

Sigma 150mm f/2.8 EX DG APO HSM Macro Lens Review

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Note: The Sigma 150mm f/2.8 EX DG HSM Macro Lens has been replaced by the [Sigma 150mm f/2.8 EX DG OS HSM Macro Lens](#).

The Sigma 150mm f/2.8 EX DG HSM Macro Lens delivers **excellent image quality** in a **relatively long focal length** (for a macro lens) at a **very reasonable price**.

The image quality a lens is capable of presenting to the camera's sensor is typically the biggest concern I have with a lens. Will it deliver the results I desire? The Sigma 150mm f/2.8 EX DG HSM Macro Lens quickly erased this concern for me. This lens is **quite sharp** with a wide open f/2.8 aperture - from the center all the way out to the full frame corners. Stopping down improves image sharpness only modestly, but it is very usable wide open.

Most other Sigma 150 optical qualities are also very good. CA (Chromatic Aberration) is very well controlled. Distortion and flare are not issues. Color is fine.

Vignetting is the Sigma 150's weakest image quality factor. Even stopped down to f/8, full frame users are going to see over 1 stop of shading in the corners. Users of 1.6x bodies should be happy at f/4 and beyond. This light fall-off may or may not be an issue to you. It will be most-noticeable if you have an evenly-colored subject or background extending through the darker outer portion of the image circle (image corners). Check the vignetting results (link at top of this review) for the visual.



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An optically great lens will not show its strength if it delivers an out of focus image. Unfortunately, I had a lot of mis-autofocused results from this lens - far more than could have been my fault. Sigma's internal **HSM**(Hypersonic Motor) autofocus is very nice - quiet with FTM (Full Time Manual) focusing. But it is only moderately fast and it showed **inconsistent accuracy** in both one-shot and AI Servo AF modes. The Sigma 150 focuses even more slowly in low light. A 3-position focus limiter switch (seen above) helps with the speed issue - it prevents long distance hunting. On a macro lens, focusing from very close to infinity or reverse takes some time even on the fastest focusing lens. You can limit the Sigma 150's focus distance range to between 15" and 20" (.38m and .52m), 20" (.52m) and infinity - or the full range can be allowed.

This is far from the slowest or most-inconsistent autofocusing lens I've used but definitely is not the best in this regard. Fortunately, most macro photography is done using manual focusing which makes any autofocus inconsistencies and speeds irrelevant. This is a really nice 150mm telephoto lens that could be even better for general purpose and sports use if it had fast and accurate AF.

Model	MFD	MWD	MM	12mm ET	25mm ET	1.4x	2x
Canon EF-S 60mm f/2.8 Macro USM Lens	7.9" (200mm)	3.5" (90mm)	1x	1.28x	1.61x	N	N
Tamron SP 90mm f/2.8 Di Macro Lens	11.4" (290mm)	3.9" (99mm)	1x			Y	Y
Canon EF 100mm f/2.8 USM Macro Lens	12.0" (300mm)	6.0" (150mm)	1x	1.19x	1.39x	N	N
Canon EF 100mm f/2.8 L IS USM Macro Lens	11.8" (300mm)	5.9" (146mm)	1x	1.17x	1.37x	N	N
Sigma 105mm f/2.8 EX DG Macro Lens	12.2" (310m)	4.8" (122mm)	1x			N	N

Sigma 150mm f/2.8 EX DG HSM Macro Lens	15.0" (380mm)	7.6" (194mm)	1x			Y	Y
Canon EF 180mm f/3.5 L USM Macro Lens	19.2" (480mm)	9.5" (240mm)	1x	1.09x	1.21x	Y	Y
Sigma 180mm f/3.5 EX DG APO HSM Macro Lens	18.0" (460mm)		1x			Y	Y
Tamron SP 180mm f/3.5 Di LD Macro Lens	18.5" (470mm)		1x			Y	Y

Like all true macro lenses, the Sigma 150mm f/2.8 EX DG HSM Macro Lens has a very short MFD (Minimum Focus Distance). The chart above shows many of the available-at-this-time macro lenses along with their respective focus-related specs including MWD (Minimum Working Distance). MWD is the distance from the end of the lens (vs. the film/sensor plane) to the subject with the lens focused at its MFD. These measurements are without lens hoods in place. Insects and other living things generally prefer you to keep your distance. Obviously, the longer focal length lenses allow for the longest working distances at their maximum magnification - which is 1x or 1:1 for all listed lenses. At 1x, the subject is reproduced at its actual size on the camera sensor. Of course, the subject at 1x on the sensor will appear far larger than life size on even a 4x6 print.

With many currently-available macro lenses hovering around the 100mm and 180mm focal lengths, the Sigma 150 stands alone in the middle. It provides a very nice compromise in size, weight, working distance and cost in addition to focal length while retaining the f/2.8 aperture.



Without Hoods | With Hoods

Three great macro lenses. Shown above from left to right are the [Canon EF 100mm f/2.8 Macro USM Lens](#), [Sigma 150mm f/2.8 EX DG HSM Macro Lens](#) and [Canon EF 180mm f/3.5 L Macro USM Lens](#). Note that the Sigma 150 is wearing a Canon rear lens cap. The rear Sigma cap is slightly lower profiled - the Canon cap enables an apples to apples size comparison. Use the mouse-over text links under the image to see the lenses with their hoods in place.

