

Digital for Beginners.

The following information will hopefully give you an insight into digital photography and help you to understand how to get the most from your camera.

Setting up your camera may involve going into your camera's menu. Don't be afraid of this, follow the instructions carefully in the manual but if you do have problems, ask anyone in the Club for help.

Image Resolution in Jpeg. (Picture Quality)

This is important if you want good quality photographs for printing or projecting. Set your camera on the highest resolution it has i.e. if the camera has 5mp (mega pixels) set it to the maximum. If the menu says that it has 'Fine', 'Medium' or 'Large' format for setting the pixels, set it to 'Large' this will give the best quality image. You may have noticed that the amount of photographs you can take has gone down, this because you are using more of the cards memory to get the better quality. The reason that the manufacturer has given you the option of large or fine format is that not everyone wants to print and frame their photos and a lower resolution for use on computers or television is fine.

Note! Different manufacturers may have a different terminology; some have large, medium or small for their jpeg settings, so check your manual beforehand. Remember this is for setting Jpeg only not RAW images. Jpeg is an acronym for Joint Photographic Experts Group; this is a standard for an image file format, set by a group of experts, would you believe.... RAW explanation will take much longer!!

Getting Started.

OK, so you have set your camera to the correct Jpeg setting, what next???

Well if you are totally new to photography all you have to do is set your

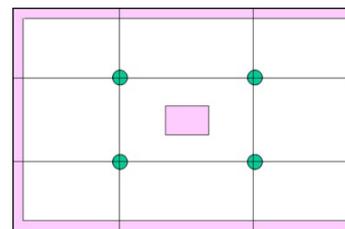
camera to 'AUTO' yes auto. The modern day camera is so good at getting good photographs you would be tempted to leave it on Auto forever, but remember that the camera is taking shots that 'IT' thinks is correct not what you may always want. Its people that take good photos, not cameras.

You will have symbols on the camera that says: Portrait, Sport, Landscape, Macro, etc. etc. All these are excellent settings if you are happy to remain in auto and you will get some excellent shots but shots that the camera has pre-set and not you.....

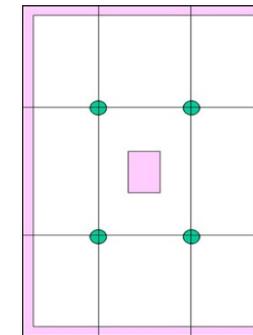
Taking better photographs.

Even in Auto you can still follow these simple 'rules' of photography, remember that no rules are to be strictly adhered to, but may help to get that little bit better shot.

'Rule of Thirds'. This compositional rule is used in some of the most successful photographs and paintings; even in portraiture you will see it. If you divide your intended photograph into thirds (as the diagram) and place the subject where the lines cross (green dot) this gives more interest than simply having the subject in the centre of the photograph.

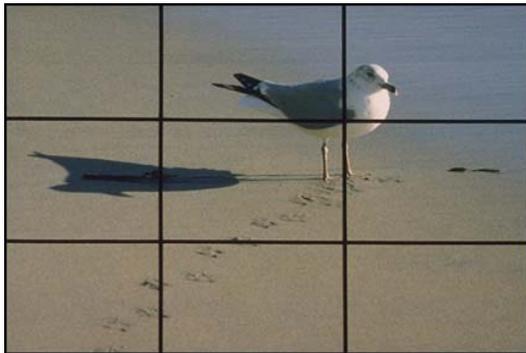


Landscape format



Portrait format

To get the subject into the 'thirds' there are a couple of simple ways to do this, the first is to get the shot 'in-camera'. This means you can auto focus your subject by pressing the shutter button halfway down and while holding down, move the camera slightly until the subject matter is in the thirds. The second is to simply crop your photo in Photoshop.



Here is a good example in the use of thirds, with the gull on the third; it allows us to show its footprints in the sand that 'lead' us into the photo.



This portrait shows both the eyes (important) and the performers figure on the thirds.

Leading Lines. This really should be: lead-IN lines because that's what it is. We read left to right, so to create something that will lead or take you into a picture is always a good idea. If you look at the gull in the first photograph, its footprints lead/take you into the photograph towards the main subject, the gull. In landscapes especially, this gives the viewer a way into your photograph and their eye then looks around to seek other items of interest.



An example of a 'leading line'. The rocks in the foreground are taking you into the photo and onto the sailing boats on the horizon.

