

A – Z of Photography

A – Aperture size of the iris allowing light in.

Aperture priority mode – a semi-automatic mode available on most cameras

Analogous colours – colours next to each other / colour gamut

Acceptance – when your photo has been evaluated to meet the standards as prescribed, by a panel of evaluators.

B – Bulb Mode a mode allowing the photographer to determine the time duration of the shutter to a maximum of 30 minutes.

Bayer filter:

Photo sensor named after its inventor Bryce E. Bayer. The sensor is overlaid with green, blue and red filters, which are in a ratio of 50% green, 25% blue and 25% red. In this way, it approximates the sensitivity of the human eye, in which green accounts for the greatest share of the perception of brightness.

CCD – Closed coupled device, an electronic light sensor used in various devices including digital cameras.

C – Crop sensor – a sensor which is smaller than the standard and has a crop factor as specified by the manufacturer, most commonly either 1, 5 X or 1,6 X sensor.

Complement colour – colour on the opposite side of the colour wheel.

Cd/Candela Candela is the SI unit of the SI basic variable of luminosity.

CMOS technology: - CMOS stands for Complementary Metal Oxide Semiconductor. This involves semi-conductor technology, which has become widespread in photo sensors, etc. CMOS sensors are primarily characterized by low power consumption and short switching times.

Color fringes: Color fringes, also called chromatic aberrations, occur in images because of deviations of optical lenses. Because the individual wavelengths of the visible spectrum in a lens are refracted differently, each wavelength range has its own focal point. In practice, this leads to color fringes, which are particularly visible on the contours and edges of an image. This error can be corrected using additional lenses, which are attuned to the respective wavelengths.

Color noise: Color noise, or image noise, describes the deterioration of image

quality due to structures, which themselves do not carry any image information. The impacted image sections deviate from the actual image information in terms of color and brightness, and are especially visible in dark areas of the image in which the signal-to-noise ratio is very low.

Color space: A color space is a defined range of colors. The best-known color spaces from the RGB color model are sRGB and AdobeRGB (1998), as well as the CMYK color model, Euroscale Coated v2, Fogra39, and ISO Coated v2.

Color temperature: The color temperature describes the light mood and is specified in Kelvin. A cooler light mood (bluish) prevails, for example, more in a cloudy sky, than in sunshine (yellowish).

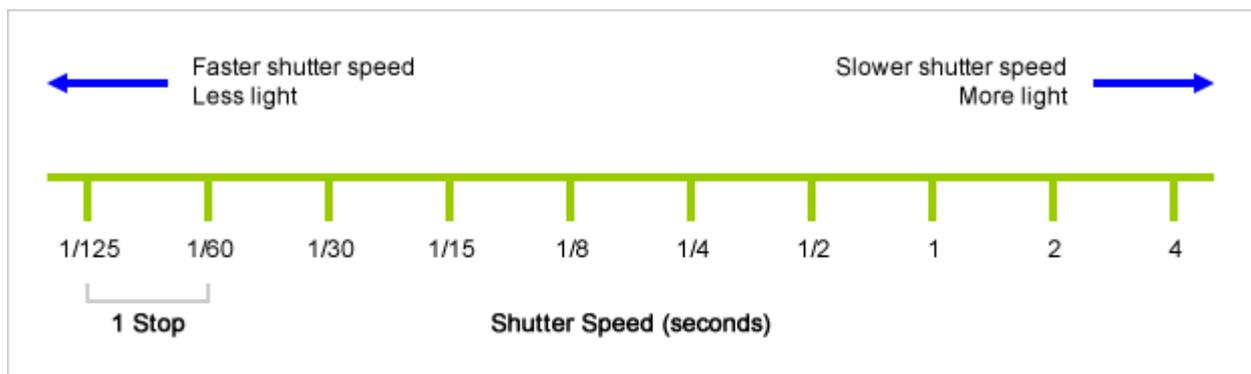
Contrast: Contrast is the ratio of the brightest to the darkest area of an image.

D – DOF or Depth of field the acceptable sharpness of an image in front of and behind the subject.

E – EV Exposure value

F – F stop STOPS AND SHUTTER SPEED

Shutter speed measures how long your camera's shutter is left open during a shot. The longer it's open, the more light it lets in, and the greater your total exposure will be. Doubling or halving your shutter speed produces an increase or decrease of 1 stop of exposure.



Common shutter speed stops.

For example, changing from 1/100 of a second to 1/200 lets in half as much light, so we can say we've decreased the exposure by 1 stop. Similarly, going from 1/60 to 1/30 lets in twice as much light, giving a 1 stop increase in exposure.

Most cameras allow you to adjust shutter speeds in increments of 1/3 of a stop, so 3 turns of the dial either way will adjust your exposure by 1 stop.

STOPS AND ISO SPEED

ISO speed describes how sensitive your camera's sensor is to the light that hits it. A more sensitive sensor will produce the same overall exposure from less light, meaning that you can use a narrower aperture or faster shutter speed in the same conditions.



