

# Photography Terms

## **AEB**

Auto exposure bracketing, a facility found on D-SLRs that allows you to take sequence of shots at different exposures, that is, with varying degrees of exposure compensation.

## **ADOBE RGB**

An RGB (red-green-blue), light-based (additive) color space invented by Adobe and designed to better represent the colors achievable on a CMYK printer.

## **ADVANCE PROGRAM MODE**

Programmed Auto (P), Shutter Priority (S or Tv), Aperture Priority (A or Av), and Manual (M) exposure modes set by turning your camera's exposure mode dial. Each mode gives you some control over exposure while also allowing you to set other camera functions, such as ISO, autofocus, flash, and color.

## **AMBIENT LIGHT**

The light that already exists in the scene and surrounds the subject, and hasn't been added by the photographer.

## **APERTURE**

The lens opening through which light travels to expose the sensor. Usually calibrated in f-numbers with smaller numbers corresponding to wider openings that let in more light, and bigger numbers corresponding to smaller openings that let in less light.

## **APERTURE PRIORITY MODE**

An advanced exposure mode that allows you to select an aperture and have your camera set the correct shutter speed for a normal exposure.

## **ARTIFACT**

A loose term to describe an element that degrades picture quality. Anything from the blockiness that can occur when pictures are heavily compressed as JPEGs, to the distortion to pictures that occurs with heavy manipulation – even the effect you see with lens flare.

## **ATGNI**

All The Gear, No Idea. A photographer who has lots of camera equipment but doesn't know what half of it does. A bit of an Uncle Bob, in fact.

## **AUTOFOCUS**

The system your camera uses to automatically focus on the subject.

## **BIT DEPTH**

The number of bits (1 or 0) used to represent a single pixel in a bitmapped color image; typically 8, 12, or 16.

### **BLINKIES**

Photographer's jargon that refers to the blinking display of over-exposed portions of a picture during playback.

### **BLOWN OUT**

Bright areas in a photo that are overexposed are said to be blown out. They won't hold any detail and will be bleached white.

### **BOKEH**

Pronounced 'boh-kay', this term is derived from the Japanese word for 'blur' and is used to describe the aesthetic quality of the blur in out-of-focus areas of a picture. The faster the lens, and the more aperture blades it has, the smoother the blur tends to be (find out how to make the ultimate bokeh portrait).

### **BRACKETING**

The act of taking several pictures of the same scene with different settings to ensure you expose it correctly or capture the best white balance. Some cameras use auto-bracketing for exposure and white balance to bracket shots automatically.

### **CAMERA SHAKE**

The blurring of an image caused by movement of the camera while the shutter is open. Shake is usually the result of trying to handhold your camera with a slow shutter speed.

### **CHIMPING**

The act of looking at pictures on the back of the camera as soon as you've taken them, usually accompanied by lots of 'ooh-ooh-oohing', hence the name. Stand around chimping, and the chances are you'll be missing some great photo opportunities kicking off right in front of you.

### **CLIPPING**

This is what happens to the histogram when you grossly overexpose or underexpose a picture (find out how to read a histogram). In an overexposed shot, the histogram will usually be bunched up on the right and parts of it will be 'clipped' off by the edge of the graph. If the histogram is bunched up on the left and clipped by the opposite side of the graph, this usually indicates an underexposed photo.

### **CMYK**

CMYK is short for cyan, magenta, yellow, black; it's a color model used in printing to represent all colors by using mixtures of these four process colors.

### **COLOR CAST**

Various types of light sources, when reflected off of objects, produce different color casts.

### **CROP FACTOR**

Also known as focal-length multiplier, this refers to an image sensor that has been made smaller, either to fit into a smaller camera body or to perform faster. Lenses perform differently with cropped sensors, capturing less area and affecting depth of field.

### **CROP SENSOR**

A crop sensor refers to any sensor smaller than a full frame sensor or a 35mm film frame. The common types of crop sensor include APS-C and micro 4/3 systems.

### **DEPTH OF FIELD (DoF)**

The zone of perceived sharpness in a picture that extends out from the point of focus towards the camera, and beyond it, towards the horizon (for more on this, check out our guide to Depth of Field: what you need to know for successful images).

### **DIFFUSED FLASH**

Using a translucent/semi-transparent material (like the plastic on a milk carton) to diffuse the light from your flash, softening it on a subject. There are numerous after-market gadgets made to do this that can attach to your flash.

### **DSLR**

Stands for digital single-lens reflex; a type of digital camera.