Backgrounds. This is as important as any other 'rule' although one of the easiest to forget. Always make sure that when you take your photograph you look all the way round your viewfinder/LCD screen, making sure you haven't got a telegraph pole/tree branch sticking up through someone's head!! Also by using the 'thirds rule' you can get both the subject AND the background in, instead of two photos' of both....

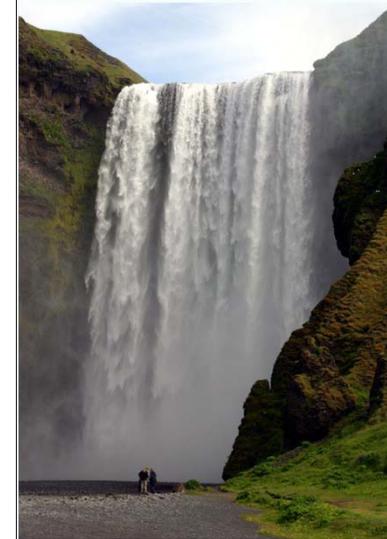
Here is an example of both foreground and background, the boat is the main point of interest but then your eye automatically moves on to the sky in the background.



The importance of a good background is shown here.

Scale. This may not be your first thought when taking a photograph but never the less can be an essential part of any photograph. Scale adds depth to the photograph and it allows the viewer to see what you saw when it was first taken, after all you still have it in your mind's eye they don't. Placing something or someone of a known size in your photograph will help to show the size of an unfamiliar scene or composition. A photo can fit a mile high mountain into it and look like a small hill, without scale. So try and look for some recognisable size to give the viewer scale.

Obviously scale can be misleading and in some cases deliberately done so. However the norm is to try and give that feeling of depth and the best way is usually the human form.



In this photograph, placing the figures in the foreground gives us an idea of how high this Icelandic waterfall really is.

Horizons. Where you place your horizon line in your photograph will have a great effect on how your composition is viewed. One of the 'golden' rules is never to have your horizon in the centre. That said, like all these rules if it works, do it!! But if the foreground is what you're trying to highlight, two thirds of your photograph should be of the foreground. (Remember the thirds rule?) If it's the sky you want to emphasize, then the foreground should be around one third of the composition.

The most important item to remember when taking a shot with a horizon is to keep it level at all costs. Nothing looks worse than a ship/boat going down or uphill. All water photographs MUST be level. If you fail to get it correct in camera you must modify in Photoshop.



An example of both thirds and a level horizon.

Manual Functions.

OK, so those were a few of the 'rules' of photography that you can use even if you're still in Auto mode. What next? Well, please remember that the 'mysteries' of the modern day camera will not give up its secrets to you in a blinding flash, it could take months before you get to understand what an 'f' stop is but don't worry we were all like that to start with.

If you're still not confident in going Manual and you've just taken a great shot in auto anyway, so what's the point!! Well you can still check out what you've just taken by going to 'Image Playback' on your LCD monitor on the back of your camera. Here it will give you all the details of the photograph you have just taken. Try and remember to do this each time when you can, it does become clearer the more photos you take.



Here is a typical view of a LCD Information Display; it provides all the details of the photograph taken. Along the top from left to right is firstly the Shutter Speed, in this case 1/3200 of a second. Next is the 'f' stop (Aperture Value), the Exposure Compensation Amount of -1 and the Folder/File number. Below is the photograph taken and Histogram then below that is the Manual setting, in this case Av (Aperture Value) the Metering Mode and the ISO speed. Below this is AWB (Auto White Balance) and Picture Style (On Canon Cameras) Then 'L' or Large File, then the File Size, sRGB (standard Red Green Blue). To finish is how many shots taken, date and time..

Using your cameras 'Semi' Manual settings.

Tv. Time Value or Shutter Priority setting allows you to pre-set the shutter speed enabling you to freeze the action on a fast moving scene or using a slower shutter speed can create a blurred affect on say fast flowing water. In this mode, you set the shutter speed and the camera will automatically set the aperture to obtain the correct exposure, hence 'Semi' automatic. The 'Shutter' is literally just that, it's a device that is timed to open/close at a set period of time allowing your camera to capture an image on its digital sensor.