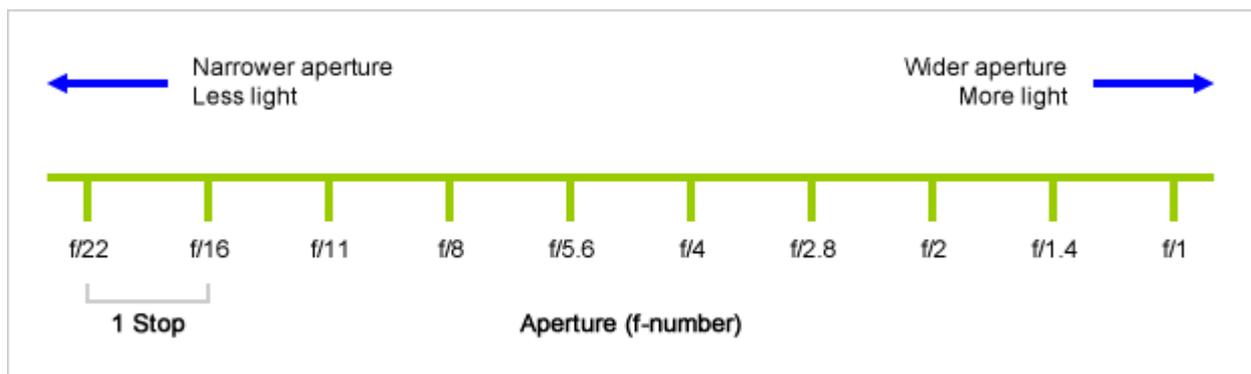
Common ISO speed stops.

ISO is measured using values that correspond to the ASA scale for film, with a higher ISO number relating to a more sensitive sensor. As with shutter speed, doubling the ISO number gives an increase of 1 stop, while halving gives it a decrease of 1 stop.

For example, switching from ISO 100 to ISO 200 doubles the sensor's sensitivity, producing a 1 stop increase. Moving from ISO 800 to ISO 400 is a 1 stop decrease. Most cameras let you change ISO speed in increments of 1 stop.

STOPS AND APERTURE DIAMETER

Aperture is measured using the "f-number", sometimes called the "f-stop", which describes the diameter of the aperture. A lower f-number relates to a wider aperture (one that lets in more light), while a higher f-number means a narrower aperture (less light).



Common aperture stops.

F - Field of view - field of view informs us as to how much of a scene a lens can see. In other words, it's a more informative benchmark regarding what you can photograph with the specific camera and lens you're using.

G – Gamut: Is the description of the color range which can be reproduced by a technology or a technical device.

Gimp – free photography enhancement and editing program similar to Photoshop.

H – Hues - a colour or shade.

High-Key image: In high-key photography bright tones, few contrasts and soft light lend style to an image.

I – ISO - in **photography**, **ASA** and **ISO** are both measurements of film speed, or sensitivity to light. **ASA** is a scale created by the American Standards Association, but it is no longer widely used. Now, most film is labeled by **ISO**, which was created in 1987 by the International Organization for Standardization.

J –

K – Kelvin:

Kelvin is an SI unit of temperature measurement. It is also used for measuring the colour temperature. Setting the temp manually on a camera is done in Kelvin.

L – Luminance: The luminance describes the brightness of image points

Low-Key image: In contrast to high-key photography, low-key photography uses little light as a stylistic device. Light is used consciously to accentuate highlight contours and the few details that are important for the image. Many sections of the image often remain in the dark. This lends a certain amount of drama to this type of image, a familiar sight in theatrical or stage photography.

M – Manual Mode – Photographer controls all aspects of the camera.

Moire - When odd stripes and patterns appear in your images, this is called a **moiré** effect. This visual perception occurs when a fine pattern on your subject meshes with the pattern on the imaging chip of your camera, and you see a third separate pattern.

N –

O –

P – Program Mode A semi-automatic mode available on most camera makes.

Photovault - A general program used by most camera clubs to submit photo's to club and salons for evaluation.

Primary colors: Primary colors are the basic colors that compose secondary colors. Thus, the colors that a monitor can display are composed of the colors red, green and blue. The same applies to cyan/magenta/yellow, by means of which all colors which can be displayed by the process are mixed in printing.

Photoshop - most commonly used photo enhancing and editing program.

Q –

R –

S – Salon – an organized photographic competition to measure your photo against photographers all over the country and sometimes even the world.

sRGB: Standard RGB is also a color space developed by Hewlett-Packard and Microsoft. It is widespread, but smaller than the AdobeRGB (1998) color space.

Split complementary colour, the two colours adjacent a complementary color.

T – Shutter mode or priority a semi automatic mode available on most camera's.

Tonal value: The tonal value describes the measure of tone scales. For example, a digital camera with 8 bits per color channel has a tonal value reduction of $2^8 = 256$ steps per color channel.

U – UV filter used to reduce glare from shiny objects and reflections.

V – V flats to either reflect light or to flag it from the lens.

W – White balance:

In the case of a white balance, a camera should be set to the color temperature of the recorded scene to keep the color balance neutral. This is also done by the human eye, which evaluates colors in a largely neutral manner.

Wide gamut: Gamut is the displayable color space of a monitor. Wide gamut features a device class that is characterized by a very large color space that is close to AdobeRGB (1998) or even slightly more. Monitors with wide gamut are typically used in image editing.