

On the disc

Load up the *Digital Photographer* cover disc to view a selection of test shots captured by our reviewer

Sigma EX 300-800mm f5.6 DG HSM

SRP PRICE £5,000 The ultimate telephoto zoom lens whose reach starts where most telephoto lenses stop. We take it for a test drive



This lens has been affectionately nicknamed the 'Sigmonster' due to its rather large size along with its huge focal range. Despite the range, the lens is still only a 2.7x zoom due to the range starting where most zoom lenses would be tailing off and calling it a day!

The lens itself is built like the proverbial 'brick outhouse' and comes supplied with a massive tripod bush and metal lens hood, all contained in a purpose-made semi-soft case. The case is the worst thing about the whole package and badly needs re-designing. Twin zips, which are far too lightweight for the job, open the front of the case to allow access to the lens that is cosseted inside it. Don't get us wrong, the lens is well protected, but the whole box-shaped case is a nightmare to carry!

A strong, single strap is provided, which is fine until you put it on your shoulder. Due to the shape and weight, it just won't stay there. Twin straps, so that the lens can be carried on your back, would be much more usable and we found it far easier to mount the lens on a tripod and use the tripod as a carry handle over your shoulder – the case stayed in the boot of the car!

As stated, the lens is well built, as you would expect for the price that you are paying here. The AF/MF switch is in the usual place and forward of that is a drop-in filter slot, with a pair of lugs that need to be pinched to remove the filter. Immediately in front of that is a ring for turning filters once in place, which is useful for landscape photographers in particular, and next is a collar with a substantial strap mount for a carrying strap. Some 70mm up the lens,

Best for...

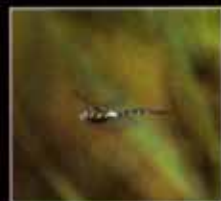
Ultra telephoto work including wildlife and birds or covert situations where approach is difficult. The silent focusing will also help in this respect, as sudden sounds could scare off your subject and with this lens that is less likely.

passing the nameplate on the way, is the zoom control ring. Despite being big enough to get your whole fist around it, it is nicely torqued and smooth in operation. About a third of a turn, clockwise as you hold the camera, takes you from 300mm through to the 800mm mark.

Next up is a distance window marked in metres and feet, although there is no attempt at a depth-of-field scale, which is a shame. The manual focus ring steps up in diameter next and is again big enough for virtually your whole hand, but is finger-light in use. Just under half a turn takes you through the whole focus range. The ring does not turn during autofocus, although full-time manual override is available should you need it. The HSM focus system is

■ [Above] Though the weight is the main drawback, the long focal range justifies it

In detail: features



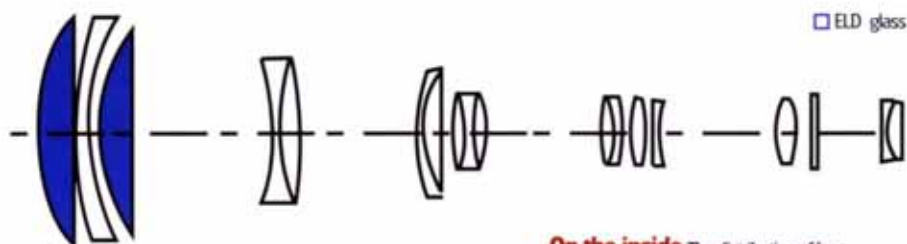
DEPTH OF FIELD: The depth of field is minimal at f5.6, meaning that there is plenty of scope to produce creative compositions, whatever your chosen genre of photography.



BUILD DESIGN: The weight of the lens is the only drawback – a single shot handheld was all we could manage and it still shows a touch of camera shake!



MINIMUM FOCUS: At 6m the minimum focus distance is challenging with the focal lengths achieved. Still the lens does a sterling job when it comes to wildlife work.



On the inside The distribution of lens elements along the barrel of the Sigma EX 300-800mm f5.6 DG HSM

“With a constant aperture of f5.6 throughout the focal lengths and excellent performance wide open, there is very little to criticise”

responsive and silent in use, and we found it snapped into place quickly. Another step up in diameter follows before you reach the massive tripod collar. A knob on the left side frees the collar to rotate, or, more correctly, for the lens to rotate in it. The shoe doubles up as a carry handle with the end sporting the second strap mount.

