September, 2016

S | Sports

SIGMA 500mm F4 DG OS HSM

Introducing the flagship lens of the Sports line

1. Outstanding functionality for challenging shoots.
2. Top-level optical performance.
3. Functions that satisfy the demands of professional photographers.
4. Customization and flexible adjustment for convenience or a specific purpose is possible.
5. SIGMA GLOBAL VISION product lines are setting new benchmarks for image quality





Launch: TBD

Accessories: Case, Hood (LH1388-01) and WR Protector. Lens is equipped with fixed tripod socket.

Corresponding AF mounts: SIGMA, Canon and Nikon

*The Appearance and specifications are subject to change without notice.

This lens combines top-level optical performance with outstanding functionality for challenging shoots.

Introducing the flagship lens of the Sports line

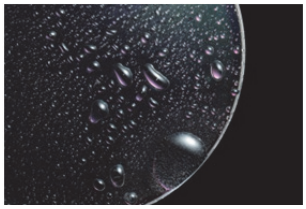
Covering all the essence. Portable, durable and of a high-standard – A Masterpiece of hyper-telephoto lens. Photographers typically choose a prime lens when they require top image quality. However, the new flagship lens of our Sports line, the SIGMA 500mm F4 DG OS HSM fulfills this need while incorporating SIGMA's latest technologies and delivering a full range of advanced features and functions: enhanced dust- and splash-proof construction, Optical Stabilizer (OS) system, SIGMA Tele Converter compatibility, AF function switch, SIGMA's latest-generation Hyper Sonic Motor (HSM), and more. Combining top-level optical performance with functionality for challenging shoots, SIGMA 500mm F4 DG OS HSM | Sports sets a new standard for high-performance telephoto lenses.

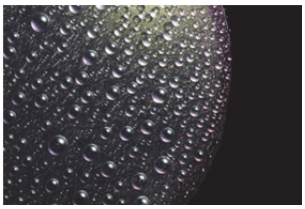
[Key features]

1. Outstanding functionality for challenging shoots.

- Enhanced dust/splash-proof construction and available exclusive Protector

  Designed for top performance in tough shooting conditions, the SIGMA 500mm F4 DG HSM | Sports features highly effective dust- and splash-proof construction. The front of the lens features a water- and oil-repellent coating that allows water to be wiped away easily and helps prevent oil from sticking to the surface. This feature is particularly useful when shooting in a drizzle or near ocean spray. The lens is compatible with the exclusive SIGMA Protector LPT-11 (sold separately), which effectively helps prevent damage to the lens during shooting and maintenance.

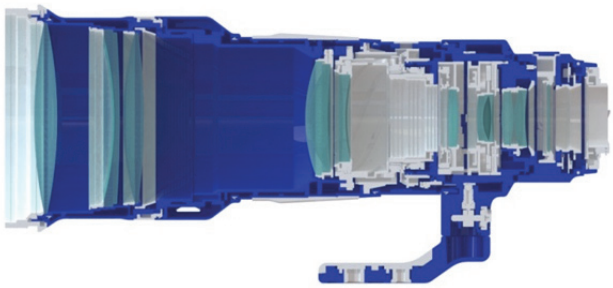






● Magnesium alloy barrel

To help minimize the weight associated with a hyper telephoto lens, the lens barrel is made with a magnesium alloy. Both lightweight and tough, this alloy contributes to the outstanding maneuverability of SIGMA 500mm F4 DG HSM | Sports.



● Carbon fiber hood

The lens hood is made of carbon fiber, which is both lightweight and strong. In fact, the entire lens is designed to be lightweight for outstanding performance in tough shooting conditions.

● Tripod socket with 90° click stops

Since photographers often prefer to use a hyper-telephoto lens with a monopod or tripod, the lens features a large and extremely stable tripod socket. Antistatic nickel plating on the socket



parts help enhance the quality and durability of the 90° click stops, which make it easy to switch between vertical and horizontal shooting positions. The click position may be canceled by turning off the “de-clicking” switch. The lens also comes equipped with a dedicated strap for the tripod socket, making it easy to carry equipment without undue stress on the camera mount.

