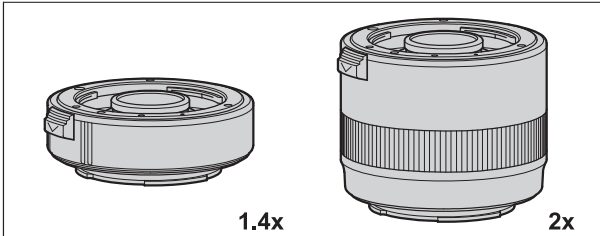


## ENGLISH

APO TELE CONVERTER 1.4x EX DG  
APO TELE CONVERTER 2x EX DG



Thank you very much for purchasing a Sigma APO Tele Converter EX DG. The Sigma APO Tele Converter 1.4x EX DG provides a 1.4x increase in the master lens' effective focal length, whereas the Sigma APO Tele Converter 2x EX DG doubles the master lens' effective focal length. These tele converters have been designed to take full advantage of the optical performance of the master lenses for which they can be used. Please read these instructions before using the Sigma APO Tele Converter EX DG. Your camera's instruction booklet also contains pertinent information about using lenses. Please refer to it along with these instructions.

### NOTICE: USABLE LENSES AND FUNCTIONS

- Sigma APO Tele Converter 1.4x EX DG and Sigma APO Tele Converter 2x EX DG are dedicated Tele Converter lenses, which should be used only with lenses listed in [Table 1]. If you mount a Sigma APO Tele Converter 1.4x EX or APO Tele Converter 2x EX to a lens that is not listed in [Table 1], it may damage the Tele Converter as well as the master lens.
- The dedicated lenses are listed in [Table 1] (as of February 2009). Please also visit our web site for latest up-to-date information.  
Web site address: <http://www.sigma-photo.co.jp/english>
- Usable range of focal length or AF working distance varies depending on the camera in use. Please refer your lens' instruction manual for details.

- PENTAX AF mount Tele Converter does not support PENTAX SF series cameras.
- Do not use more than one teleconverter at a time.

### ATTACHING THE APO TELE CONVERTER TO THE LENS

First, attach the APO Tele Converter EX DG to the master lens. Then, attach the lens and the tele converter to the camera body.

When removing the APO Tele Converter EX DG or the master lens, please rotate the lens in the direction opposite to the direction used to attach the APO Tele Converter EX DG or lens.

- When the APO Tele Converter EX DG is attached to the camera body it will automatically function in the same way as the master lens. Please refer to the instruction booklet for your camera body for details.
- If using a lens with a SONY and attaching the APO Tele Converter EX DG to the camera body first, it may cause the AF mechanism to run idle.

### FOCUSING

The lenses marked "AF" in [Table 1] will retain auto focus operation when used with a tele converter. Those lenses marked "MF" can only be used for manual focus. Please focus the lens automatically or manually according to the instructions provided for the camera or lens.

- If using lenses marked "MF" with a SONY, NIKON AF and PENTAX AF cameras, be aware that these lenses cannot focus precisely by

auto focusing. Please be sure to use the manual focusing method when using these lenses with the APO Tele Converters.

- The speed of auto focusing, when using the tele converter, may be slightly slower than without the converter.

### EXPOSURE

Using the APO Tele Converter EX DG decreases the effective aperture by one F-stop (with the APO Tele Converter 1.4x EX DG) or by two F-stops (with the APO Tele Converter 2x EX DG). However, exposure can be determined in the same manner as when using the master lens without a tele converter.

- If using a lens marked "⊙" in [Table 1], the camera's display will you the converted exposure information.
- When using a tele converter with a lens not marked "⊙" in [Table 1] while using a hand-held exposure meter, you should increase the exposure reading by 1-stop for the APO Tele Converter 1.4x EX DG or by 2-stops for the APO Tele Converter 2x EX DG.
- If using lenses equipped aperture ring with NIKON AF mount of this Tele Converter, you need to set minimum aperture depending on the camera in use. Please refer your camera's instruction booklet.
- If using lenses equipped aperture ring with PENTAX AF mount of this Tele Converter, you need to set A position depending on the camera in use. Please refer your camera's instruction booklet.

