



# *Digital Camera Training Guide*

*by  
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## Out of the Box

1. Upon opening your latest possession always check the contents by removing all the contents from the box and checking them against the contents list in the front of the manual or indeed on the side of the box the camera came in.
2. Usually you should be looking at a camera, manual, quick start guide, leads for attaching to a computer, software disk, memory card, video lead, battery and charger however not in all cases.
3. Having established that all your contents are correct check over each item in turn for any damage, whilst it's not common for damaged parts to be supplied with today's quality checks it can sometimes happen.
4. Try not to open the software pack initially as quite often even though companies such as Jessops offer a 30 day return policy it is subject to a couple of conditions which are, no damage or marks on the product and subject to the software not being tampered with in any way especially opening it.
5. With all these points checked out you may be able to get to start using your new camera, I say may because invariably the batteries are always supplied discharged and will require charging which for some can be 1 hour or so and for others can be up to and beyond 4 hours depending on battery type. So get them on charge as soon as possible, if it is a gift get the batteries out and charge them the night before if possible.
6. Check through your instruction manual for start up procedure for guidance on inserting batteries correctly and the location also correct insertion method for the memory card into its slot. It is very important to insert both battery and memory card correctly or damage could be done to your new camera, it has been done before!
7. Check the start up section again, you should be ready to turn on your new camera and start setting it up.

**We must point out that the commands, controls and symbols shown throughout this lesson are in no way certain to be the same symbols used on your particular camera. Principally however the meanings remain the same and use of the index to find terms and descriptions will quickly show you from your own manual the symbols for each command or function.**

## Memory Cards

1. Memory cards have many different options and some of the higher end cameras sometimes even have 2 slots for 2 different types of memory card but this is rare in smaller cameras. Despite rumours they can be inserted incorrectly into the camera so always make sure. Usually there is a marker on the card slot door, which indicates correct insertion but with some cards it is not so easy to tell.
2. Another point to note is how many images can your memory card hold, the ones supplied with cameras are invariably small and give just enough memory to take only a few images at highest resolution. Always check this and use guides like the ones in Jessops catalogues or even the manual will usually contain a memory card section or image quality section describing how many images for certain image quality sizes can be fitted on a card. You will note however that the card size specified is usually much larger than the standard card supplied, invariably it is realised the card supplied is like a sampler that comes through your letterbox and will be woefully inadequate for everyday use.
3. All proprietary memory cards supplied nowadays are of a high standard but do not always assume that the alternate manufacturers cards are cheaper, Fuji for instance at one stage used to be cheaper than Jessops own and if you have a Canon that uses a compact flash card the Fuji card will usually work but check with your supplier if there are any doubts. We use Fuji in Nikon for instance with no problems.
4. A card reader is usually a good investment and invariably cheap to purchase, it gives you the freedom if you have more than one card to download images whilst still having use of the camera and is usually faster.
5. Some older cameras are USB 1.0 connection, which is slower by the new standard of USB 2.0 by some 4 to 8 times, so a new card reader capable of USB 2.0 has a better and faster transfer rate of the camera at USB 1.0. Fire wire is an option on some newer cameras but not usually seen on all PC's as yet and unless you require high speed loading of images in a business environment it is usually not worth the purchase of a fire wire adapter card and can you fit a card reader to your P.C. without incurring additional costs.
6. Care of your card is also worth consideration, memory cards are not infallible and can sometimes be wiped or corrupted by impact or even close proximity to a magnetic source such as placing it on your home speakers (they do contain a big magnet after all and this device is a flash memory storage device which is done magnetically).
7. Finally capacity of your card is important it is sometimes worth considering two 256Mb memory cards instead of one 512Mb card purely because of the eggs in one basket adage. If you have two cards full of images and one fails at least half your images are safe.

