25 Common Photography Abbreviations, Explained

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ABBREVIATIONS, EXPLAINED

Photography is a visual medium, yet it's full of abbreviations: AF, DOF, TIFF, DSLR, CMYK, AWB, and so much more. For the beginner, these initialisms and acronyms can be incredibly overwhelming (and even seasoned photographers will find certain abbreviations confusing!).

That's why we've put together this guide, which explains the abbreviations you're most likely to encounter, whether you're hunting for gear, photographing outdoors, or working in a studio. The list is alphabetical, so you can easily reference it whenever you come across a new

photography abbreviation – though I also encourage you to read through each and every item right now. (It pays to stay ahead, right?)

So without further ado, here are the most common photography abbreviations so you can tell your TIFFs from your TTLs like a pro:

A

Aperture Priority mode, commonly abbreviated as A or Av, is a camera setting that allows you to manually adjust the aperture value (otherwise known as the f-number or f-stop), while your camera automatically selects a corresponding shutter speed to produce a well-exposed image.

The camera's internal light meter constantly measures the lighting conditions of the scene, and as you adjust the aperture, your camera adjusts the shutter speed accordingly. Aperture Priority mode, like its sibling modes, Program and Shutter Priority, isn't foolproof. But it offers a high degree of control and frequently does a good job of nailing the exposure.

AF

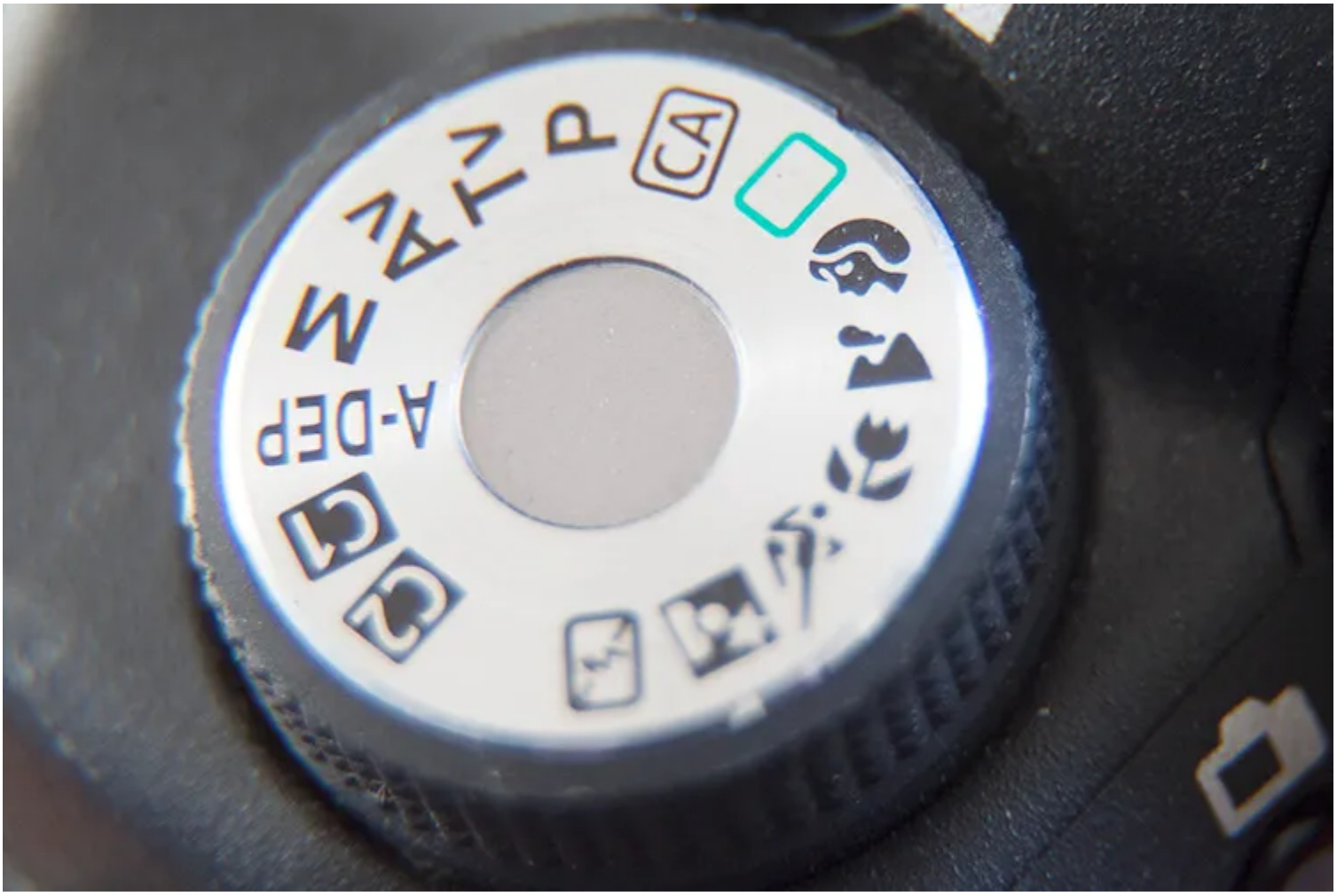
AF refers to *autofocus*, the camera feature that automatically adjusts the lens to acquire focus on a subject to create a sharp image.