Av. A whole book could be devoted to this mode; it seems to be the choice mode of most photographers and is certainly my choice of setting. The aperture information or 'f' stop is located on your lens somewhere; it will have a figure of 1: 2.8 or 1: 4.5 – 5.6 if it's a zoom lens. This will be the maximum aperture or opening you can obtain and also where things can get complicated!! There is a complete mathematical formula for aperture/exposure settings but it may totally put you off photography so we will avoid it altogether. The simpleton way of trying to remember 'f' stop/aperture is that the smaller the number like f2.8, the shallower the depth of field and the larger the number say f22 the greater depth of field. Great says you, but what is depth of field?? Well again without getting too complicated, if you want the subject you're photographing in the foreground to have a blurred background, you will require a low 'f' stop like 2.8 or as low as your lens will go. If you want to try and get the rest of your photograph behind your subject in focus then you set your 'f' stop/aperture to a greater setting say f8 or even f22. Then just when you think 'got that' more complications are added!!! The aperture or 'hole' in your lens allows lots of light (f2.8) to reach your sensor or little (f22) light depending on setting but if too much light gets in, it will 'over' expose your photograph, too little and it will 'under' expose.

A typical scenario for under/over exposed photographs, are landscapes with a dark foreground and bland sky. Either your foreground is too dark or the sky is too light with no definition in either. There are ways to rectify this in Photoshop but the following may be of help..

Exposure. Achieving the correct exposure is another complicated ordeal for the beginner and indeed the more experienced photographer. Basically having the correct balance between the Aperture and Shutter speed 'should' give the correct result but that doesn't always happen in practice. For those wise old men who have vast years of experience, they have the 'where with all' to get it right, we mere beginners have to cope as best we can and as quickly as we can. Many of the top photographers will return to the same scene day after day, until the light is just perfect for that 'spectacular' shot we all look at with great envy...

As previously said you can get overexposed skies that are 'washed out' or foreground that is underexposed or 'blocked out'. The easiest way around this is to utilize the Exposure Compensator; this will allow you to take multiple exposures or 'Bracketing' as it's called, of the same photograph. All digital SLR's should have this function along with many of the newer Compact cameras.

You will have to refer to your individual menu/manuals for this but if you do have problems please ask for help. The usual setting for obtaining the correct exposure is to set it to 1- under/minus, 1 on default and 1+ over/plus, one of these should suffice, if not, you probably will find that you have one photo with the correct sky and one with the correct foreground. If you can't return for the better light, you can 'blend' 2 of the shots together in Photoshop or indeed, some cameras now have this facility built into the camera called HDR.

The following items are given to keep you up to date and hopefully to help in understanding what the heck members are talking about!!

ISO Setting.

The modern digital camera has a vast range of ISO settings to choose from, but the norm is that the higher the setting, the 'noisier' or 'grainier' your photograph will get, or less picture quality. However, the newer cameras are getting so good, you will find no reduction in quality at all. I leave my ISO setting on 400 and this gives me a good 'all round' quality I find.

White Balance.

Our eyes are very good at judging white under different light sources but digital cameras often have great difficulty with this. There are many settings for different 'whites' on your camera but I have found that until you understand the fine details of your camera, leave it in Auto White Balance.

AF. Auto Focus.

The modern SLR camera has several focusing points, my own Canon 40D has 9 but I understand some cameras now have as many as 15. However, 90% of the time I use the centre point for all my shots only using others when using my tripod. Once the subject is focused, move the camera to obtain the required position.

Lenses.

Wide Angle. Any lens with a focal length of less than 50mm is classed as a wide angle lens but the average is usually less than half this at 24mm.

Zoom. An 'Optical' zoom lens is a lens where the focal length changes by shifting the mechanism (slide or rotate) to magnify your chosen subject.

Prime Lens. This lens is a static or fixed lens but usually gives a sharper and clearer quality photograph but has restrictions with no focal range.

Macro Lens. A macro lens is unique in that it can focus from infinity to extremely close, allowing you to fill the frame with a very small object displaying it in high quality. Manufacturers may say their lens is 'Macro' but a true macro has a 1:1 ratio.

Conclusion.

All the items discussed so far should enable you to get a good start, there are many other facets to your camera we could discuss but loading you too much information in my opinion only confuses the mind. The best way I have found, is to come along to each meeting, especially competition nights where the judge gives his 'critique' of members work, he may only point out that the photograph may have been better if it was lighter/darker in colour/black white, it may be anything but that light goes off in your head 'ping' and you think 'that's a good idea!!!' You will find that you retain more that way, more than if you were bombarded with answers to all and sundry..

Remember that photography is a huge learning curve you may know and understand your camera in a matter of weeks but that does not guarantee that you will become a top photographer overnight. Some people do seem to have a gift or an eye for it but they are few and far between. I hope you are one of the later but most of all just enjoy your photography it can be very rewarding when you overhear a complete stranger making glowing remarks about your photograph.....

Terry Hawkins. 2011