### **DUST BUNNIES**

In the wider world, dust bunnies are clumps of dust and fluff that you find drifting around wooden floors. In the camera world, dust bunnies are the annoying dots of sensor dust that show up in the same place in consecutive photos. These usually must be removed manually (to find out how to do this, check out our safe guide to sensor cleaning).

### **EXPOSURE**

The quantity of light allowed by your camera's sensor. Exposure is a product of intensity (controlled by the aperture) and duration (controlled by the shutter speed).

### **EXPOSURE COMPOSITION**

Increasing or decreasing the total exposure to brighten or darken an image, respectively, beyond the normal exposure setting.

### **EXTENSION TUBE**

A tube placed between the camera and lens that moves the lens further from the image plane, allowing for a closer focus distance. Extension tubes are used mainly in macro photography.

### **EV**

Stands for exposure value; a scale used to denote the exposure for a shot without the need to specify either the shutter speed or the aperture.

### **FAST/SLOW LENS**

A fast lens is one that has a wide maximum aperture, allowing you to use fast shutter speeds for any given situation. A slow lens has a small maximum aperture, meaning that shutter speeds will be comparatively slow in the same situation. The focal length of a lens needs to be taken into account when thinking about lens 'speed' – a 10mm lens with a maximum aperture of f/4.5 is slow, but a 500mm lens with the same f/4.5 maximum aperture is fast (confused by your lens markings – check out this dictionary explaining all the numbers and abbreviations on your lens).

### **FILL-IN**

A blip of flash to brighten up the shadows in a daylight picture is known as fill or fill-in flash. Set the flash to Slow Sync mode, and the camera will take care of this for you, automatically balancing the ambient light and flash (find out how to master fill flash in four easy steps).

### **FISHEYE LENS**

A special wide-angle lens capable of capturing a very wide field of view, up to 180 degrees, but with significant distortion.

### **FLARE**

Flare is a (usually unwanted) effect of having bright light sources in the frame, or just out of the frame. When the light source is in the frame, bright/colored artifacts can be seen in the image. When the light source is just out of the frame but hitting the front element of the lens, it can make the picture appear hazy and washed out. Shielding the front of the lens with a lens hood or your hand can prevent this.

### **FOCAL LENGTH**

The distance from the optical center of the lens to the sensor when the lens is focused at infinity. Focal length is usually measured in millimeters. The longer the focal length, the greater the magnification of the image and the narrower the field of view.

### **FOCUS**

To adjust the lens to produce a sharp image.

### **FOCUS POINT**

The point at which your camera is most sharply focused, and onto which you want your camera to lock for a continuous focus while moving.

### **FRINGING**

AKA 'purple fringing', this is the ghostly purple glow that can sometimes be seen around the edges of high contrast areas in digital pictures – compacts are particularly prone to it (Also called Chromatic Aberration).

### **FRONT CURTAIN SYNC**

Front- or first-curtain sync occurs when the flash is fired immediately after the shutter opens. The shutter then remains open until the end of the exposure.

### **F-STOP**

The number that corresponds to the size of the lens opening (aperture) in an adjustable camera lens. Typical f-stops (or f-numbers) are f/1.4, f/2, f/2.8, f/4, f/5.6, f/8, f/11, f/16, and f/22. The larger the number, the smaller the aperture.

### **FULL AUTO**

The point-and-shoot exposure mode that fully automates your camera. Although this mode often guarantees acceptable results, it allows for the least amount of creativity.

## **FULL FRAME**

A camera with an image sensor format which is the same size as 35mm format (36 mm × 24 mm) film.

## **GLASS**

As in ‘that’s a lovely piece of glass’. Glass is another term for lenses, generally used by photographers that understand that quality of a lens matters more than the quality of the camera attached to it.

## **GRAD**

‘Grad’ is an abbreviation of ‘Graduated’ and is used to describe a type of optical filter which has a dark section and a clear section. These filters – commonly known as ND Grads – are used to balance the brightness in high-contrast scenes, usually landscapes, with the dark area placed over the bright sky and the clear section over the foreground (to learn more, see our guide to ND Grad Filters: what every photographer should know).

## **GRIP AND RIP / SPRAY AND PRAY**

Both of these terms refer to the act of setting the camera to its highest continuous drive mode and keeping the shutter button held down to try and capture a fleeting moment. The theory is that the more frames you fill, the more chance there is of at least one of them being acceptably composed and sharp.

## **HALOS**

A term used to describe the glow that’s created around the edges of objects when they’ve been over-sharpened in Photoshop or other similar photo editing software.

## **HISTOGRAM**

A graph used to depict the brightness, tonal range, and contrast of an image.