Pretty much all recent cameras and most recent lenses offer autofocus capabilities, which allows photographers to capture sharp photos of sports players in action, birds in flight, and so much more.

Cameras offer several AF modes. Single-focus AF, known as AF-S (Nikon) or One-Shot AF (Canon) locks focus on a subject and prevents refocusing as long as you keep the shutter button depressed halfway. On the other hand, continuous or tracking focus – AF-C (Nikon) or AI Servo (Canon) – constantly readjusts the focus as the subject moves (though you will need to keep the shutter button depressed halfway). Some cameras also have a third mode, which switches between the two main AF modes automatically.

Auto

Auto is short for *automatic* and may also be signified by a small green rectangle on the camera's mode dial:



In Auto mode, a camera automatically calculates and adjusts various camera settings to produce a sharp, well-exposed image, taking into account (and controlling) shutter speed, aperture, ISO, focus, white balance, and light metering.

Some cameras have specialized automatic modes, called *scene modes*, which are designed to capture compelling photos of a particular subject. For example, Action or Sports mode prioritizes faster shutter speeds – so you can capture sharp images of moving subjects – and is represented by a running figure on the mode dial.

AWB

AWB stands for *Automatic White Balance*, which tells the camera to automatically measure the white balance (WB) of a scene and remove any unnatural color casts. In other words, with AWB activated, your camera will try to analyze and color-correct each scene as you shoot.

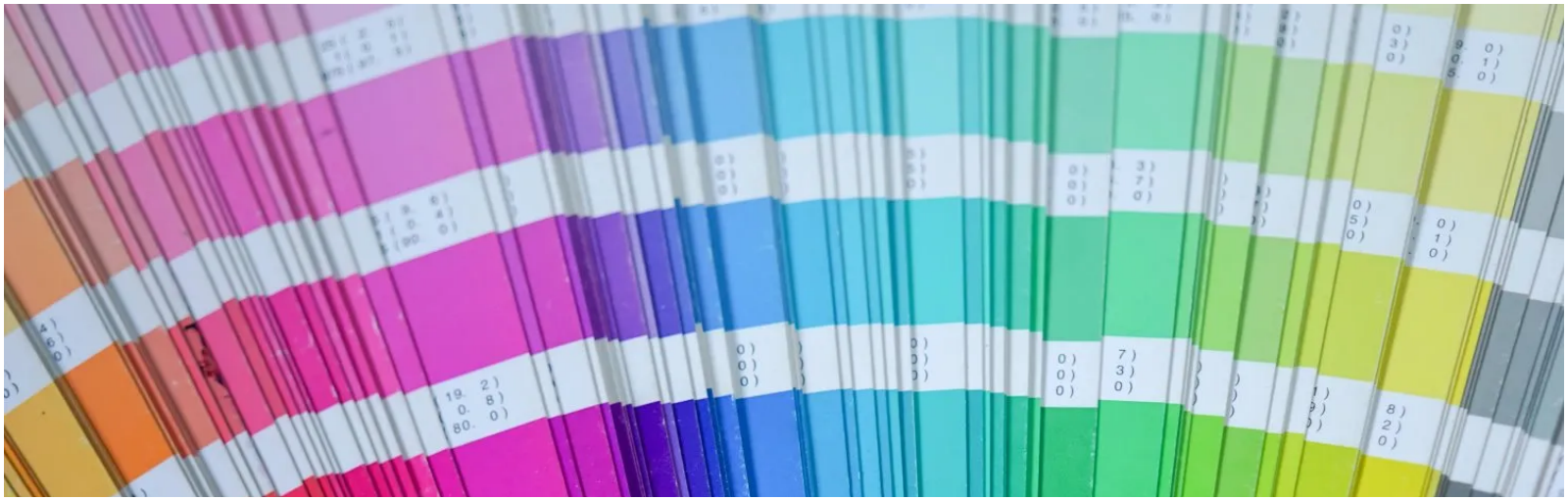
In most cases, Automatic White Balance works fairly well, though it can be tricked (which is the reason product photographers often set the white balance manually). Fortunately, if you shoot in RAW format, you can easily tweak the white balance in post-production.