* Tripod socket cannot be detached from the lens

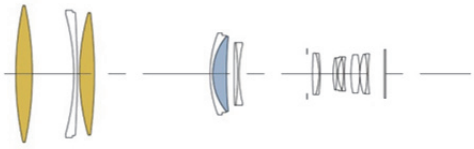
*Strap included

- Nikon electromagnetic diaphragm mechanism included

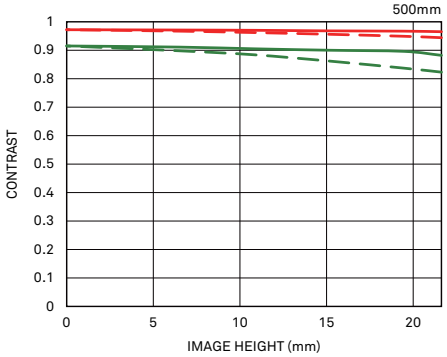
The lens for the Nikon camera includes the electromagnetic diaphragm mechanism and is able to receive the appropriate signals from the camera body. This feature ensures precision diaphragm control and stable Auto Exposure (AE) performance during continuous shooting.

2. Top-level optical performance

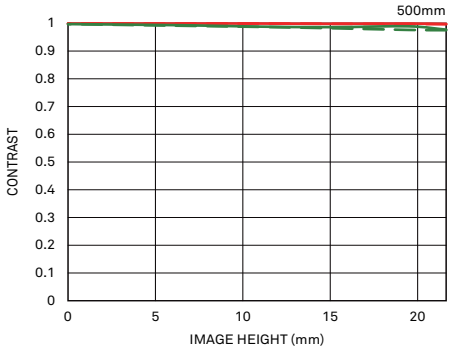
The lens incorporates two FLD and one SLD glass elements, while the optimized power distribution helps minimize spherical aberration and axial chromatic aberration. The optical system also effectively minimizes transverse chromatic aberration, which can affect the edges of the shots taken in the telephoto range. In addition, image quality remains exceptional when the lens is used with a SIGMA Tele Converter (sold separately).