## **Starting Up**

### **Switching On**

1. If the camera has a lens cap or sliding cover remove it or slide it open first, some newer compact cameras have automatic openers however a quick look at the manuals start up section should tell you what to do.
2. On turning on your camera there are usually a number of checks to make first of which is, is it on? The displays if any should be visible or possibly a power indicator.
3. If the camera has a menu section within the display it may require opening to check settings or it may open automatically on first start up to set date, time etc.
4. Firstly it always pays to set the date and time whether you choose to display it or not on the finished image, it is always a good reference because most modern imaging systems can read technical information from your images recorded at the time taken and you can reference this for date and time as well as many other setup parameters as you progress with your digital imaging skills it is known as EXIF information (usually found in Image/info in any of the proprietary Photoshop programs) and is also useful for direct printing systems which will be explained later on.

### **Settings**

1. Image quality is probably the one of the few settings you need to initially set and it is probably best to set it mid range of the scale of image quality as this will give immediately pleasing results from an image size point of view even if the image taking itself needs practice.
2. This now requires some further reading of the manual to find where the settings are and, whilst daunting to look at in the manual, it is usually easier to access than the manual would appear to show. All cameras have lot of time and investment put into making their systems easy to access for the most novice of users. Think about it, if the camera cannot be operated by the user then they won't sell many cameras, unfortunately the manual writers find it difficult to put the operations simply down on paper.
3. Most cameras now adopt a large, medium or small image scaling system to make it easier and sometimes this can be selected by a button and/or wheel system on the camera body without using the menu system.
4. To confuse issues there is also sometimes a RAW option, ignore this at present it is a system of recording data without any compression or conversion, it cannot be read in photo booth machines and only the software supplied with the camera can usually convert it which means a lot more work before you get to use your camera.
5. Leave all other settings as set by the factory for now as with most cameras the automatic mode overrides any other camera setting and you will be using this mode to start with.

6. Also how do you intend to view the picture you are about to take? On the rear viewfinder like the traditional cameras or on the LCD screen if you have the review option on your style of camera.
7. Check the options available in your manual bearing in mind that if you use a rear LCD screen it will affect battery life as it will draw more power having the review screen on for real time viewing of the image in the lens.
8. It must be noted, many users prefer this method of taking photos as they see a larger image on the rear screen compared to looking through the standard viewfinder. Also some cameras employ a digital viewfinder, which, unless it is a high quality camera the image in a digital viewfinder is usually appalling to work with, as it is a digital view of the image seen not an optical one. This is particularly prevalent in mid-range SLR style cameras

Once set up you should be ready to take basic shots with your camera.

### **Going Digital Principals**

- Cameras start from very basic to very complex however they all mimic their old film counterparts to a greater or lesser extent so if you are just making the switch from film to digital don't worry operation is pretty much the same however the advantages you have now are as follows.
- The ability to review the picture you just took on the camera and erase it, if it is no good.
- The ability to record a high number of images on one card if the camera allows.
- The ability to take your memory card out of the camera at the processors put it in a machine and download your images for processing immediately.
- The ability to process your own images with use of a PC or businesses such as ourselves to large sizes or alternate style images, black and white, sepia etc.
- No more caring for, or, buying film.
- The camera manufacturer has gone to great lengths to make sure that most operations and settings are the same as film cameras to sell more products with the inevitable demise of film in the consumer market place.