### 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.
- This lens is not waterproof. When you use the lens in the rain or near water, keep it from getting wet. It is often impractical to repair the internal mechanism, lens elements and electric components damaged by water.
- 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.

### TECHNICAL SPECIFICATIONS

	1.4X	2X
Lens construction	5 elements in 3 groups	6 elements in 5 groups
Focal length	1.4x that of a master lens	2x that of a master lens
Aperture coupling range	F2.8 - F32	F2.8 - F32
Reproduction ratio	1.4x that of a master lens	2x that of a master lens
Dimensions dia. × length	68.5 × 19.5 mm (2.7 × 0.77 in)	68.5 × 52 mm (2.7 × 2.05 in)
Weight	160g (5.64oz)	235g (8.29oz)

Dimensions and weight include the SIGMA mount.

[Table 1]

SIGMA (シグマ用)			
	1.4X	2X	
APO 50-150mm F2.8 (II) EX DC HSM	AF	AF	◎
APO 50-500mm F4-6.3 EX (DG) HSM	MF	MF	◎
APO 70-200mm F2.8 (II) EX DG MACRO	AF	AF	◎
APO 70-200mm F2.8 EX (DG) HSM	AF	AF	◎
APO 80-400mm F4.5-5.6 EX (DG) OS	MF	MF	◎
APO 100-300mm F4 EX (DG) HSM	AF	MF	◎
APO 120-300mm F2.8 EX (DG) HSM	AF	AF	◎
APO 120-400mm F4.5-5.6 DG OS HSM	MF	MF	◎
APO 150-500mm F5-6.3 DG OS HSM	MF	MF	◎
APO 300-800mm F5.6 EX (DG) HSM	MF	MF	◎
APO MACRO 150mm F2.8 EX DG HSM	AF	MF	◎
APO MACRO 180mm F3.5 EX (DG) HSM	AF	MF	◎
APO 300mm F2.8 EX (DG) HSM	AF	AF	◎
APO 500mm F4.5 EX (DG) HSM	MF	MF	◎
APO 800mm F5.6 EX (DG) HSM	MF	MF	◎
APO 70-210mm F2.8	MF	MF	
APO TELE MACRO 300mm F4 HSM	MF	MF	
APO TELE MACRO 300mm F4	MF	MF	
APO TELE MACRO 400mm F5.6 HSM	MF	MF	
APO TELE MACRO 400mm F5.6	MF	MF	
APO 300mm F2.8	MF	MF	
APO 500mm F4.5	MF	MF	
APO 800mm F5.6	MF	MF	
APO 1000mm F8	MF	MF	

CANON (キヤノン用)			
	1.4X	2X	
APO 50-150mm F2.8 (II) EX DC HSM	AF	AF	◎
APO 50-500mm F4-6.3 EX (DG) HSM	MF	MF	◎
APO 70-200mm F2.8 (II) EX DG MACRO	AF	AF	◎
APO 70-200mm F2.8 EX (DG) HSM	AF	AF	◎
APO 80-400mm F4.5-5.6 EX (DG) OS	MF	MF	◎
APO 100-300mm F4 EX (DG) HSM	AF	MF	◎
APO 120-300mm F2.8 EX (DG) HSM	AF	AF	◎
APO 120-400mm F4.5-5.6 DG OS HSM	MF	MF	◎
APO 150-500mm F5-6.3 DG OS HSM	MF	MF	◎
APO 300-800mm F5.6 EX (DG) HSM	MF	MF	◎
APO MACRO 150mm F2.8 EX DG HSM	AF	MF	◎
APO MACRO 180mm F3.5 EX (DG) HSM	AF	MF	◎
APO 300mm F2.8 EX (DG) HSM	AF	AF	◎
APO 500mm F4.5 EX (DG) HSM	MF	MF	◎
APO 800mm F5.6 EX (DG) HSM	MF	MF	◎
APO 70-210mm F2.8	MF	MF	
APO TELE MACRO 300mm F4 HSM	MF	MF	
APO TELE MACRO 300mm F4	MF	MF	
APO TELE MACRO 400mm F5.6 HSM	MF	MF	
APO TELE MACRO 400mm F5.6	MF	MF	
APO 300mm F2.8	MF	MF	
APO 500mm F4.5	MF	MF	
APO 800mm F5.6	MF	MF	
APO 1000mm F8	MF	MF	

