

Sigma 50-500mm f/4-6.3 EX DG HSM Lens Review

The-Digital-Picture.com Reviews



- [Image Quality](#)
 - [Sample Pictures](#) ■
 - [Vignetting](#)
 - [Specifications](#)
- [Find on eBay.](#)

by [Bryan Carnathan](#) 

Any **10x SLR zoom lens** (50mm x10 = 500mm) is going to be attractive, but one that ends **with a 500mm focal length** is going to get an especially high amount of attention. Sigma 50-500mm f/4-6.3 EX DG HSM Lens, for this reason, but not for this reason alone, is a **very popular lens**. The fact that Canon's longest zoom ends at 400mm and costs much more increases the demand for this lens.

I should point out right up front: Though designated 500mm, this **focal length seems overstated** - 450-470mm or so feels about right. Still not a bad long focal length on a zoom with this overall focal length range.

As can be expected for a lens with a 450-500mm focal length available, the Sigma 50-500mm f/4-6.3 EX DG HSM Lens is not small or light. It has even acquired a nickname - "Bigma". The 50-500 measures 3.7" x 8.6" (95mm x 218.5mm) and weighs 4.1 lb (1.8 kg). You can carry this lens all day - but you will know that you did. It is not too heavy to handhold, but a support will be welcomed if you intend to have it in shooting position for long periods of time.

The Sigma 50-500's build quality is on par for Sigma's EX line - very good. The focus and zoom rings are nicely sized, nicely shaped, smooth and well-damped. The switches are raised and not as integrated as they could be, but this is a relatively minor issue. The lens finish is Sigma's standard black matte EX finish. I think it shows marks too easily -

others really like it. As do all super-zoom lenses, the 50-500 extends significantly at its longest focal length range as can be seen in the comparison pictures below.



Shown fully retracted above are the **Canon EF 24-70mm f/2.8 L USM Lens**, **Canon EF 100-400mm f/4.5-5.6 L IS USM Lens**, **Sigma 80-400mm f/4.5-5.6 EX DG OS Lens** and **Sigma 50-500mm F/4-6.3 EX DG HSM Lens**. The same lenses (sans 24-70) are shown below at their fully extended lengths.



I mentioned the switches - there are two. The first is very straightforward - AF or MF. The other has two functions. The first is a zoom lock to prevent gravity-induced zoom creep - and this lens will rapidly extend if pointed downward. The other function is used to restrict the focal length to 100mm or longer. The Sigma 50-500 is compatible with the [Sigma 1.4x](#) and [2.0x Extenders](#) - but only at focal lengths of at least 100mm. Thus, the lock switch's second function. Most [Canon camera bodies](#) will not AF with extenders mounted behind this lens.

AF is accomplished via Sigma's **HSM** (Hypersonic Motor). It is quiet, does not extend (rear-focusing), **fast and has proven accurate** to me even in AI Servo mode shooting sports. The only downside I've noticed is that the Sigma 50-500mm f/4-6.3 EX DG HSM Lens does a lot of focus hunting when shooting sports - a focus distance limiter (not provided) would be a big help. FTM (Full Time Manual) focusing (I really like this feature) is available and the front element does not rotate.

Colors appear accurate, but contrast is not as good as some of the other options - none of which have this focal length range of course. Vignetting is well controlled through the middle focal length ranges, but will be noticeable at 50mm and from 300-500mm with a wide open aperture. Users with 1.6x bodies will probably only notice vignetting between 400 and 500mm. Full frame users will notice some vignetting on the long end even when stopped down to f/8. CA (Chromatic Aberration) is well controlled with some showing in corners at 50mm and from 400-500mm.

The Sigma 50-500 shows a little barrel distortion at 50mm and moderate pincushion distortion over most of the rest of the focal length range. Distortion is less noticeable at longer distances (not unusual). Flare is well controlled on the wide end, but increases to very strong with the sun touching the corner of the frame at the longer focal lengths. Stopping down helps - I haven't had flare issues when actually using this lens.