## Basic Operation

### Taking Pictures

1. Very basic cameras may have no options at all on either screen or dial selection so, now turned on, you should be ready to shoot and fire, if you have a more complex camera there may be either a dial on the body or a menu screen that allows you to set the camera mode.
2. The most basic operation to use and usually the most reliable to start with is **AUTO** or **P**. This setting controls all the camera set-up parameters and means what it evaluates for brightness of scene, white balance etc. will all be evaluated in a millisecond and when you press the shutter release button the camera will work out all the required settings to get the best possible shot and fire the camera shutter.
3. There is however a drawback in the digital camera over the old film camera, in that, the lower the cost of the camera the less technology has gone into processing this information and whilst all cameras usually get an acceptable shot, what suffers is the time the camera takes to work out this information.
4. This is called shutter lag and is the most common problem with compact digital cameras and can mean the difference between a good photo and a blurred one. What happens is this. You press the button down, the camera takes in all the information through the lens and works out what is best for the photo, then it takes the photo. This delay can be quite long and even to the point you think the shot is taken, move the camera and bang, it fires the shot. The shot is blurred because instead of taking the photo of your favourite nephew the camera has actually taken a moving photo of the room as the camera is put down on the table.
5. To minimise this usually any camera when you press the shutter button halfway down will process the information ready to take the photo. Press the button fully as part of the same action (do not release and re-press as it will start all over again) then the photo is taken. Most cameras now also beep or make a shutter noise to indicate it has taken a photo, now you're done.
6. Not all cameras require or need you to press the button halfway down to set-up the shot but the delay is still present in taking the shot, so, get used to how long the camera takes to do this and it will soon become second nature.
7. If the camera doesn't make a noise and you think it will help, see if there is a sound option in the manual for setting up.

8. Flash is usually a requirement for most operators, parties etc. On most cameras flash is usually an automatic setting and enabled to operate from the factory settings. Intermediate cameras may require the pressing of a button to pop the flash up and then it is automatically operated. This is an easy check to make with your camera on go into a darkened room but not pitch black as the camera will spend more time trying to find a subject than being able to take a decent image. Take a picture and see if the flash fires.
9. Did it fire? No then check the flash settings according to the manual it should be set to AUTO also, if possible.

Now you should be able to fire away some photos in a variety of situations at a basic level. Any questions?

### **Reviewing Your Pictures**

1. Reading your manual find the section about reviewing your images. If your camera has no rear display screen, then reviewing your pictures is probably not possible without the use of a computer.
2. If you have a rear screen then a section of your manual should show how to view the images you have taken. It invariably requires the pressing of a button on the rear of the camera, turning of a selection dial by the shutter release button or access through the menu screen.
3. There are many different options for reviewing and navigating the image such as zooming in, panning around the image and scrolling through your images, each manual should give all the instructions.
4. It is always worth zooming in on an image, closely to an eye or similar point of detail, just to check how accurate the image is. Disappointment can always happen when you load your images on a PC or, print them at a processors, only to find they are all slightly out of focus or there is a blur from a fingerprint on the lens.
5. Controls are so varied at this point that notes are impossible to put down for all models, suffice to say zooming is usually the zoom controls on the side of your lens, a dial of some sort on the back of the camera near your shutter release button or the zoom control on the back of the camera. As you get more used to the camera a quick press of a button to review becomes second nature, especially after a few disappointments in image quality.
6. Image reviewing at basic levels is usually quite simple however zooming in and panning around the image can prove technically difficult and fiddly with the limited amount of controls on the back of a basic camera, the vast amount of buttons on a high end camera usual mean you have to have a third hand to operate all the buttons required.

All cameras have bad points purely because of the amount of technology being crammed into such a small product but, be patient, and practice using the camera often.

## **Program Modes**

Quite often nowadays there are a number of modes built into the cameras programming, enabling the novice operator to obtain pleasing professional results of different subjects without having to be an expert photographer and a wealth of camera craft knowledge.

These modes have been created using general rules of photography so you don't have to learn them to get a good quality photo of your pet or favourite landscape.

Accessed usually via the mode dial on top of the camera body or, in other cases, via the menu screen.

If you have these options you will usually find some, all or sometimes more than the modes described in the following sections, and, how the settings are probably controlled in some cases.

The modes we shall review are portrait, landscape, sports, close up and night.

Portrait  or  etc.

This mode as it suggests is for taking pictures of singular subjects such as a child, friend or pet and alters the camera settings to concentrate usually on a central point of focus, a shallower depth of field (the amount of area in front and behind the subject in focus), a relatively low shutter speed (the speed at which the shot is taken 1/60<sup>th</sup> to 1/125<sup>th</sup> of a second) and if possible keep the ISO setting as low as possible to keep noise (interference) levels down to a minimum in the cameras sensor.

