, a useful facility to some people may be the ability to convert a scanned document for use in a word processing package. Although not personally experienced in this area information received tells me that several free download programmes can be accessed that will do this.