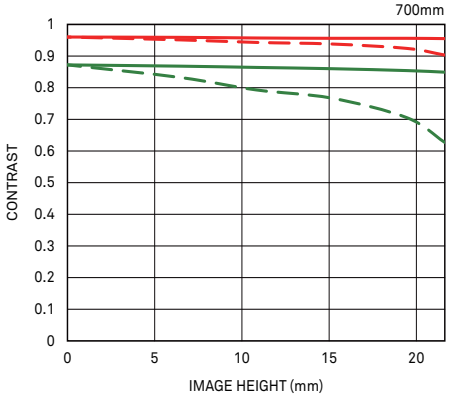
Diffraction MTF



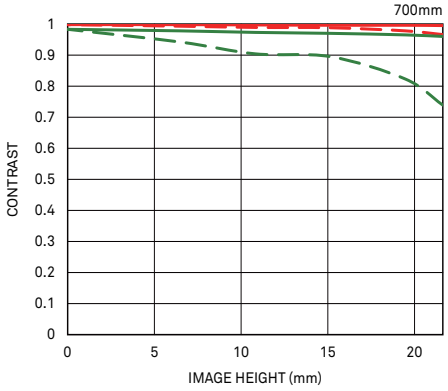
Geometrical MTF



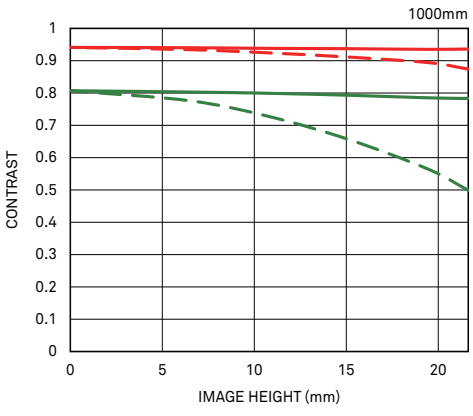
Tele Converter 1.4



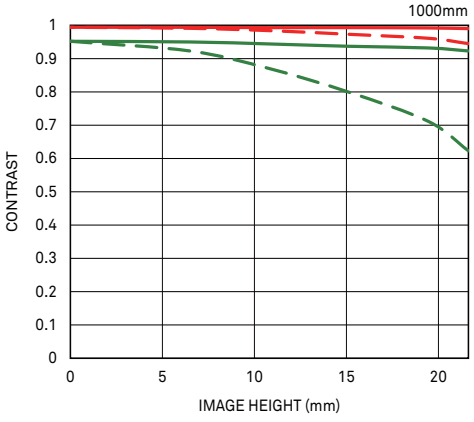
Geometrical MTF



Tele Converter 2.0



Geometrical MTF



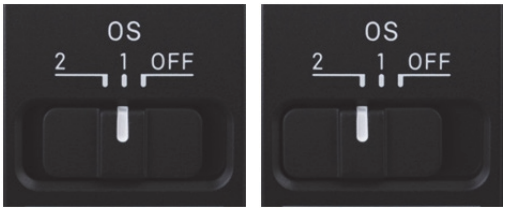
- Circular PL Filter RCP-11 is a drop-in polarized filter (sold separately).

Circular PL Filter RCP-11 is a drop-in filter that can easily be rotated while the lens is in use. (A protector that is inserted in a slot at the rear of the lens comes with the lens as standard equipment.)

3. Functions that satisfy the demands of professional photographers.

- OS system with acceleration sensor and new Intelligent OS algorithm

The Optical Stabilizer (OS) system features an acceleration sensor to deliver even more precise performance and up to approximately four stops of stabilization. Two OS modes are available: Mode 1 for general photography and Mode 2 for motor sports and other applications requiring panning. In Mode 2, the acceleration sensor teams up with the Intelligent OS and its updated stabilization algorithm to deliver effective stabilization while you move the camera horizontally, vertically, or diagonally—regardless of the position of the lens. This feature helps ensure effective panning and outstanding capture of moving subjects.



- AF function switch with preset AF modes

The AF function switch allows you to set your own autofocus specification. The lens can remember the focus position of your choice or turn off AF until it is needed.

Note: Image is for SIGMA mount lenses. Available switch functions may vary by mount.



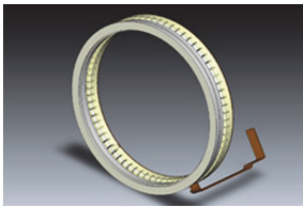
- Manual override incorporated to make two full-time manual modes switchable.

In addition to AF/MF, MO (Manual Override) is incorporated as one of the options of the focus mode switch. By setting it to the MO position, it switches to manual focus by rotating the focus ring even during continuous AF. With AF position, standard full-time manual focus is available. Using the optional

SIGMA USB DOCK, it is possible to adjust the MO position's sensitivity to switch to manual focus.

● Quieter and Faster "Optimized AF"

The HSM (Hyper Sonic Motor) ensures high speed and quiet AF. With the further enhanced AF algorithm compared to previous models, continuous AF (AF-C) improves the focusing efficiency.



4. SIGMA Tele Converters, mount converters, and USB DOCK make possible customization and flexible adjustment for convenience or a specific purpose.

● AF is effective even when Tele Converters are attached





Tele Converters that are newly designed to match the new lens line-ups (optional) can be attached. The addition of SIGMA's TELE CONVERTER TC-1401 or TELE CONVERTER TC-2001 produces a AF 700mm F5.6 hyper-telephoto lens or a AF 1000mm F8 hyper-telephoto lens respectively.

* When shooting subjects with low contrast or luminosity value, focus may not be spot on the subject.