All this allows for a photo that is hopefully bright, not too much in focus in front or behind the subject to distract attention from the subjects face, and, sharp enough by using a shutter speed that would allow a hand held shot (ie no tripod) but not encourage camera shake in the finished picture unless of course you have a particularly unsteady hand.

The cameras programming may also try to create a warmer setting to the skin tones and reduce the sharpness if it has this ability by altering the colour balance and sharpness settings internally.

Landscape  or  etc.

In much the same way, the camera has settings and rules in the programming that it will try to adhere to in taking a picture in this mode.

In short it will try to focus on the closest point in the picture and increase the areas in front and behind this point that it will try to keep in focus, it will also probably try to make the picture more vivid and sharp if the camera has the ability.

This should produce an image that hopefully has as much in the picture in focus as it possibly can, is vivid and has a great level of sharpness throughout, to the best of the cameras ability.

Sport  or  etc.

Dispensing with the camera's way of thinking, this mode endeavours to increase the shutter speed ( $1/250^{\text{th}}$  to  $1/750^{\text{th}}$  of a second or greater) to capture fast moving images as it suggests and will do this at the cost of all other settings in turn to produce a sharp image of dynamic frozen sport images but should try to maintain a focus area limited around the subject as with portrait mode.

Do bear in mind that if you want the sort of shot you see in magazines where all the background is blurred giving the effect of speed passing by, then this mode may not be too successful, it will be inclined to freeze the image at speed making the subject look as though it is parked. It would therefore be worth experimenting with other modes such as portrait whilst panning with the subject.

Close Up (known as Macro)  or **MACRO**

As it says this mode will force the camera to focus in a much closer range than most modes for example flower heads, insects etc. Invariably the camera can focus to within inches (cm) of the lens. It will produce an image with a very close range of focus front to rear of the chosen image.

It is a mode that when chosen will be lucky to get a blur free shot without the aid of a tripod but is always worth having a go for those spontaneous pictures and will provide some of those great high detail close ups albeit not probably to the quality seen in magazines. Patience and plenty of shots will probably prove to be the route to success in this setting.

Night  or  etc.

Again, as it suggests really, altering the camera settings to obtain a balance between the subject and its surroundings to provide a well rounded image producing detail of the subject and the surrounding area to produce a picture that not only shows the subject but the fact that the image was taken at night by showing surroundings instead of a black area around the subject.

The depth of focus area will usually be reduced to allow light in from the surroundings so, the overall area will be out of focus but with the subject only clearly seen.

There are other modes but the ones described are most common and usually go by the titles above others include; child (similar to portrait but more vivid colouration), night scene / night portrait (similar to night) and scene (similar to landscape).

You may also find on the dial **P**, **A**, **S** and **M** (or **P**, **Av**, **Tv**, **M**) which are for more advanced operators but worth experimenting with as you become more experienced.

**P** = Program mode and controls all the camera settings however you must decide on the ISO setting in the menu system.

**A(Av)** = Aperture mode and requires you to set the aperture F2, F8 etc and ISO setting will be retained from set-up in the menu system. \*

**S (Tv)** = Shutter mode and requires you to set the shutter speed 1/60<sup>th</sup>, 1/125<sup>th</sup>, etc and ISO setting will be retained from the set-up in the menu system. \*

**M** = Manual mode where you have to input shutter speed, aperture size and ISO setting will be retained from the set-up in the menu system.

\* For A (Av) setting, the S (Tv) setting is automatic, and vice-versa.

## Additional Basic Settings

### Flash Modes

Various modes are available most common of which are listed below

Do bear in mind that built in flashes have a limited range due to their compact size and any shot farther than the length of the average medium room will not be fully lit. Notes in the manual may indicate a guide rating which is usually shown as a metre length figure against an ISO setting ie: 10m @ ISO 100. This means when the camera is set at ISO 100 sensitivity then the flash maximum range is 10m that it will shed light over that the picture will collect information from.