B

B refers to *Bulb mode*, which is designed to produce long exposures and is often used by landscape and night photographers. With your camera set to Bulb, when you depress the shutter button, the shutter will remain open until the button is pressed again (or until it is released, depending on your camera and its settings).

Bulb mode is usually used in conjunction with a tripod and a remote shutter release. It's generally needed to achieve exposures longer than 30 seconds (the maximum exposure time on most cameras).

CMYK



CMYK stands for *cyan, magenta, yellow, and black*. Note that the K refers to *black*, which is shorthand for the *key plate*, a printing tool that creates the artistic detail of a picture in black ink.

CMYK is the technology used by most color reproduction printers (for magazines, posters, business cards, etc.). This four-color mode applies each color in specific amounts to create a color print. CMYK is a subtractive process, so with each added color, more light is absorbed to create the final image.

Because the RGB color space (which is generally used by cameras to record images) provides a larger range of colors for the digital screen, CMYK-printed images are inconsistent with the images you see on-screen before pressing “Print.” But if you convert the images to CMYK before printing – using Photoshop or Illustrator – you’ll see an image on the screen that is much closer to the printed product.

DOF

DOF, or *depth of field*, is the zone of sharp focus in a photograph. Some images feature a narrow depth of field, in which only a small sliver of the scene is in focus; other images feature a deep depth of field, in which the entire scene is in focus from foreground to background.

Note that the depth of field is affected by several factors, including the lens's aperture. A large aperture creates a shallow depth of field effect, while a small aperture creates a deep depth of field effect.

Depth of field is also influenced by the lens focal length and the distance between the camera and the subject (i.e., the point of focus).

DPI

DPI, or *dots per inch*, is often used interchangeably with PPI, or *pixels per inch*. Technically, DPI measures the number of dots that will be printed in an inch-long line. PPI *also* measures the number of dots along an inch-long line, but on a computer screen instead of on paper. Printers and screens with higher DPI and PPI values, respectively, are clearer and more detailed.

To correctly size your images for printing, you need to know the DPI of your printer or lab.

DSLR

DSLR stands for *digital single-lens reflex*, a type of camera that features a mirror, which reflects the light coming in from the lens and directs it to the viewfinder. DSLR mirror technology lets you see a preview of the scene via the viewfinder – then, when the shutter button is pressed, the mirror flips up, allowing the light coming through the lens to reach the camera sensor.

