



Welcome to  
Imber Court Photo Training  
Online Diploma Course  
Module 4



**IMBER COURT**  
PHOTO TRAINING

# Understanding Your DSLR

## Welcome to module 4

In this module you will learn how to check if your images are correctly exposed and adjust exposure when necessary.

A perfectly exposed image should have a range of tones from black through to white and contain detail in every part of the shot. This means there should not be areas of pure black or white in your image that contain no information or detail. The parts of an image that are white and overexposed are known as highlights and the dark parts as shadow areas. Our camera metering system is a sophisticated piece of equipment that is built into the camera although on some occasions it can get confused. We can tell when it gets confused by checking the camera's histogram immediately after taking a shot.



# Understanding Your DSLR

To view your histogram you will need to check your camera handbook to see how to switch it on although in most Canon DSLR's you simply push the info button when an image is displayed on the rear screen. On most Nikon cameras you need to switch the function on in the 'Playback Setting's Menu'. You should also find the 'Highlights On' setting in your camera menu. The histogram will only appear when you are in playback mode and an image is displayed on the screen!



We use the histogram to check our exposure. When we look at a scene using our eyes we are able to see detail in both the bright and darker parts of that scene, unfortunately most cameras are unable to see this. The ability of a camera to see detail in both the bright and dark areas of an image is called the dynamic range. It's common to take an image with a beautiful blue sky with a few white puffy clouds with a landscape below and when the image is viewed the sky has lost all its detail and is overexposed, usually a large grey mass whilst the foreground is exposed perfectly. Our histogram will show us this problem rather than the photographer discovering this when they get home and view the image on a computer screen.

When viewing your histogram the left hand side is black and the right hand side is white, whilst the centre represents grey. These are referred to as highlights, midtones and shadows. Our cameras are calibrated to see everything as grey, you may have heard of a grey card or be old enough to remember the test card on a television set that was used to adjust brightness. Look at the three histograms below the left hand image shows an underexposed shot, the centre image shows a correctly exposed image and the right hand image shows an overexposed image. You will notice the black areas in these histograms show the actual pixels in your image. In the underexposed histogram the pixels have all shifted over to the left hand side and most of them are grey or darker. In the average histogram there is a nice range of pixels spread evenly across the histogram, this shows a correctly exposed image. The overexposed histogram shows all the pixels shifted to the far right and actually touching (clipping) the right hand side which is an indication that parts of this image are overexposed. If you have enabled your highlights as mentioned above the overexposed parts of this shot will also be flashing on your rear screen to warn you.



# Understanding Your DSLR

We use our exposure compensation settings to correct an over or underexposed image. Hopefully you will have looked at this setting back in Module 1. If we have taken an image and the histogram display shows the image is underexposed we need to take it again and make it brighter by overriding what the camera thinks is the correct exposure. Therefore we set our exposure compensation to +1 or +2 and experiment until we manage to get an average histogram as above. When the indication from the histogram shows the shot is overexposed as in the right hand image above you need to take the image again and set the exposure compensation to -1 or -2 and again experiment until you see something similar to the average histogram above.

When you have finished using exposure compensation it is extremely important that you remember to set it back to zero before you take your next image as this setting will not default back to zero when you switch off your camera.

The image below demonstrates the effect of exposure compensation on an image

