

## Sigma 18-300mm F3.5-6.3 DC MACRO OS HSM/DC MACRO HSM

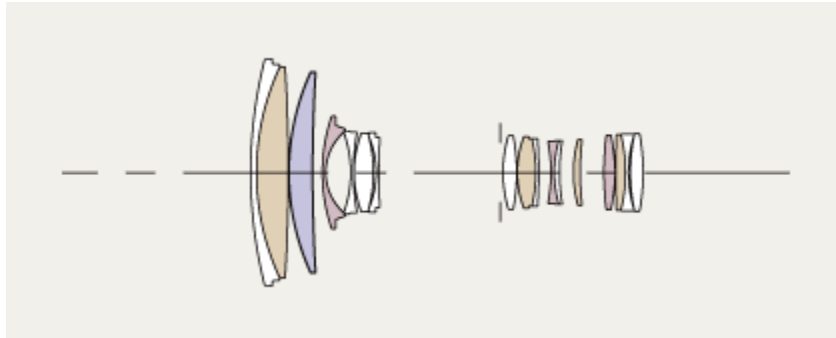


LENS HOOD LH780-07  
(Supplied)

[Corresponding Digital SLR Camera](#)

ASP | OS | HSM | IF

### Lens Construction



- FLD glass
- SLD glass
- Aspherical lens

### Specifications

**Lens construction** : 17 Elements in 13 Groups

**Angle of view (for SD1)** : 76.5 - 5.4 degrees

**Number of blades in diaphragm** : 7 Blades(Rounded Diaphragm)

**Minimum aperture (W)** : F22

**Minimum focusing distance** : 39cm / 15.4in.

**Maximum magnification** : 1:3

**Filter size** :72mm

**Diameter x length** :79mm x 101.5mm / 3.1in. x 4.0in.

**Weight** :585g/20.6oz.

### **Corresponding AF Mounts**

[18-300mm F3.5-6.3 DC MACRO OS HSM]

SIGMA / NIKON / CANON

[18-300mm F3.5-6.3 DC MACRO HSM]

SONY / PENTAX

### Corresponding Digital SLR Camera

DC lenses have an image circle that covers APS-C size image sensors. Not for use on digital cameras having image sensors larger than APS-C size or on 35mm or APS film cameras, as vignetting will occur. The angle of view varies depending on which camera the lens is mounted on. To find the 35mm camera-equivalent focal length, multiply the DC lens focal length by the crop factor (digital multiplier) of 1.5, 1.6, or 1.7, depending on the brand of DSLR camera on which the lens will be used. To find which DC lens is equivalent to a full-frame lens, divide the focal length of the full frame lens by the same crop factor.

Sony and Pentax mounts are not incorporated with OS function.

AF will not function with Pentax ist\* series and K100D DSLR cameras that do not support HSM.

The appearance and specification are subject to change without notice.

## **Emphasizing image quality. This is a SIGMA's new all-in-one lens.**

Who decides it is impossible to combine portability with image quality? It is understood that the relationship between optical performance and shape of lens is more like trade-off, and we may need to prioritize one over the other. A high ratio zoom lens often requires compactness and enhancement of additional features, to be capable enough to cover various shooting scenes with convenience and versatility. However, SIGMA still believes that image quality is what matters the most. When travelling with minimal equipment the lens needs a wide zoom range especially as a telephoto lens may be needed unexpectedly without time to switch lenses. Even with a high ratio zoom lens, our goal is to satisfy enthusiastic photographers with the versatility of the lens and its optical performance. Therefore, we sought for the point where all the pieces, such as specification, performance and size, fall into place, and this lens is the fruit of this journey. This is good either as your first interchangeable lens or as a high performance all in one lens. Enjoy the performance of a high ratio standard zoom lens that has "the highest standard for excellent image quality based on each concept", of which product lines Sigma has renewed and established with Sigma Global Vision.

## **1. Incorporates 4 FLD and 1 SLD glass elements, and minimizes chromatic aberration. It makes a difference in the rendering performance toward the telephoto-end.**

### **Excellent optical performance that satisfies experienced users**

This lens incorporates 4 FLD (“F” Low Dispersion) glass elements, which have performance equal to fluorite plus 1 SLD (Special Low Dispersion) glass element. It enables this lens to minimize the chromatic aberration, especially toward the telephoto-end, and provide clear image quality with high color fidelity.

\* FLD glass is the highest level low dispersion glass available with extremely high light transmission. This optical glass has a performance equal to fluorite glass which has a low refractive index and low dispersion compared to current optical glass. It also benefits from high anomalous dispersion. These characteristics give excellent correction for residual chromatic aberration (secondary spectrum) which cannot be corrected by ordinary optical glass and ensures high definition and high contrast images.

### **Accumulated lens technology leads to superior image quality**

The most appropriate optical glass elements are selected to optimize all focal lengths of the lens. From wide angle to telephoto and macro ranges, it offers superior image quality throughout the entire zoom range. It compensates for the distortion very well, especially at wide-end, and carries extraordinary expressive capability from the center to the corners.