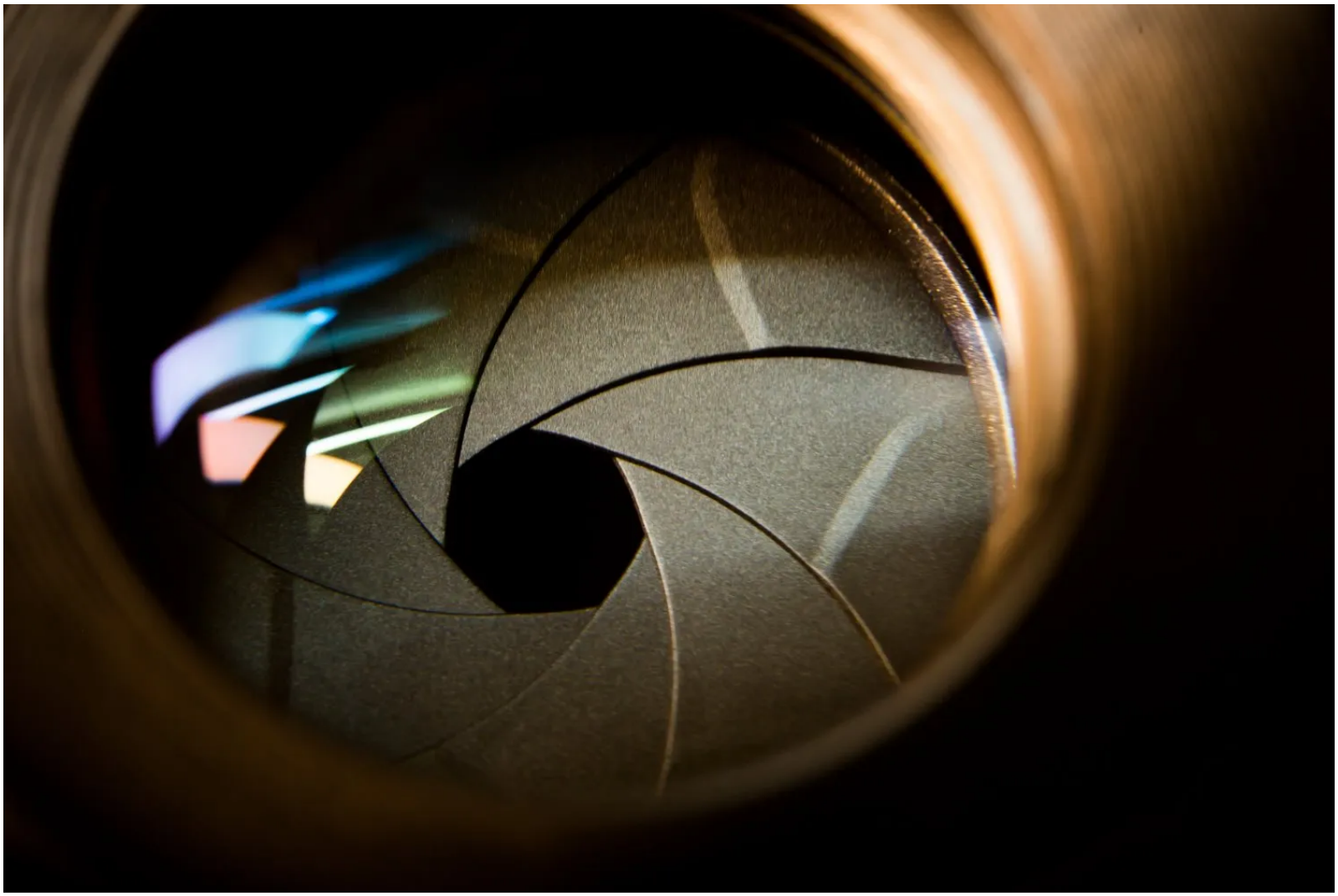
EVF

The EVF, or *electronic viewfinder*, refers to a type of viewfinder popularized in mirrorless cameras. Instead of showing an optical preview of the scene, electronic viewfinders display a digital preview, which simulates the exposure of the final image.

Electronic viewfinders offer a number of benefits over optical viewfinders (OVFs, below), though they can suffer from resolution and lag issues.

F-stop or f-number

The f-stop or f-number indicates the size of the aperture opening on your lens. (Here, the “f” stands for *focal*.) Wider aperture openings let in more light and produce a shallower depth of field effect (see “DOF,” above). Every aperture can be expressed as an f-stop or f-number, such as f/2.8, f/4, f/8, f/11, etc.



IS

IS refers to *image stabilization*, a camera and/or lens feature that's designed to counteract movement caused by camera shake. The technology goes under several names, though IBIS, VR, and VC are a few of the most common labels.

Note that image stabilization may not be offered by your camera or lens. Recent mirrorless cameras do tend to offer in-body image stabilization (i.e., IBIS), but adding IS technology is expensive, so you're less likely to find it in beginner products.

If you like to shoot handheld at slower shutter speeds (e.g., in low light or at narrow apertures) or when using long lenses, good image stabilization is essential.

ISO

Photographers often claim that ISO stands for *International Organization for Standardization*, though it actually comes from a Greek word, *isos*.

In film photography, ISO (or, formerly, ASA) is an indication of the sensitivity of a roll of film to light. In digital photography, ISO determines the amplification of the camera sensor brightness (though if you prefer, you can think of it as the sensitivity of the sensor to light).

The ISO value can be adjusted in-camera; the higher the ISO, the brighter the resulting exposure (all else being equal). However, higher ISO values produce more grain, also known as noise.