It also should be remembered that like a torch the light is brighter close up and falls off and fades at a distance so a room full of people may have some at the front too brightly lit and the rear row too dimly lit if you have focused in the centre of the group.

**Auto**  **AUTO**  /   (on/off)

A standard mode that that fires only as the camera programming dictates from the scene information it registers ie: light levels in relation to minimum shutter speed and maximum aperture.

In other words if the lens cannot let in enough light to get a properly lit picture the camera will use the flash to add just enough light to get a correctly lit picture.

### Red-Eye

This mode forces the flash to fire momentarily just before the camera takes the picture and fires the flash fully. This momentary short burst of flash light causes the eyes pupils to dilate from the brightness of the light which in most cases reduces or eliminates red-eye in the subject by forcing the eye to reflect less light back from the retina of the eyes.

There are other modes but the ones described are most common and usually go by the titles above.

Others include; slow sync, rear curtain and rear curtain sync flash you should refer to individual manuals and would most likely find these modes are available in the more advanced mode options for creating professional effects.

## Timer

A mode for taking a time delayed shot for example giving you the opportunity to prop the camera on a wall or tripod if you have one and press the shutter, get into the picture with your family etc and after a pre-determined delay the camera takes the shot.

## Battery (full/part/empty)

An indicator that very little battery power remains in the cameras battery, it is usually displayed on the information screen of your camera. It invariably has full charge, part charge and empty indication. You will also find that the time between part charge remaining and empty is quite short so be prepared with another battery if possible.

If you only run one battery of the re-chargeable type always ensure you fully charge it prior to going to use the camera for a prolonged period of time, for example a party or day trip, but it does pay to have a spare.

## Zoom Lens Control (wide angle/zoom)

Usually a button arrangement (if available) somewhere on the camera body and is either two individual buttons adjacent to one another or what appears as a toggle switch. Placement would be most commonly by a thumb hold point on the rear of the body, by a fore-finger hold point on the front of the body or along the side of the lens on some SLR style cameras.

An important point to remember is that the optical zoom is most important as the digital part of a zoom is purely the camera cropping the actual picture in its internal software. If you are using a computer to process your images afterwards there is little point in stepping into the digital zoom range as it takes time to do and you can accomplish the same effect on your PC later. You can see the digital part of your zoom usually on the display indicated as a small part of the zoom bar at the end and invariably the camera will stop zooming at the end of the optical zoom to the point you have to release and re-press to zoom any closer.

## **Lessons**

### **Battery Charging/Replacement**

Check the camera is off. Remove and replace the battery/batteries correctly and also if you have the charger present familiarize yourself with plugging the battery into it and what indication the charger makes for charging and what indication for fully charged.

Also check in the manual how long charging is estimated at if the camera has a battery and charging kit with it as you do not want to get caught out in the future by leaving battery charging to late.

Also remember most re-chargeable cells now can be topped up rather than waiting until the battery is fully dis-charged first, which enables you to make sure you have a fully charged battery every time you use it for long periods.

### **Changing or inserting the memory card**

Check the camera is off. Remove the memory card and correctly re-insert the card into the slot. Turn on and check it functions by seeing whether the camera acknowledges how many pictures are available.

### **Switching on**

Having check you have fully charged (or new batteries if standard batteries are used) turn on your camera and using the manual check all displays, if any, are visible and that the camera appears, at least, to be ready to use.

### **Setting the image size**

Check the image size setting to the manual instruction and try to alter it using your manual as a guide.

### **Checking the flash setting**

Check what mode, if any, the flash is set to according to the display or manual.

### **Taking a basic test picture**

Take a few pictures outside, in brightly lit areas, dimly lit areas to see if the flash system works or is set correctly.

