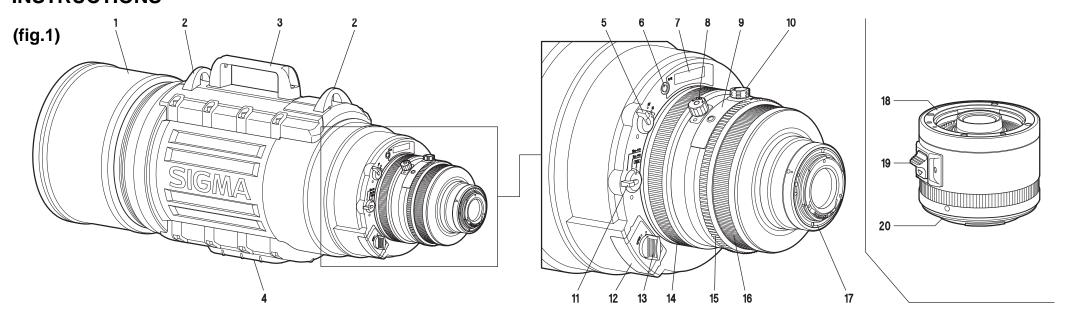
# SIGMA

# APO 200-500mm F2.8/400-1000mm F5.6 EX DG

## **INSTRUCTIONS**



Thank you very much for purchasing a Sigma Lens. In order to get the maximum performance and enjoyment out of your Sigma lens, please read this instruction booklet thoroughly before you start to use the lens.

#### PACKAGE CONTENTS / ACCESSORIES

Please make sure that the following standard accessories are included with your lens. If any of them is missing, contact the retailer from whom you purchased your lens immediately.

- 1. Lens body
- (Lens Hood, Filter Holder, DG UV Filter and Rear Cap supplied)
- 2. 400-1000mm F5.6 Attachment
- (Front Cap and Rear Cap supplied)
- 3. Safety Strap
- 4. Dedicated Circular Polarizing (C-PL) Filter
- 5. Li-ion Battery BP-21 ( Battery Cover is included )
- 6. Battery Charger BC-21
- 7. Battery Charger Cable
- 8. Carrying Case
- 9. Instruction Manual
- 10. Warranty Card
- 11. SIGMA Limited Warranty & Service Network

## **DESCRIPTION OF THE PARTS (fig.1)**

## Lens body

- 1. Lens Hood
- 2. Safety Strap Cringle
- 3. Carrying Handle
- 4. Tripod Socket
- 5. Focus Mode Switch
- 6. m/ft Switch Button
- 7. LCD Panel
- 8. Rear Barrel Fixing Knob
- 9. Filter Holder
- 10. Filter Holder Fixing Knob 11 Focus Limiter
- 12. Battery Compartment Cover
- 13. Battery Compartment Cover Fixing Knob
- 14. Zoom Ring
- 15. Filter Rotator Ring
- 16. Focus Rina
- 17 Mount

## 400-1000mm F5.6 Attachment

- 18. Mount (For attaching to the lens body )
- Lens Detachment Lever
- 20. Mount (For attaching to the camera body)

## **APO LENS**

APO lenses use high reflective index and low dispersion glass in some lens elements. This special glass normally has some tiny air bubbles but it does not affect the optical performance of your lens.

## **NIKON AF TYPE CAMERAS**

- This lens functions in the same way as a G Type auto-focus Nikon lens (without an aperture ring). Functions may be restricted depending on the lens/camera combination. For more details, please refer to the camera's instruction manual.
- The AF function of this lens can be used with cameras that support built-in lens motors.

#### SAFETY PRECAUTIONS

#### Marning !!

Using the product and disregarding this warning sign may cause serious injury or other dangerous results.

#### 

Using the product disregarding this caution sign may cause injury or

#### Marning!! (Lens and Attachment)



After attaching a lens, do not look directly at the sun, through the viewfinder. Doing so can cause damage to the eye or loss of



Do not look at the sun with the lens of your camera; otherwise you can lose your evesight.

