

CANON

All You Need To Know About

CANON LENS TERMINOLOGY

—Glossary



— From USM to IS, find out what these 18 most common Canon terminologies mean for your lenses so you can better plan for your next lens upgrade!

Lens Terminologies



EF stands for *Electro-focus*, which means that the automatic focusing on EF lenses is handled by an electric motor built into the lens.



EF-S stands for *Short Back Focus*. The difference between the EF and EF-S lens is that the EF-S lens is smaller, designed for *Canon digital cameras with APS-C sensors*.



EF-M (Electro Focus Mini/Micro) lens is made for the Canon EOS M mirrorless series. The M in EF-M lens refer for mobility and like the EF-S lens, they too are designed for *APS-C sensors*.



The Canon **RF** lens mount is developed for its *full-frame mirrorless interchangeable lens cameras*.



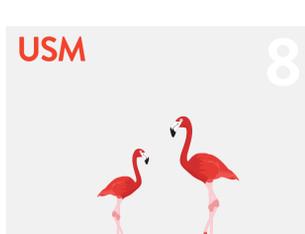
MP-E lenses are made for very *high magnification* from 1:1 to 5:1. It is also a *manual-focus only lens*.



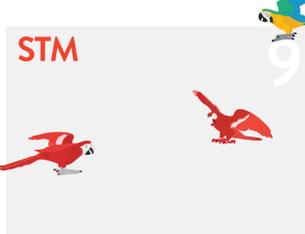
IS is Canon's abbreviation for *Image Stabilization*. It *counteracts against movement blur* to provide sharper image output when the slow shutter speed is utilised.



The *Roman numerals* represent the first, second and third generation respectively.



USM means *Ultrasonic Motor*, which is for fast and quieter focusing. It comes with *three different motors* of the ring-type, Micro I and Micro II.



The *Stepper Motor* lens is introduced to better the video output from Canon lenses. It provides quieter and smoother autofocus during movie recording as it uses a focus-by-wire system.



Macro lenses are made for *close-up photography* and often feature a magnification ratio of 1:1 to capture intricate details at close distance.



TS-E refers to *Tilt-Shift Lenses* and they are *manual focus lenses* that allow users to reposition the optics by shifting them up and down or left and right. Also, the front section of the lens can be tilted at an angle upward, downward, left or right to adjust the output's perspective as well.



DO lenses refer to *Diffraction Optics lenses*. The advantages of DO lenses are that it is much *smaller and lighter* than other lenses of the same parameters. You can identify DO lenses by the *green ring* around the ring barrel.



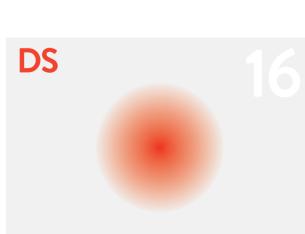
The **L lenses (Luxury)** are identified by the *bold red ring* around the lens' frontal end which showcases the professional-grade optics. *All L lenses come with USM (Ultrasonic Motor)*, wider aperture setting, and are built with protection against weather and dust.



BR lens refers to the *Blue Spectrum Refractive optics*, and is a compound lens that corrects blue wavelength colour fringing in your output.



ASC, or otherwise known as the *Air Sphere Coating*, is a lens coating technology developed to significantly *enhance the anti-reflective properties* of lenses.



DS refers to *Defocus Smoothing*, and it allows out of focus areas (bokeh) to have a *gradient feathering effect* that soften the edges.



SWC technology is a *Subwavelength Structure Coating* lens technology that makes it possible to *control flare and ghosting* even on lens surfaces.



Some Canon lenses utilise *infrared reflective Heat shield coating* to *prevent overheating* when shooting in the hot sun or environment.