### **Reviewing the image**



Play back your image if you have a display screen, zoom in and out to check quality and pan around the image to examine different areas of the picture.

### **Deleting the image**



Try to delete and image from the card according to the manual.

## Taking a timed shot

Set up your timer to take a timed shot using the manual to show you how.

## Zooming in for a shot /

Take some more practice pictures zooming in on a subject to get a close up picture.

## Try different shooting modes

Play around with the settings dial if you have one for different modes such as landscape, portrait etc.

## Try different flash modes AUTO

Set the flash for red-eye reduction or even some of the other options available if you have them.

## Try P, A, S and M, or P, Tv, Av, M

If you feel confident try these program settings if you have them on your camera.

- P** will give basically all functions set by the cameras own evaluation system.
- A or Av** will require you to set the aperture and it will work out the shutter speed required. This may cause a very slow shutter speed if too dark a shot condition is used
- S or Tv** will require you to set the shutter speed and it will work out the aperture required. This may cause a very shallow depth of field if too high a shutter speed is used.
- M** will require you to set both shutter and aperture and should have a little bar chart below the image in the viewfinder which when it centralises with the centre line the image should be correctly exposed.

## **Care and Cleaning**

Always ensure the lens is kept clean with a suitable lint free cloth, these are easily purchased from any camera supplier and if you look out sometimes kits are available with cleaning fluid, blowers and swabs for additional care.

Never leave your camera in a hot place or out in direct sunlight as this can have a detrimental effect.

Unless specifically waterproof avoid getting the camera damp or wet, it pays to carry a clear plastic food bag with you and an elastic band if you are going to shoot on grim days, as you may put the bag over the camera leaving the lens poking through the opening and use the elastic band to seal around the camera lens. Make sure if the lens has moving parts you do not obstruct the movement as you will cause damage to the workings of the camera.

Avoid dusty or sandy areas, we all like the beach shots but be extra careful not to leave the camera lying in the sand or use hands covered in sand when operating the camera.

If you have not bought a little holdall or bag when you purchased the camera it might be a good idea to invest in one. Try to get one with pockets for cleaning cloths, spare batteries and memory cards etc.

If the camera does get wet, dry it as soon as possible and if you can leave in a warm (**not hot**) place to let the moisture slowly release from the camera, also do not turn the camera back on until you are sure the camera is dry.

**Always check the lens is clean and free from smudges, if necessary clean it with a cleaning cloth.**

## **More Advanced Operation**

### **Continuous Shooting**



Try to setup the camera with this setting if you have the option, it will cause the camera to fire shots repeatedly in a burst anywhere from 1.5 shots a second for 3 shots to almost the limit of the camera buffer (20 shots at 5 frames per second for high end cameras). Ideal to try to capture moving objects.

### **Multi-zone metering**



Try this metering option from your setup menu it causes the cameras internal computer to meter light generally from the entire scene for correct exposure. Ideal for landscape or large group shots.

### **Centre-weighted metering**



Try this metering option from your setup menu it causes the cameras internal computer to meter light biased generally from the centre of the scene for correct exposure. Ideal for group shots where the background is unimportant or the highlighting of a flower in a surrounding bush.

### **Spot metering**



Try this metering option from your setup menu it causes the cameras internal computer to meter light specifically from the centre of the scene for correct exposure. Ideal for getting the metering correct on a face in a portrait, if not filling the frame with the subject, or when shooting a subject where the background is not as critical as the subject for lighting, such as a car at a race track.

## **Explanation of Terms**

### **ISO**

On film cameras this describes the sensitivity of the film and does exactly the same job on a digital camera. There is however a slight difference.

Basically the lower the ISO number (ISO 100) the less sensitive the sensor is to light which means it takes longer to register the light from a scene. The higher the number (ISO 400 or 800) the faster the sensor registers light from a scene.

Therefore, for example, on a brightly lit scene a lower ISO number can be used and on a dimly lit scene a higher ISO number would be used, albeit this is the most basic of explanations.