## **IMAGE SENSOR**

The device in your camera that gathers light from an image and converts it into an electronic signal. It replaces the function of film in a film camera.

## **INTERCHANGEABLE LENS**

Lenses that can be mounted and interchanged, to provide you with the ability to use lots of different focal lengths and lens features. This is one of the most distinctive features that distinguishes dSLRs from point-and-shoot cameras.

## **IQ**

Image Quality – you’ll often see this abbreviation used in online camera reviews.

## **ISO**

Stands for International Standards Organization and is a number representing your camera's sensitivity to light. A higher ISO setting is used for lower-light conditions and frequently provides somewhat poorer image quality characterized by digital noise elements. The lower the ISO you can use, the better.

## **JPEG**

A common file format for digital photographs. While most now know what this photography term is, many still don't know that it gets its name from the Joint Photographic Experts Group that developed it, and that the JPEG file format allows files of color photos to be compressed to a smaller digital file than if the full range of colors were to be saved.

## **KELVIN**

A unit of measure based on the absolute temperature scale used to describe the color temperature of light. Daylight is 5500K.

## **LANDSCAPE**

A photo of an outdoor scene and used to refer to an image orientation wider than it is tall.

## **MACHINE GUNNER**

A photographer who takes 10 shots when they only need to take one. Machine gunners put their cameras in the fastest drive mode and invariably end up with memory cards full of duplicate images (find out how your memory cards work).

## **MACRO LENS**

A lens that can be focused from infinity to extremely close-up. You can project an image on the sensor of half- or full-size. A macro lens is most useful for close-up macro photography.

## **MAGIC HOUR/GOLDEN HOUR**

A term tossed about by earnest landscape photographers that refers to the time after dawn and before dusk where the sun tends to be at its warmest and most interesting. Shooting landscapes in this golden light gives pictures soul, man... (for more on how to use natural light, check out our guide [See the light like a pro: everything you were afraid to ask about natural light](#)).

## **MANUAL EXPOSURE MODE**

An advanced exposure mode that allows you to select an aperture and shutter speed manually. You achieve normal exposure by adjusting the aperture and shutter speed until the exposure indicator in the viewfinder rests at zero on the scale.

## **MANUAL FOCUS**

Setting the focus on your lens visually, and turning the focus ring on the lens to accurately and sharply focus on an object. This is especially useful in low light and for macro subjects.

## **MARCHING ANTS**

The dotted lines that flicker around areas that have been selected with the marquee tool in Photoshop.

## **MAXIMUM APERTURE**

The largest aperture to which a lens can be set, shown as markings on the lens barrel. For example 1:2.8 indicates a maximum aperture of f/2.8. Some zoom lenses have two settings for the maximum aperture, such as 1:3.5-5.6, indicating the maximum aperture varies with the focal length of the lens between f/3.5 and f/5.6.

## **METERING MODE**

The setting in your camera that dictates how a scene is measured to determine the normal exposure. Typically, three metering modes are available: Evaluative/Matrix, which uses built-in algorithms to determine exposure at the focus point; Center-Weighted, which averages the tones in the scene biased on the center of the viewfinder; and Spot, which measures the tones at a small spot in the center of the viewfinder.

## **NIFTY FIFTY**

A 50mm lens with a maximum aperture of f/1.8 or faster is known as a 'nifty fifty'. Lenses in this range are fast, lightweight and frequently optically superb. But the best bit is the price. The f/1.8 and f/1.4 50mm lenses are often the best value bits of glass you can buy.

## **NOISE**

Picture noise is the digital equivalent of film grain, although nowhere near as appealing (learn how to reduce noise at high ISO settings). Pictures become speckled and gritty as you increase the ISO sensitivity on the camera (because you're essentially 'turning up the volume' on the light that's being captured).

## **NORMAL LENS**

Also, called a standard lens, of medium focal length and optimized to make images look as the eye would see them, such as for portraits.

## **PANNING**

Moving your camera horizontally, from side-to-side, typically to follow a moving object.

## **PIXEL PEEPER**

Someone who spends too much time looking at images files at 100% on their computer and assessing noise and resolution 'at the pixel level' rather than making pictures.

## **PORTRAIT**

A photograph of a person or group of people posing for an image. Also, used to refer to an image orientation where the width of the photo is narrower than the height.

## **PRIME LENS**

A lens with a fixed focal length (such as 20mm, 50mm, 80mm). Zoom lenses cover a range of focal lengths (such as 80-200mm). For more on primes, check out our... primer: 9 things you should know about using prime lenses.