SONY (ソニー用)			
	1.4X	2X	
APO 50-150mm F2.8 II EX DC HSM	AF	AF	◎
APO 50-500mm F4-6.3 EX (DG)	MF	MF	
APO 70-200mm F2.8 II EX DG MACRO HSM	AF	AF	◎
APO 70-200mm F2.8 EX (DG)	MF	MF	
APO 100-300mm F4 EX (DG)	MF	MF	
APO 120-400mm F4.5-5.6 DG HSM	MF	MF	◎
APO 150-500mm F5-6.3 DG HSM	MF	MF	◎
APO MACRO 180mm F3.5 EX (DG)	MF	MF	
APO 300mm F2.8 EX (DG)	MF	MF	
APO 500mm F4.5 EX (DG)	MF	MF	
APO 800mm F5.6 EX (DG)	MF	MF	
APO 70-210mm F2.8	MF	MF	
APO TELE MACRO 300mm F4	MF	MF	
APO TELE MACRO 400mm F5.6	MF	MF	
APO 300mm F2.8	MF	MF	
APO 500mm F4.5	MF	MF	
APO 800mm F5.6	MF	MF	
APO 1000mm F8	MF	MF	

NIKON (ニコン用)			
	1.4X	2X	
APO 50-150mm F2.8 (II) EX DC HSM	AF	AF	◎
APO 50-500mm F4-6.3 EX (DG) HSM	MF	MF	◎
APO 70-200mm F2.8 (II) EX DG MACRO	AF	AF	◎
APO 80-400mm F4.5-5.6 EX (DG) OS	MF	MF	◎
APO 100-300mm F4 EX (DG) HSM	AF	MF	◎
APO 120-300mm F2.8 EX (DG) HSM	AF	AF	◎
APO 120-400mm F4.5-5.6 DG OS HSM	MF	MF	◎
APO 150-500mm F5-6.3 DG OS HSM	MF	MF	◎
APO 300-800mm F5.6 EX (DG) HSM	MF	MF	◎
APO MACRO 150mm F2.8 EX DG HSM	AF	MF	◎
APO MACRO 180mm F3.5 EX (DG) HSM	AF	MF	◎
APO 300mm F2.8 EX (DG) HSM	AF	AF	◎
APO 500mm F4.5 EX (DG) HSM	MF	MF	◎
APO 800mm F5.6 EX (DG) HSM	MF	MF	◎
APO 70-200mm F2.8 EX (DG) HSM	AF	AF	◎
APO 70-210mm F2.8	MF	MF	
APO TELE MACRO 300mm F4	MF	MF	

APO TELE MACRO 400mm F5.6	MF	MF	
APO 300mm F2.8	MF	MF	
APO 500mm F4.5	MF	MF	
APO 800mm F5.6	MF	MF	
APO 1000mm F8	MF	MF	

PENTAX (ペンタックス用)			
	1.4X	2X	
APO 50-500mm F4-6.3 EX (DG)	MF	MF	
APO 70-200mm F2.8 EX (DG)	AF	AF	
APO 100-300mm F4 EX (DG)	AF	MF	
APO MACRO 180mm F3.5 EX (DG)	MF	MF	
APO 300mm F2.8 EX (DG)	AF	AF	