You would then think it wise to always have the ISO level set high however there is a problem. The higher and therefore faster the sensor has to process the information falling upon it means that some information is lost in transmission leading to a grainy effect on the image often referred to as noise.

### **Aperture**

The lens has a leaf system in front of the shutter, which rolls open and closed by mechanical action mimicking what the human eye does between bright light and dark light.

At an F2 aperture setting for instance the aperture is wide open allowing in the maximum amount of light whereas at F22 the aperture is very small, allowing in the minimum amount of light.

To this end if all other camera settings are left the same at F2 the camera would take a picture in a short period of time to capture a well lit image, whereas at F22 the camera would have to take the same picture over a much longer period of time to get the same well lit image.

### **Shutter**

The time at which the shutter in front of the sensor opens to allow the image from the lens onto the sensor and is usually in parts per second up to full seconds ie: 1/750<sup>th</sup> to 30 seconds. Bulb is sometimes available meaning when set as long as the shutter release button is pressed the shutter will remain open.

### **Depth of Field**

The distance either side of the subject photographed front to back that will remain in focus.

In given photographic settings there is always a point in front and behind the subject that is in focus and it can be manipulated.

For example at a low aperture setting F2 the areas of the image in front and behind the point of focus is sharp only within a very short distance. At F22 the areas of the image in front and behind the point of focus is sharper over a much greater distance

The same is true for a wider angle setting over a long zoom setting whereby at the zoom setting the areas of the image in front and behind the point of focus is sharp only within a very short distance and at a wide angle setting the areas of the image in front and behind the point of focus is sharper over a much greater distance but there are many other variables that can affect these parameters.

## **Tips on Taking Pictures**

- Familiarise yourself with the manual and the camera.
- Always hold the camera steady, if possible control your breathing (steady it, do not hold your breath) prior to pressing that shutter button.
- Remember, if the camera allows hold the button half down to meter the shot prior to taking the picture, do not release and re-apply the button as the metering process will start all over again, with one action press the button half down (the camera may beep when it's ready) then fully depress the button to take the shot.
- Try to work out what kind of work you are going to do with the camera before you go out and set it up accordingly ie: parties will want red eye reduction, landscapes will want the landscape option selected.
- Make sure the battery is fully charged or you have spares.
- Make sure there is room on the memory card.
- Practise a lot, there is no wasting of film after all, enjoy it, you can always delete a bad image but will never forgive yourself for missing that good one and some of the best images are the ones you didn't expect to work.
- Look deep into the final result, sometimes there may be a great shot within the shot you've taken with a little cropping.
- Buy a reasonable book or some of the photography magazines from time to time, they are full of tips and helpful suggestions.
- If you're familiar with computers get a photo editing software package such as Photoshop Elements or Paint Shop Pro and start playing with effects or black and white. You can usually generate better black and white images on PC rather than using the camera settings.

## **Transferring and Saving Images**

### **Camera to PC**

All digital cameras have to have some way of getting the image from the camera to an external reader of some sort. Some cameras (not so many nowadays) can have only internal memory meaning you cannot install a large memory card to gain many images but all will have a lead to get information from the camera to a computer or rely on the removal of a memory device such as a card to a card reader or drive bay to transfer the images to PC. The first way to transfer is to plug the lead provided into the camera at one end and into the computer at the other, don't worry either the two ends are usually very dissimilar. Once plugged in the camera is turned on and the computer will either use the software (provided you have installed it in the first place) for the camera or in the case of later Windows platforms it can use its own file manager to ask you what to call the images, where you want them to be put and whether to delete them from the memory card when finished. Both options will require study of Windows and/or the operating software that came with the camera prior to using them.

Always remember to have the camera turned off prior to connecting and if you are saving them to PC confirm they are on the computers hard drive before removing them from the memory card. Also always try to make a backup on disk whenever possible.