## **PROGRAM AUTO MODE**

In this advanced exposure mode, the camera sets the shutter speed and aperture automatically for the normal exposure from a range of equivalent exposures. You can change the settings for focus, color, image quality, and sensitivity (ISO).

## **RAW**

The lossless native file format of your camera. Raw contains the maximum image information, but must be converted to a compatible file format, such as JPEG to print or display on the web.

## **REAR CURTAIN SYNC**

Rear- or second-curtain sync occurs when the flash fires just before the camera shutter closes at the end of the exposure.

## **RTFM**

As in “What does X button do? How do activate Y mode? Where do I find Z function in the menu?” “RTFM!” Often spat in the direction of people who repeatedly ask questions about their camera functions on internet forums, RTFM stands for Read The Frikkin’ Manual (we’ve substituted one word here to protect fragile photographers). And for those who did read the manual, here is what your digital camera’s manual didn’t teach you.

## **SCENE MODES**

Automatic exposure modes selectable for a particular type of scene, such as portraits, sports, or landscape.

## **SHUTTERBUG**

An American term for a photographer who eats, drinks and sleeps photography. Shutterbugs carry a camera with them at all times and shoot absolutely everything without mercy.

## **SHUTTER PRIORITY MODE**

An advanced exposure mode that allows you to select a shutter speed and have your camera set the correct aperture for a normal exposure.

## **SHUTTER RELEASE BUTTON**

The button on the camera positioned under your right-index finger that when pressed halfway starts autofocus, metering, and Vibration Reduction. When pressed fully, this button takes the picture.

## **sRGB**

The standard red-green-blue color space and the default setting on your camera used to define colors so that you can have consistent color from shooting all the way to printing. It was created by Microsoft and HP in the mid-90s.

## **SYNC SPEED (FLASH)**

The fastest shutter speed that can be used with your flash. This varies between cameras and is typically 1/250 or 1/200 of a second.

## **STOP**

A stop is a measure of exposure, usually referred to as ‘EV’ (Exposure Value) in cameras. The aperture, shutter speed and ISO settings on a camera can all be measured in stops, although the actual figures used are different across all three. Each stop represents a doubling or halving of exposure (to learn more, download our free photography cheat sheet on understanding exposure compensation).

## **TELEPHOTO LENS**

A magnifying lens that's manufactured so that the physical length of the lens is shorter than its focal length, but it's more commonly used to describe any lens with a focal length more than 80 millimeters.



### **TILT-SHIFT LENS**

A lens able to change perspective, such as converging angles in architectural subjects.

### **TOUCHING UP/RETOUCHING**

The process of enhancing a picture in image editing software. This term is often used to describe the process of whitening eyes and teeth, and improving skin tone on a portrait, although the idea of 'touching up a model' is a little unsavory...

### **TRIPOD**

A three-legged camera support attached to the bottom of your camera. A tripod steadies your camera so that you can use slow shutter speeds without camera shake.

### **TTL**

Stands for Through the Lens and is the metering system commonly used by modern built-in and accessory flash systems in which pre-flash pulses of light are read through the camera's lens to set the flash exposure.

### **UNCLE BOB**

The name that wedding photographers give to a wedding guest who comes armed with a big DSLR, big lenses and expensive flash gun. Often used derogatorily, as in "A right Uncle Bob was always getting in my way."

### **UWA**

Acronym for Ultra Wide Angle lens.

### **VIBRATION REDUCTION**

Vibration Reduction and image stabilization are inventions that make micro adjustments in a lens element or image sensor to keep the image stabilized on the sensor and blur-free even when using the camera at relatively low shutter speeds.

### **VIEWFINDER**

The optical device on the rear of your camera that allows you to see the scene through the lens prior to taking the shot.

### **WHITE BALANCE**

The process of adjusting your camera to the color temperature of the light source so that colors look more natural.

### **WIDE ANGLE LENS**

A lens with a short focal length, typically between 14-28 millimeters, that offers a wide-angle view.

### **WIDE OPEN**

When a lens is set at its smallest f-number, such as f/2.8 or f/4, it's being used 'wide open'. At this point, the aperture (the hole in the lens) is at its maximum, letting in as much light as possible. Wide apertures mean shorter shutter speeds are required to take a picture, so lenses are often used wide open to take pictures of sport and action (to learn more about this, download our cheat sheet on when to use small or wide apertures).

### **ZOOM CREEP**

Not a dirty old man with a long lens, but rather what happens if you point a superzoom lens up or down, and the zoom position slowly shifts.

### **ZOOM LENS**

A lens that allows you to vary its focal length by turning a ring on the lens body.