#### The weight of this lens is very heavy. When using the safety strap, please avoid causing any injury to your body.



Do not aim your lens or camera & lens combinations toward the sun; light entering through the lens could cause damage to eves or



The mount part of the lens is complicated. Improper usage may cause injury. Please select a sturdy tripod that is capable of supporting this lens.

If the tripod is not sturdy enough, it may cause the lens to fall.



When carrying the lens body while the camera body is attached, please grip the lens from its carrying handle. If you carry the lens by holding the camera body only, the mount part of the lens or the camera body may brake.

## Marning !! (Battery and Battery Charger)



Keep batteries in a safe place out of children's reach. If a battery is swallowed, call for emergency medical aid immediately.



Do not use any battery other than the designated battery types. Doing so may cause battery explosion, battery leakage, lems



Do not use any battery other than that specified in this booklet. Otherwise, it might cause battery explosion, battery leakage, lens damage, injury or fire.



Avoid any shock, shake and drop. Ignoring this warning may cause battery explosion, or battery leakage, resulting in injury or fire



Never disassemble, short circuit, heat, batteries or put batteries into fire. Ignoring this warning may cause battery explosion, battery leakage, injury or fire.



Please only use charger with dedicated battery. Charging other battery types causes battery explosion, battery leakage, lens damage, injury or fire.



If for some reason, the camera, lens or batteries emit smoke, or if overheating or the smell of burning is detected, remove the batteries, taking care to avoid being burned, Take the camera and the lens to the retailer where you bought it, or to an authorized Sigma service station.



quidelines, rules and regulations of your community regarding the disposal of batteries.



cause fire or electric shock.

If you do not use the lens for a long period of time, remove the battery. Do not attempt to modify or disassemble this product. Doing so can



from the AC outlet immediately. It could cause fire or electric shock Do not place any heavy objects on the power cord, or pull it, bend it unduly, or heat it. It could damage the cord, and could cause fire or

If water or a foreign object gets into the battery charger, unplug



Do not use this product with AC voltage other than the specified power supply voltage (AC100V - 240V). Doing so could cause fire



Use a safety approved AC power cord as is specified by each

## ♠ Caution !! (Battery and Battery Charger)



Do not pull the AC power cord, when disconnecting the battery charger from the AC outlet. It could cause fire or electric shock due to damaged cord. Always take hold of the molded AC plug, when unplugging it from the outlet.

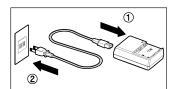


Do not cover the Battery Charger with cloth, cushions, etc. It could cause excessive heat, deform the case, and cause fire When Battery Charger is not used unplug it from the AC outlet.

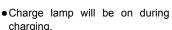
#### TO CHARGE THE BATTERY

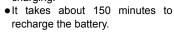
A lithium ion battery BP-21 is provided with this lens. Charge the battery, before using the camera first time. Please charge the battery by the supplied battery charger BC-21, when no charge remains.

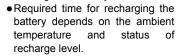
1. Connect the power cable to the charger and insert the plug into the wall outlet.



2. Attach the battery, by sliding it in the direction of the arrow, as shown in the diagram.





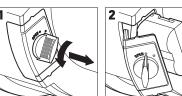


When the charge lamp goes out, charging is completed.



- Remove the battery from the charger and remove the power cable plug from the wall outlet.
- We recommend charging the battery before using the camera again. If it is not used for several days, battery performance decreases.
- In the case that the number of possible shots will decrease extremely after charging, it may indicate the end of battery life. Please purchase a new battery.