This process does give the best advantages of having original images available for processing and by saving them to disk you can just as easily take the disk to a processors for printing but can rest safe in the knowledge that you have your backup done and original files if you wish to edit, enlarge or modify the image in any way.

Never be surprised when the under trained assistant asks you if you would like a CD of your images when you have just passed them the very same thing, it does happen.

### **Card Reader to PC**

In much the same way as the camera setup works the card reader gives the opportunity of continuing to use the camera if you have more than one card it is also usually faster and saves the cameras batteries while transferring as with the camera you have to leave it on for the duration of the transfer using valuable battery power.

Cheap to buy and as easy to plug into the computer as the camera they usually read many card types so if you change cameras to one with a different memory card type most multi readers will cope. Once installed and this may require a CD for the drivers for the card reader, simply take out the memory card from the camera and plug it into the reader. The screens that you have experienced with the camera software or Windows own system will take over in the same manner as Camera to PC connection. Use your Windows help system or camera manual to assist with this.

Backup in the same way as mentioned in Camera to PC connection and once done erase the images on the card to continue using it.

## **Processing Images**

Processing of images has many options.

### **Simplest:**

Take the camera and card to a high street processor such as Jessops just like you would have taken a film in and providing the images are not set in RAW then;

- The assistant should be able to help you through the process of removing your memory card.
- Insert the card in the machine
- Show you how to load your selected images.
- Show you how to crop them or re-size them if required.
- Show you how to save your selection and send it to the print machine.
- Take your money at the counter.

It is not as daunting as it sounds when you load the card the process is pretty much automatic, letting you review the images first to decide on what to process and what size from a simple touch screen.

### **Better for backup:**

Transfer your images first to a computer then save to a CD and take this to the processors then follow the same process as previously described for the memory card processing, the booths have CD read options as well. Make sure when you do save to CD that the images only are placed on the CD, if you put them in a directory the machine usually cannot find them.

### **Better for Quality:**

Save your images as TIFF files with a Photoshop type program and send them to a magazine or internet company for processing, the general quality and enlargement options are higher but more expensive. The images can even be sent over the internet in a lot of cases but make sure you have broadband and a good one for this.

**Tips:**

- Most processors have offers of 50+ prints where the price comes down substantially if your card does not have enough perhaps get the machine to select a few extra copies of ones you like to make it up to the discount quantity, savings can be quite large.
- The prints on CD offers are handy but the print that is put on CD is not the original file from the memory card, it is usually a much smaller file of much less quality and will usually only be just good enough for a 6x4 at best. The problem here is if you have an image you would like to enlarge or an image of particular value the original is lost and post processors like ourselves can do very little with the CD image as it is so small and has so little detail left. If you can either back your own images up onto a PC and subsequently CD or find a friend or local company that can such as ourselves.
- Finally TIFF files, processors do not like these files as they are larger and invariably crash the photo booth machines if they can even read them in the first place. They do however have an advantage over JPEG (the most common format of recording an image at basic level. That is, the TIFF file contains all the image data for the machine to process the image as it was shot, whereas, the JPEG is interpreted by the processing equipment and alters contrast, balance, colour etc to achieve what it thinks is the best average exposure for the shot. This simply put means that all your efforts at a great shot can be turned into an average shot by the processors equipment such as a black and white that looks great on the PC can come back from the processors either under or over exposed by varying amounts. A typical example of this was a shot we took of a dark skinned boy close up which came out very light on the face, however the same shot zoomed out to get the whole boy in shot against a white back left the boys face almost black even though taken at the same settings. What happened was the JPEG images we interpreted by the processing equipment and it decided that the white background being so large required the contrast be lowered to allow for so much white and consequently the boys face came out black. Returning home and saving the JPEGs as TIFFs with no alteration gave the results required whereby both shots left the boys face clear and well exposed.

On the whole processors are there to help and invariably do but try to avoid the one with multiple piercings as they are only there for the holidays and learn nothing.

We trust this has been of help, good luck and enjoy your camera.