The graininess of this image is caused by a high ISO value.

JPEG

JPEG (sometimes shortened to JPG) refers to the *Joint Photographic Experts Group* image file format. (As you can probably guess, the JPEG group created the format!) JPEG is one of the most common image formats used by photographers; RAW is another common format.

Most cameras shoot JPEGs, which are highly displayable and very small. But because JPEG is a lossy file format, the images do suffer from a reduction in quality and in post-processing flexibility.

M

M stands for *Manual*, a shooting mode that offers complete control over every setting on your camera, including aperture, shutter speed, ISO, white balance, metering mode, and more. Manual mode can be intimidating for beginners, which is why it's often better to use Aperture Priority (also on this list, above).

Note: Manual mode and manual focus are not the same. You can use your camera's autofocus capabilities when working in Manual mode (and you can even use your camera's Auto mode while focusing manually).

M4/3

M4/3, also known as MFT, is short for *Micro Four Thirds*. Developed by Olympus and Panasonic way back in 2008, M4/3 is a mirrorless interchangeable lens standard that revolves around the four-thirds sensor.

Because the four-thirds sensor is smaller than alternatives – such as APS-C and full-frame sensors – Micro Four Thirds cameras tend to be lighter and more compact. However, the smaller sensor size does restrict image quality (particularly resolution and high-ISO noise performance).

OVF

OVFs, or *optical viewfinders*, are generally found in non-mirrorless cameras (e.g., DSLRs). OVFs use mirrors to offer the photographer a "true" preview of the scene, rather than a digital rendering (see EVF, above).

Because optical viewfinders show the photographer the scene as viewed directly through the lens, they don't offer exposure simulation – though OVFs do provide a high-resolution image with zero lag.

P

P stands for *Program mode*, which allows you to adjust certain settings – including ISO, flash, and white balance – while your camera selects the aperture and shutter speed. Program mode is less popular than its semi-automatic alternatives, Aperture Priority and Shutter Priority, though it is a good way for beginners to wade into the often-confusing waters of exposure.

RGB

RGB stands for *Red, Green, and Blue* and is based on human color perception. RGB is an additive color technology designed for viewing images on digital displays (unlike CMYK, above).

S

Shutter Priority, also known as SP or TV (for Time Value), is a camera mode that allows you to select the shutter speed while the camera automatically selects an aperture for a proper

exposure. As you adjust the shutter speed, the camera's internal light meter analyzes the scene and adjusts the aperture accordingly.

Shutter Priority mode is best used for shooting fast-moving objects *or* when you want to deliberately blur a moving subject.

SLR

SLR, or *single-lens reflex*, refers to non-digital cameras with single-lens reflex capabilities (see *DSLR*, above). SLR cameras feature a mirror that reflects light up into the camera viewfinder. When the shutter button is depressed, however, the mirror flips up, exposing the film to light.

TIFF

Short for *Tagged Image File Format*, TIFF is an image file format that doesn't lose detail, unlike lossy compressed formats such as JPEG. Because TIFFs retain all image information, they're ideal for printing and storing images, though TIFFs are also far larger than lossy formats such as JPEG and HEIC.

TTL

TTL stands for *Through the Lens*; it refers to an automatic flash metering system. With TTL metering active, the flash fires a short burst of light prior to the actual exposure, the camera measures the amount of light coming through the lens, and the power of the flash is automatically set according to the selected aperture.

Not all off-camera flashes offer TTL metering (and some photographers prefer to set the flash exposure manually, regardless).

USM

USM stands for *Ultrasonic Motor*, a type of autofocus motor in certain Canon lenses. Equivalent systems include Nikon's SWM (Silent Wave Motor), Sigma's HSM (Hyper Sonic Motor), and Olympus's SWD (Supersonic Wave Drive Motor). These AF motors are generally designed to be fast *and* quiet.

WB

WB stands for *white balance*, the process of counteracting color casts created under different lighting conditions. Some photographers set the white balance manually, though others set the camera to Auto White Balance, then adjust the white balance in post-processing as required. (Note that the latter technique only works if you shoot in RAW.)

Common photography abbreviations: final words

Well, there you have it:

A whole host of common photography abbreviations that you should know! Of course, there are plenty more photography abbreviations, but once you know the basics, you'll find it easier to pick up new terms as you go along.

Any additional abbreviations that I missed? Share them in the comments below!

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