The Sigma 50-500mm f/4-6.3 EX DG HSM Lens is decently sharp wide open in the center at 50mm through 200mm but degrades rapidly to soft at 300mm and beyond. Corners are not as sharp as centers (not unusual), but are not bad wide open until the longer focal lengths. 200mm seems to be a sweet spot for this lens. Stopping down 1 and especially 2 stops makes a big difference in the results.

However, stopping down an already slow lens with no image stabilization means you need a lot of light or high ISO settings to stop subject motion. To handhold this lens at the longer focal lengths, you need a lot of light, high ISO settings or a support such as a tripod - and a relatively still subject. The Sigma 50-500mm f/4-6.3 EX DG HSM Lens' 9-blade aperture gets narrow fast - going from f/4 @ 50mm to f/4.5 at 57mm to f/5.0 at 72mm to f/5.6 at 116mm to f/6.3 at 417mm.

© The-Digital-Picture.com



Shown above fully retracted with included lens hoods installed are the **Canon EF 100-400mm f/4.5-5.6 L IS USM Lens**, **Sigma 80-400mm f/4.5-5.6 EX DG OS Lens** and **Sigma 50-500mm F/4-6.3 EX DG HSM Lens**. The same lenses are shown below at their fully extended lengths.



The MM (Maximum Magnification) this lens is capable of is OK but not exciting. MFD (Minimum Focus Distance) and MM change non-linearly as the focal length increases - as shown in the following table and as marked on the extending portion of the lens barrel.

Focal Length	MFD	MM
50mm	3.3' (1m)	.06x (1:17.1)
100mm	3.3' (1m)	.12x (1:8.6)
200mm	3.6' (1.1m)	.19x (1:5.2)
300mm	4.9' (1.5m)	.19x (1:5.4)
400mm	7.2' (2.2m)	.16x (1:6.1)
500mm	9.8' (3m)	.15x (1:6.8)

A big lens that **takes a big filter**. The Sigma 50-500 sports uncommon 86mm filter threads - quality filters of this size are expensive and not shared by many lenses. The 50-500 comes in a nice padded Sigma lens case and includes a shoulder strap that attaches to the also-included removable tripod ring. Getting the lens cap off when the included petal'd lens hood is installed is very difficult.

The Sigma 50-500mm f/4-6.3 EX DG HSM Lens is available in Canon (reviewed), Nikon (D), Sigma, Pentax, Sony and Four Thirds mounts. My obligatory standard disclaimer:

You should know that there are potential issues with third party lenses. Since Sigma reverse engineers (vs. licenses) manufacturer AF routines, there is always the possibility that a new body might not support an older third party lens. There are examples of this happening in the past. Sometimes a lens can be rechipped to be made compatible, sometimes not. Second, there is the risk of a problem that results in the lens and body manufacturers pointing blame at each other. However, Sigma USA's 4-year warranty is far superior to Canon's standard 1 year warranty (though many credit cards will double the Canon warranty for you).

A focal length this wide and long covers a huge range photo opportunities - Only the wide end is missing. Wildlife, always needing all the focal length you have, is one of the most common subjects for the Sigma 50-500. Another popular Sigma 50-500 target is sporting events - bright daylight games are best-suited for this lens. This is a nice focal length range for air shows. People, places, things ... there's just sooo much that fits between 50 and 500mm.

Before purchasing this lens, you should also consider the [Canon EF 100-400mm f/4.5-5.6 L IS USM Lens](#) and [Sigma 80-400mm f/4.5-5.6 EX DG OS Lens](#). The Canon has better image quality (especially sharpness and contrast) and has image stabilization, but costs more and has a shorter focal length range. I liked the Sigma 80-400's image quality better than the 50-500 and it has optical stabilization, but it weighs more, does not AF as well and has a shorter focal length range.

The Sigma 50-500mm f/4-6.3 EX DG HSM Lens is not cheap, but it is a decent value. And nothing else gives you 50-500mm in one lens. When a situation presents itself, you may not have time to change lenses. Even a mediocre shot is better than a missed shot.

Bringing you this site is my full time job (typically 60-80 hours per week). Thus, I depend solely on the commissions received from you using the links on this site to make any purchase. I am grateful for your support! - Bryan