## **2. Newly Developed OS system**

### **Renewed OS system for higher compensation**



No Optical Stabilizer



With Optical Stabilizer

By reviewing the system construction and the algorithm of firmware, 3.5 steps compensation has been achieved.

\* Based on CIPA's guideline. Measuring at tele-photo end, when it is attached to the camera with APS-C image sensor.

\* The lenses for SONY and PENTAX do not incorporate the OS function.

**3. A close-up lens is exclusively developed for this product (sold separately), which will not affect the optical performance of the original lens. It offers a maximum magnification ratio 1:2 and changeable angles of view enables zoom-macro photography.**

**Exclusive close-up lens (optional accessory)**



CLOSE-UP LENS

The minimum focusing distance of the lens is 39cm, its maximum magnification ratio is 1:3 and the working distance is 14cm, which is similar to macro lenses. In addition to this, a close-up lens, AML 72-01 (optional accessory), is developed exclusively for this product. It makes the rendering very constant across the zoom range, and it enables higher performance in macro photography at 1:2. Even when this close-up lens is attached, the image taken at maximum magnification ratio, at 300mm, infinity, shows very little difference in MTF.

\* Focus is at infinity, and the recommended shooting range is 80-300mm.

**Zoom-macro for enhanced macro photography**

Just by rotating the zoom ring, it enables photographers to take close-up pictures of subjects such as jewelry and flowers. Maximum magnification ratio at respective focal lengths is indicated on the lens barrel, thus it is

easy to see what the object size will be at the sensor. Furthermore, in order to secure a clear field of view, the design of this lens is very thorough, even down to the precise position of the engraved letters on the lens.

#### **4. New product lines from SGV concepts that are setting new benchmarks for image quality.**

##### **[Contemporary]**

**Latest technology for high optical performance and compactness**

**High performance line corresponding with various photography situations**

SIGMA is organizing all its interchangeable lenses into three product lines; Contemporary, Art and Sports. Among the three, the Contemporary line is a high performance line which incorporates the very latest technology making it possible to accommodate both high optical performance and compactness for use in various photography situations. Sigma has solved the difficult problem of keeping the size and weight down without compromising optical performance and function with the latest technology.

##### **[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”**



46-megapixel Foveon direct image sensor

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 18-300mm F3.5-6.3 DC MACRO OS HSM will all be checked using this “A1” before they are shipped.

\* A1 : Aizu1

### **“Made in Japan” with the best craftsmanship**

All Sigma's manufacturing – right down to the molds and parts – is carried out under an integrated production system, entirely in Japan. We are now one of the very few manufacturers whose products are solely "made in Japan". We like to think our products are somehow imbued with the essence of our homeland, blessed as it is with clean air and water, and focused, hard-working people. We pride ourselves on the authentic quality of Sigma products, born of a marriage between highly attuned expertise and intelligent, advanced technology. Our sophisticated products have satisfied professionals and lovers of photography all over the world, because our manufacturing is based on genuine craftsmanship, underpinned by the passion and pride of our experts.

### **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/ distributor of Sigma.

### **SIGMA USB DOCK - Customizable to your needs**



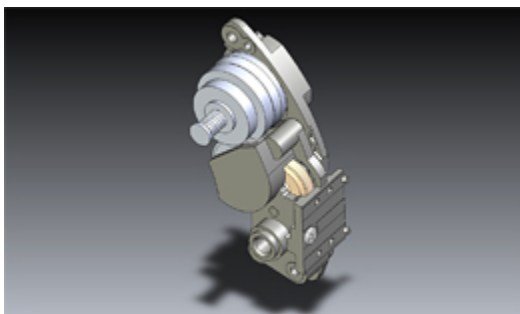
With the optional SIGMA USB DOCK and the dedicated special software “SIGMA Optimization Pro”, you can update your lens firmware, or adjust focus points by attaching this lens to a SIGMA USB DOCK connected to a computer.

### **Brass made bayonet mount**



This lens incorporates a brass bayonet mount which has both high accuracy and durability. A special treatment to reinforce its strength is applied to the surface giving it greater strength and making it highly resistant to long-term use.

### **Newly Developed Hyper Sonic Motor**



Hyper Sonic Motor

For comfortable and smooth use with the high zoom ratio, 16.6 times, it incorporates a bigger HSM (Hyper Sonic Motor) which is newly developed for this lens. It is powerful enough to ensure high speed and quiet AF.

\* For Pentax mount, if the camera body does not support HSM, auto focus will not be available.

### **Designed to minimize flare and ghosting**



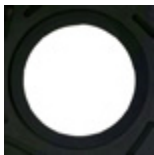
With Super Multi-Layer Coating



No Super Multi-Layer Coating

Flare and ghosting were thoroughly measured and monitored from the lens development stage to establish an optical design which is resistant to strong incidental light such as backlight. The Super Multi-Layer Coating reduces flare and ghosting and provides sharp and high contrast images even in backlit conditions.

### **Incorporating Rounded Diaphragm**



The 7 blade-rounded diaphragm creates an attractive blur to the out-of-focus areas of the image.