## LOADING THE BATTERY







- 1. To open the battery compartment cover, turn the battery compartment cover fixing knob counter-clockwise, as shown in the
- 2. Insert the battery until it reaches the contact points of the lens as
- 3. Insert the battery until it locks into place.
- 4. Close the battery compartment cover and then turn the battery compartment cover fixing knob clockwise to fix the battery compartment cover in place.
- If the battery compartment cover is turned in its improper position, the battery compartment cover may brake.
- Inserting the battery will "reset" the lens. Resetting the lens will set the zoom position to the wide focal length and set the focusing to the infinity, automatically. In addition, all icons in the LCD panel will blink and shooting will not be possible. It will be possible to take a picture once the lens is reset

## TO REMOVE THE BATTERY

Eject the battery by sliding the battery compartment cover latch in the direction of the arrow, as shown in the illustration.



#### **LCD PANEL**

This lens is equipped with the LCD panel. The meaning of functions displayed from the LCD panel explained below.



- Battery Indicator
- ② Focal length Indicator
- 3 Shooting range Indicator

#### **CHECKING THE BATTERY STATUS**

When the power of the camera body is on, the battery icon, which shows the capacity of the battery, is shown on the LCD panel. Explanations of the symbols are given as follows.

| No Icon       | The battery strength is sufficient.  |
|---------------|--|
| Display Icon  | The battery level is low and the battery will need to be changed soon.     |
| Blinking Icon | The power of the battery is insufficient, replace the battery immediately. |

#### SAFETY STRAP

The supplied safety strap is used to prevent the lens dropping when being attached to a tripod. Please attach the safety strap to the safety strap cringle.

- When carrying the lens body, please hold the carrying handle. Do not use safety strap for carrying the lens.
- The weight of this lens is very heavy. When using the safety strap, please avoid causing any injury to your body.

#### FIXING THE LENS BODY TO THE TRIPOD

- The weight of this lens is very heavy. Please select a sturdy tripod for this lens that will be capable of supporting it.
- To avoid dropping it, please attach or remove the lens to the tripod with more than two people.
- The tripod socket of this lens has three screw holes. Both sides are used for popular 1/4 inch screw and the center hole is used for 3/8 inch screw
- The mount can be rotated counter-clockwise by loosening the rear barrel fixing knob. It is possible to change the attaching camera to vertical or horizontal, easily.
- The Carrying Handle has two holes, which can be used as a sighting device when you first target the subject. Please aim the lens at your subject while looking through these holes.

## ATTACHING TO CAMERA BODY

When this lens is attached to the camera body it will automatically function in the same way as the camera manufacturer's lens. Please refer to the instruction booklet for your camera body.

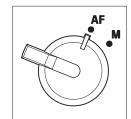
• On the lens mount surface, there are a number of couplers and electrical contacts. Please keep them clean to ensure proper connection.

## SETTING THE EXPOSURE MODE

The Sigma lens functions automatically once attached to the camera. Please refer to the camera instruction book

## **FOCUSING**

For autofocus operation, set the focus mode switch on the lens to "AF" position. (Select the autofocus mode on your camera body for Nikon AF.) If you wish to focus manually, set the focus mode switch on the lens to the "MF" position. Manual focus can be achieved by turning the focus ring.



- This lens also permits manual focusing even in the autofocus mode. With the camera set to the One-Shot AF (AF-S) mode, it is possible to manually override the autofocus while the shutter release button is pressed halfway.
- The viewfinders of some Nikon AF cameras have indicators to display the focus status. The "• " symbol indicates that correct focus has been set, "▶" indicates that focus is set in front of the subject, and "◀" indicates that focus is set behind the subject. When this AF lens is used with Nikon AF cameras in MF mode, please adjust the lens' focus until the "• " symbol is visible.
- The shooting range value is displayed in the LCD panel. It is possible to change the indication to m (meter) or ft (feet). To change it, press the m/ft switch button.
- The value of shooting range in the LCD panel is showed is 23 steps with m (meter) or 59 steps with ft (feet) (Please refer the table 1). The nearest value in the following table will be displayed depending on the actual shooting range.