With their hoods installed, the Sigma 150mm f/2.8 EX DG HSM Macro Lens is a similar length to the shorter focal length Canon 100mm Macro Lens. Its weight, however, is more in line with its inbetween focal length.

Model	Weight	Dimensions w/o Hood	Filter
Canon EF-S 60mm f/2.8 Macro USM Lens	11.8 oz (335g)	2.9 x 2.7" (73.0 x 70.0mm)	52mm
Tamron SP 90mm f/2.8 Di Macro Lens	14.3 oz (405g)	2.8 x 3.8" (71.0 x 97.0mm)	55mm
Canon EF 100mm f/2.8 USM Macro Lens	21.1 oz (600g)	3.1 x 4.7" (79.0 x 119.0mm)	58mm
Canon EF 100mm f/2.8 L IS USM Macro Lens	22.1 (625g)	3.1 x (77.7 x 123mm)	67mm

	oz		4.8"		
Sigma 105mm f/2.8 EX DG Macro Lens	15.8	(450g)	2.9 x 3.7"	(74.0 x 95.0mm)	58mm
Sigma 150mm f/2.8 EX DG HSM Macro Lens	32.0	(895g)	3.1 x 5.4"	(80.0 x 137.0mm)	72mm
Canon EF 180mm f/3.5 L USM Macro Lens	38.4	(1090g)	3.2 x 7.3"	(82.5 x 186.6mm)	72mm
Sigma 180mm f/3.5 EX DG APO HSM Macro Lens	33.6	(965g)	3.2 x 7.1"	(80.0 x 182.0mm)	72mm
Tamron SP 180mm f/3.5 Di LD Macro Lens	32.0	(921g)	3.3 x 6.5"	(84.0 x 165.0mm)	72mm

Common with Sigma's other EX lenses is the 150 macro's solid build quality. The important-for-a-macro-lens focus ring is nicely sized and reasonably smooth with no play or wobble. This is a mid-weight, mid-sized lens that feels very nice in your hands (with the exception of the raised focus limiter switch and the tripod collar). Handholding this lens is not a problem.

The Sigma 150 Macro comes with a tripod collar and lens hood that share the matte Sigma EX finish with the rest of the lens. I attribute this finish to the not-smooth function of both of these parts. The hood is hard to install/remove and the smooth-lined tripod collar slip-sticks. I suspect that both will break in over time. I find that some people really like the Sigma EX finish and others do not. It does show dirt more readily than the Canon lens finishes and is harder to clean (try using non-residue tape for this purpose).

The tripod collar is removable without removing the lens from the camera - just don't do this by accident when the camera is on a tripod. The placement of the tripod collar knob at 90 degrees from the tripod foot makes adjustment on a tripod easy, but makes the lens less comfortable to handhold. Canon places their knobs closer to the foot itself. Again, the collar can be removed.

Installing the lens cap is very difficult with the hood in place. A 72mm Tamron center-pinch lens cap would solve this problem. A padded case is included in the box. A belt loop would be a nice improvement for an otherwise very nice case that does include a shoulder strap



The Sigma 150mm f/2.8 EX DG HSM Macro Lens is available in Canon (reviewed), Nikon (D), Sigma 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, the possibility exists that a new body might not support an older third party lens. Though not common, this has happened. 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).

The use list for a macro lens is huge - our world is full of interesting little subjects. It doesn't take a large studio or huge lights to produce high quality macro photographs. And it is fun.

Even though I'm not enamored with the Sigma 150 Macro's AF performance, it is still a good medium length telephoto lens - which also has many uses. I would avoid actions sports, but portraits are a good use - especially on a full frame body. The f/2.8 aperture produces a nicely-blurred background at this focal length.

For the price, it is not hard to justify buying the Sigma 150mm f/2.8 EX DG HSM Macro Lens over the also excellent [Canon EF 100mm f/2.8 USM Macro Lens](#). The Canon has much better AF, less light fall-off and costs less - until you add the optional lens hood and tripod collar. The Sigma's longer focal length provides some extra working distance and a narrower angle of view (less background that is more diffusely blurred). The Sigma is heavier and arguably has less general purpose use on a 1.6x FOVCF body. Being compatible with [Sigma's Extenders](#) increases the versatility of the 150.

The [Canon EF 180mm f/3.5 L USM Macro Lens](#) is my most-used and most-preferred macro lens. Its biggest drawback is the price. The next is the super-slow (slower than the 150) autofocus (but it is accurate). And size is the next. The Sigma 150 gives you much of the 180's focal length at a far lower cost.

I would definitely chose the Sigma 150mm f/2.8 EX DG HSM Macro Lens over the [Tamron SP 90mm f/2.8 Di Macro Lens](#) or the [Sigma 105mm f/2.8 EX DG Macro Lens](#).

In summary, the Sigma 150mm f/2.8 EX DG HSM Macro Lens delivers **excellent optical quality** but only fair AF performance in a **solid package** at a **very reasonable price**. It very well could be the best macro lens option for you personally.

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