● Compatible with Mount Converter MC-11

Mount Converter MC-11 allows you to use your SIGMA SA mount and SIGMA EOS mount (Canon-compatible) interchangeable lenses with the Sony E-mount camera body. Owners of multiple camera systems can now get even more out of their valuable lens assets.

● SIGMA USB DOCK - Customizable to your needs



Customization including firmware updates, focus adjustment, setting of full time manual operations as well as adjustment of the timing to switch to MF when rotating the focus ring is available with the optional SIGMA USB DOCK, by connecting it with the dedicated software “SIGMA Optimization Pro” on a computer. With this lens, custom mode that can be set depending on the photography situation is available by switching it on the lens. Through custom mode, it is possible to set AF speed, focus limiter where desired focus range can be adjusted, and OS where one of the patterns for optical stabilizer can be selected from “Dynamic View Mode”, “Standard” and “Moderate View Mode”.

5. SIGMA GLOBAL VISION product lines are setting new benchmarks for image quality

[Sports]

Sophisticated optical performance and expressiveness-

High action-capture performance, enabling photographers to get the exact shots they want.

SIGMA is organizing all its interchangeable lenses into three product lines; Contemporary, Art, and Sports. While offering sophisticated optical performance and expressiveness, our Sports line lenses deliver high action-capture performance, enabling photographers to get the exact shots they want. With these lenses, fast-moving subjects even at distance can be well captured. This high-performance line also offers a variety of functions to aid the photographer in challenging conditions and scenarios. Besides sports photography, these lenses are also perfect for nature shots featuring birds and wildlife, as well as aero photography, trains, motor sports photography and portraits. Another major feature of our Sports line lenses is their wide range of customization options: using the dedicated software, all sorts of settings can be tailored to the personal preferences of the photographer.

[SIGMA GLOBAL VISION]

SIGMA Global Vision" - SIGMA is working on its full renewal of the products, and the new lens lines share all the following elements.

● Evaluation with SIGMA's own MTF measuring system "A1*"

We used to measure lens performance with an MTF measuring system using conventional sensors. However, we've now developed our own proprietary MTF (modulation transfer function) measuring system (A1) using 46-megapixel Foveon direct image sensors. Even previously undetectable high-frequency details are now within the scope of our quality control inspections. The SIGMA 500mm F4 DG OS HSM | Sports will all be checked using this "A1" before they are shipped.

*A1:Aizu 1

● "Made in Japan" with the best craftsmanship

● Applicable for the Mount Conversion Service that enables lenses to be long term assets



Over the years, Sigma has manufactured an extremely wide variety of interchangeable lenses. Leveraging our unique know-how and resources, we present our new mount conversion service, which is available for the interchangeable lenses from our new product lines. Sigma will convert the current lens mount internal components, allowing you to continue using your favorite Sigma lens with a different camera body. Thanks to this service, you can use a favorite lens for many years to come, unrestricted by your original choice of camera system.

Note: Sigma's mount conversion service differs from ordinary repairs and product support and is not offered at your local
Sigma dealer or camera store. In order to apply for the service, please contact your nearest authorized subsidiary/ distributer of Sigma.

[Other Features]

- Brass made bayonet mount
- Flare and ghosting reduction
- Incorporating Rounded Diaphragm

[Specification] All figures calculated for SIGMA.

Lens Construction: 16 elements in 11 groups

Minimum aperture: F32

Filter size: ø46mm (Rear)

Angle of view (35mm): 5°

Minimum focusing distance: 350cm/137.8in.

Dimensions (Diameter x Length): ø144.8mm x 380.3mm/5.7in. x 15in.

Number of diaphragm blades: 9 (Rounded diaphragm)

Maximum magnification ratio: 1:6.5

Weight: 3,310g/116.7oz.

[Contact]

For the further information, please find the nearest authorized Sigma Service Station from the link below.

http://www.sigma-photo.co.jp/english/network/

[Information]

SIGMA GLOBAL VISION: http://www.sigma-global.com