Table 1

| m                                | ft                                  |
|----------------------------------|-------------------------------------|
| 8                                | ∞                                   |
| 120 m                            | 390 ft                              |
| 60 m                             | 190 ft                              |
| 40 m                             | 130 ft                              |
| 30 m                             | 100 ft                              |
| 24 m                             | 80 ft                               |
| 20 m                             | 60 ft                               |
| 17 m ~ 2 m<br>( Display per 1m ) | 59 ft ~ 8 ft<br>( Display per 1ft ) |

#### **FOCUS LIMITER SWITCH**

This lens is equipped with the focus limiter switch, which enables a limit of the AF range.

It is possible to switch to the following three modes

- FULL ( Tele side 5m/Wide side 2m ~ ∞ )
- 5m ~ ∞
- 10m ~ ∞

# 10m-∞ <u>5m-</u>∞ FULL

#### **ZOOMING**

Rotate the Rubber grip on the zoom ring to the desired position.

• The focal length value in the LCD panel is shown is 16 steps (Please refer the table 2). The nearest value from table 2 will be displayed depending on the position of the zoom ring.

Table 2

| Without Attachment | With Attachment |
|--------------------|-----------------|
| 200 mm             | 400 mm          |
| 210 mm             | 420 mm          |
| 220 mm             | 440 mm          |
| 230 mm             | 460 mm          |
| 240 mm             | 480 mm          |
| 250 mm             | 500 mm          |
| 260 mm             | 530 mm          |
| 280 mm             | 560 mm          |
| 290 mm             | 590 mm          |
| 310 mm             | 620 mm          |
| 330 mm             | 660 mm          |
| 350 mm             | 710 mm          |
| 380 mm             | 760 mm          |
| 410 mm             | 820 mm          |
| 450 mm             | 900 mm          |
| 500 mm             | 1000 mm         |

#### **400-1000MM F5.6 ATTACHMENT**

The addition of the supplied 400-1000mm F5.6 Attachment produces twice focal length (400-1000mm F5.6) zoom lens.

#### **HOW TO ATTACH OR REMOVE**

Firstly, attach the Attachment unit to the lens body, and then attach the camera body.

To remove the Attachment from the lens body, turn the Attachment in the opposite direction, whilst sliding the lens' removable lever.

- It is not possible to use any other tele converter except the supplied Attachment with this lens.
- The supplied Attachment cannot be used with any other lenses.

## **LENS HOOD**

This lens hood helps to prevent flare and ghosted images caused by extraneous light. It is attached to the lens body before shipment from the factory

· After using the lens, please store the lens in the carrying case after attaching the lens hood.

## **FILTER**

It is not possible to attach the lens filter at the front of lens body. To attach a filter to the lens assembly, please use the filter holder that is inserted into the lens barrel near the rear of the lens assembly. This unit has a removable filter holder that fits a 72mm filter.

## **HOW TO USE FILTER HOLDER**

The DG UV filter is set in the filter

Turn the filter holder fixing knob counter-clockwise and then pull the filter holder out.

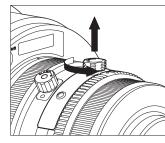
## **REMOVING THE FILTER**

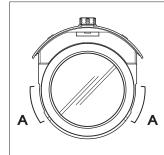
To remove the filter from the filter holder, rotate the filter counterclockwise holding part A to avoid rotating the filter holder.

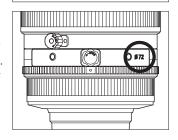
## ATTACHING THE FILTER

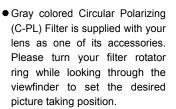
To avoid rotating the filter holder, rotate the filter clockwise holding part A. To fix the filter, please rotate the filter until it stops the rotating.

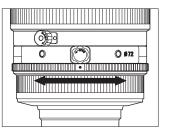
To re-install the filter holder into the lens barrel, the notation (ø72) must be on the right side of the holder while the lens faces away from you. Please insert the filter holder as far as it can go into the slot. Rotate the filter holder fixing knob clockwise to fix the Filter Holder.











