

# Glossary of photographic terms.

The following glossary is provided as an easy to use guide to some basic photographic terminology and techniques. It is not intended as a replacement for your camera's manual as each manufacturer will have their own symbols for different functions but might it help to understand processes that your manual describes. All of the terms described work together to make a digital image.

# Aperture.

This is how wide the lens iris opens and is described using f numbers. It allows more or less light into the camera. A wide aperture (e.g. f2.8 or lower) allows more light in; useful where it is darker or where you want an artistic result. A small aperture (e.g. f11 or higher) allows in less light but can make a sharper image.

# Depth of Field.

This is how far back the image is in focus and is controlled using Aperture. An aperture of 2.8 will give a shallow depth of field. An aperture of f11 will give greater depth if field (usually good for landscapes).

# Shutter Speed.

How quickly the camera sensor is exposed to light. A fast shutter speed (e.g. 1/2000) is good for action shots. A slow shutter speed (e.g. 1/15 or slower) is good for detailed images or milky water effects.

## ISO.

This is similar to film speed and determines how sensitive the sensor is. Low ISO (e.g. 100) is good for fine subjects such as macro or landscapes as it gives a nice smooth result. High ISO (e.g. 1600 and above) can be used for fast action or to create grainy black and white images.

## Exposure.

This describes how the camera has captured the image. It is a result of the combined settings of Aperture, ISO and Shutter speed.

## jPEG.

This is a form of image capture. It is like taking a slide photograph on film and doesn't give much scope for editing.

# RAW.

This is another form of image capture. It provides greater information and detail which provides more creative options. You can create colour or black and white images from a single RAW file.

## Histogram.

This is the graph of an image showing the Exposure values. The normal range is 0 to 255.

It is very important and more accurate than the image on the back of your camera. It should not touch the extreme left (shadows) or extreme right (highlights) as detail will be lost. This is called clipping.



## White balance.

This sets how the image will look depending on where is taken. There are often options including sunny, cloudy, shady, indoors. There is also Auto White Balance where the camera assesses what it thinks is correct.

If you shoot jPEG images you need to ensure that you use the right White Balance.

If you use RAW White Balance can be adjusted during editing.

# Shooting Modes.

## Auto.

Auto Mode takes full control of your camera - other than focusing or zooming.

## Program.

This mode provides a bit more flexibility and allows the user to adjust some settings.

## Aperture Priority.

You choose how wide the aperture is. The camera adjusts the shutter speed based on the ISO. You would probably use this for landscapes/portraits.

## Shutter Priority.

You choose the shutter speed. The camera adjusts the aperture based on ISO. You would probably use this for action/wildlife/sports.

## Manual.

You choose all the settings. This gives you total control of all aspects of image capture. This is arguably the most creative mode but needs some experience to understand properly.

## Picture Styles.

Some cameras have picture style options to simplify settings. These are usually only applicable to jPEG images.



## Camera Terminology.

# Lens types.

## Primary.

A lens with one fixed focal length (e.g. 50mm)

# Wide Angle.

Usually refers to images that capture a big view. Lens types range from very wide (e.g. 10mm) up to around 70mm.

# Mid-range.

A lens with a focal length from around 50mm up to 100mm. Very versatile. Can be used for portrait, landscape and street photography.

# Telephoto.

A lens with a longer range from 100mm up to 600mm. Can be heavy and expensive. Usually used for wildlife and sports photography.

## Zoom.

A lens with different focal lengths. These can be wide angle zooms, mid-range zooms or telephoto zooms.

## Photography styles summary.

These are very basic descriptions as there are many variations on the core themes.

## Landscape.

Usually refers to a scenic view. Can include seascapes, cityscapes and skyscapes. There are many variations on this theme.

## Portrait.

Usually refers to people pictures but can include animals/pet portraits.

## Macro.

Close up photography. Can include insects, spiders, plants, everyday objects. Often needs specialist kit or lens types.

## Wildlife/Sports.

These styles encompass similar needs including long (telephoto) lenses and fast shutter speeds.



# Photo guide books, Manuals and Advice.

First and foremost; consult your camera's manual and learn what features it has, where the controls are and what they do. It might seem dull and boring but it will help.

There are too many to list here but, well known for getting you started, are books by Michael Freeman and Tom Ang.

Some third parties provide guide books and manuals for cameras (e.g. EOS Training for Canon).

Manufacturers also have training or experience sessions where you can get advice or try out their equipment. Keep an eye on newsletters/manufacturers websites.

You can also book onto workshops for training but do your research first as some can be expensive.

YouTube can also be a valuable resource for guidance and worth exploring.

# Image Processing (Editing).

This is a core part of digital imaging. Once the photograph has been taken, it needs to be processed and edited for use.

A RAW image is essentially a package of information and this needs to be unwrapped so that we can see the photograph. It sounds complicated but your computer will do this for you.

Image Editing Software. There are many image editing software packages including:

- Adobe Photoshop/Lightroom
- Affinity Photo
- Capture One Pro
- DXO Photolab
- Exposure (formerly Alien Skin)
- ON1
- Skylum Luminar

Many of these will offer a free trial period so you can try them to see what suits you best.

Most camera manufacturers also have their own (often **FREE!**) RAW software.

Some are very good (e.g. Canon's Digital Photo Professional – DPP).

You normally need to register your camera on the manufacturer's website to access and download the software. It's worth doing though as there are often hidden benefits.

You should also try and ensure your camera's firmware is up to date so you are getting the best performance. Always follow the step-by-step instructions when doing this.

# Most important of all - get out, practice and have some fun!