Forward of the collar, the lens takes a couple more hikes in diameter before reaching the massive front element. The large metal hood mounts around this, with a bayonet fit supported by a screw-in knob to

fix it in place or reverse it for storage in that case, with a supplied ‘bucket’ type lens cap held on with velcro.

There is no way that anyone is going to hand hold this lens, though we did try and fail to do so for more than one shot, but it does balance well on the tripod mount. It even performs well enough when propped on a beanbag on the sill of a hide window, if a tripod is just not feasible. When on the beanbag, the constant length and lack of moving parts during focusing make it easy to use. A nice touch would be a focus limiter, but that is just being greedy. With a lens of this size and focal length, get the support right and you are well over half way to achieving sharp pictures. Once supported, it is not going to move far whatever camera is mounted on the back of it.

The optical qualities of the lens make it worth carrying the weight along with you. It is sharp throughout the range, has excellent contrast and good neutral colour rendition. With a constant aperture of f5.6 throughout the focal lengths and excellent performance wide open, there is very little to criticise. Distortion is almost immeasurable with figures of less than a half of one percent at both ends of the zoom. Chromatic aberrations are also non-existent until refraction kicks in at smaller apertures and even then they are well controlled. The only nit-pick we could come up with, and that is not really a quality problem, is the close focus distance of six metres, which is a rather long way off!

Technical data

Manufacturer	Sigma
Model	EX 300-800mm f5.6 DG HSM
Price	£5,000
Web	www.sigma-imaging-uk.com
Phone	01707 329999
Elements/construction	18 elements in 16 groups
Angle of view	8.2-31°
Max aperture	f5.6
Min aperture	f22
Min focus distance	6m
Mount	Sigma, Canon, Nikon
Filter size	46mm rear drop-in
Length	544mm
Diameter	156.5mm
Weight	5,880g

Verdict

Features **10/10**

■ Exceptionally long reach and a constant aperture along with almost prime-like optical performance and rapid focusing, makes this a feature-packed lens.

Build quality **9/10**

■ Tank-like engineering and well-balanced on the tripod mount in a weight that is heavy but manageable. For a lens of this capability, the weight is more of a reassurance than a hindrance.

Performance **9/10**

■ Great optics combined with silent focusing and a reasonable, fixed, maximum aperture for the focal length, make for a good item of kit.

Quality of results **9/10**

■ Great control of distortion along with clean, sharp images and good contrast. You are getting quality that more than justifies the price tag.

Value for money **9/10**

■ For the focal length there is nothing to match it at any price, though it is one just for the professionals at £5,000.

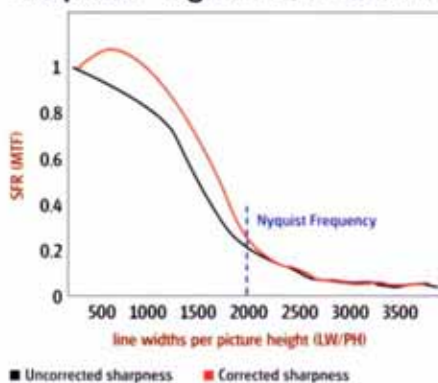
Total

The bulk of the lens is the only area where any problems occur.

92%

Getting it to and from a shoot is worth the effort, as it gives superb results.

Sharpness – Sigma EX 300-800mm



Test results The results from Imatest show that the long end is as good as the wide end of the lens.



SHARPNESS: The lens is sharp at all apertures, with the long end as good as the wide end for consistent results every time – that’s what you’re paying for after all!



FOCUS: On a Nikon D200, the lens is capable of keeping up with birds in flight. This shot, for example, was taken with the following setup: 1/500sec at f8 and 800mm, ISO 200.



ZOOM RANGE: The lens covers an amazing range that is unsurpassed by anything else on the market. A true pro lens that’s highly recommended.