- This lens has been designed to deliver optimum performance with a filter installed in the lens assembly. The quality of the picture decreases if the filter is not installed inside the lens. Please, always use a filter inside the lens assembly. Stray light and dust entering from the insertion slot of the filter holder can affect exposure and cause poor pictures if the filter holder is not in the lens assembly.
- The position of the white dot on the rotator ring is important for filters that use rotation movement as a filtering process, such as Circular Polarizing (C-PL) Filters.
- It is possible to use any other 72mm filters. However, if the filters have the thickness of more than 5mm (screw thread excluded) or diameter of more than 75mm, they cannot be attached.
- Please do not attach a PL filter except the dedicated filter supplied with this lens. If any other filter is attached, it may be impossible to remove.
- Supplied circular PL filter cannot be used with any other lenses.

#### FLASHGUNS AND AF AUXILIARY LIGHT

Vignetting will occur if the lens is used with the cameras built-in flash and AF auxiliary light. In addition, when an external flashgun is attached to the camera's hot shoe and fired, it will cause vignetting.

#### **BASIC CARE AND STORAGE**

- Avoid any shocks or exposure to extreme high or low temperatures or to humidity.
- For extended storage, choose a cool and dry place, preferably with good ventilation. To avoid damage to the lens coating, keep away from mothballs or naphthalene gas.
- Do not use thinner, benzine or other organic cleaning agents to remove dirt or finger prints from the lens elements. Clean by using a soft, moistened lens cloth or lens tissue.
- Prevent water, sand, dust and other foreign getting into the lens body. This can result in critical damage which can not be repaired. When rain or drops of water fall on the lens body, please wipe away them by clean towel.
- Sudden temperature changes may cause condensation or fog to appear on the surface of the lens. When entering a warm room from the cold outdoors, it is advisable to keep the lens in the case until the temperature of the lens approaches room temperature.

## **QUALITY ASSURANCE AND AFTER SERVICE**

Warranty terms and warranty card are on a separate sheet, attached. Please refer to these materials for details.

## **TECHNICAL SPECIFICATIONS**

## Lens body

| Lens construction         | 13 - 17                         |
|---------------------------|---------------------------------|
| Angle of View             | 12.3 - 5°                       |
| Minimum Aperture          | 22                              |
| Minimum Focusing Distance | 2m (Wide side) - 5m (Tele side) |
| Magnification             | 1:3.5                           |
| Filter Size               | 72mm (Drop in - rear)           |
| Dimensions Dia.×Length    | 236.5×726mm (9.31×28.6in)       |
| Weight                    | 15,700g (554oz)                 |

Dimensions and weight include the SIGMA mount.

## 400-1000mm F5.6 Attachment

| Lens construction      | 6 - 7                    |
|------------------------|--------------------------|
| Focal length           | 2x that of a master lens |
| Magnification          | 2x that of a master lens |
| Dimensions Dia.×Length | 71×52.8mm (2.8×2.08in)   |
| Weight                 | 288g (10.2oz)            |

Dimensions and weight include the SIGMA mount.



The CE Mark is a Directive conformity mark of the European Community (EC). SIGMA (Deutschland) GmbH

Carl-Zeiss-Str. 10/2, D-63322 Roedermark, Germany

Verkauf: 01805-90 90 85-0 Service: 01805-90 90 85-85 Fax (Service): 01805-90 90 85-35



Disposal of Electric and Electronic Equipment in Private Households

Disposal of used Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems) This symbol indicates that this product shall not be treated as household waste.

Instead it shall be collected separately for the recycling of electrical and electronic equipment. If the new products are purchased, this product might be handed over to the distributor

or the collection system of waste electrical and electronic equipment eventually. By ensuring this product is disposed of correctly, you will help prevent potential

negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product or components of this product. If this product is disposed illegally, it might cause a possibility of penalties. For more detailed information about recycling of this product, please contact your local

city office, your household waste disposal service or the shop where you have

## **SIGMA CORPORATION**

purchased the product.

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