

## How to Attach/Detach the lens

Please follw the instrcutions provided with your camera to attach and detach the lens to and from the camera

\* When attaching/detaching the lens, be careful not to touch the electronic contacts nor crush these contacts with strong force or impact.

### Focusing

The lens is normally focused automatically when the focus mode switch is set to the Auto focus position. If the camera is in the manual-focus mode, adjust the focus by looking into the finder and turning the manual focus ring. The lens also supports focusing through the use of focusing aid.

## Exposure Modes

For the exposure mode settings, follow the applicable instructions provided in your cameras manual.

## Vibration Compensation Module

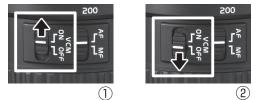
## [70~200mm F4 PRO FX VCM-S]

VCM (Vibration Compensation Module) is a mechanism that compensates vibration that occurs when taking hand-held photos. This features is particularly effective in scenes that require a low shutter speed, including when taking photos at night and in dark locations.

## <Using VCM>

VCM can be used in both AF (Auto-Focus) and MF (Manual Focus) modes. (1) Set the VCM switch to ON. (pic.①)

(2) Press the shutter button half-way down and confirm through the view finder that the object is stable, then press all the way to take the photo.



### Photography conditions

Set the VCM switch to OFF in the following photography conditions (pic.(2))

- When taking photos with the camera mounted on a tripod
- When conducting bulb (long-term exposure) photography
- Also, VCM may not be fully effective in the following types of conditions
- When moving the camera significantly during photography
- When riding in a vehicle that vibrates significantly
- When photographing an object that vibrates significantly

## Precautions

Due to the design of VCM, regardless of whether the VCM switch is set to ON or OFF, immediately after the shutter button is pressed half-way the viewfinder image may vibrate. However, this does not indicate a malfunction. Immediately after pressing the shutter button half-way, the lens conducts VCM warm-up for approximately two seconds after releasing your finger from the shutter button. During this period, a clicking sound may be heard from within the lens but this does not indicate a malfunction.

The viewfinder image may vibrate while the camera's internal flash is charging. When the VCM switch is set to ON, battery consumption is higher than normal and there is the possibility that the number of photos that can be taken on a single charge may be reduced. To prevent battery drain, set the VCM switch to OFF when you will not use the vibration correction module.

If the lens is removed while in VCM mode, a rattling sound may be heard when you shake the lens. However, this does not indicated a malfunction. The sound will disappear after you reattach the lens and press the shutter button half-way down.

## One-Touch Controllable Focus-Clutch Mechanism

## [16~28mm F2.8 PRO FX] [17~35mm F4 PRO FX]

<How to switch from the Auto focus position to manual focus position> The lens focus mode can be switched between the Auto focus (AF) and manual focus (MF) Positions at any time by moving the manual focus ring forward and backward.

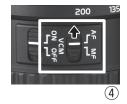
\* For both Nikon and Canon mounted lenses, it is

possible to use manual focus without switching the focus mode switch on either the camera body or the lens to the manual position. In the Auto focus position the manual focus ring turns freely.



# [70~200mm F4 PRO FX VCM-S]

# AF (Auto-Focus) <Using Auto-Focus>



# MF (Manual Focus)

time while in AF mode by rotating the focus ring. You can switch instantly to Manual Focus even during AF photography. <Using Manual Focus> (1) Set the lens AF/MF selector switch to MF. (Photo (5)) (2) Look through the viewfinder while rotating the focus ring to align the focus.

- ring to adjust the focus.

# [70~200mm F4 PRO FX VCM-S]

Tripod collar ring collar ring.



## Filters

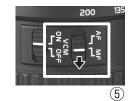
# Performance Table

Model			
Focal distance			
Depth of field			
Format			
Minimum aperture			
Optical structure (elements/			
Coating			
Angle of view			
Filter size			
Minimum focus distance			
Maximum macro Magnific			
Focusing system			
Number of aperture Diaph			
Maximum diameter			
Overall length			
Weight			
Hood			
* The specification data is based			

electronic parts.

Uses a ring-shaped ultrasonic motor to achieve high-speed and quiet auto-focus.

- (1) Set the lens AF/MF selector switch to AF. (Photo 4)
- (2) Press the shutter button half-way down to operate Auto-Focus.
- (3) A focus indicator  $[\bigcirc]$  is shown within the viewfinder once the focus is aligned. (4) Press the shutter button to take the photo.



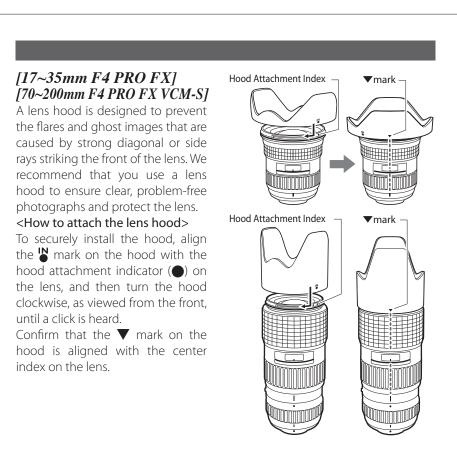
This lens features full-time manual focus, which enables MF to be used at any

\* To use Full-time Manual, set the camera to Single AF mode to align the focus and then, with the shutter button pressed half-way down, rotate the focus

A dedicated tripod collar ring (TM-705) is available as a separately sold option. For attachment instructions, refer to the User Manual included with the tripod

Use the appropriate sized threaded filters with these lenses. Be sure your filters are clear before taking a photo. Perfect photographs cannot be taken if the filter is dirty or when water droplets or other foreign particulates are on the filter. Clean the filter thoroughly before taking photographs.

\* Always use one filter at a time. If two or more filters are used together, or when a thick filter such as a polarized filter is used, vignetting (darkening at the corners of the exposed image) may occur.



## Caution Regarding Use of a Built-In Flash

If the camera's built-in flash is used, the light of the built-in flash will be partially obstructed by the lens, which casts a large shadow area. Therefore, it is recommended to use an external when using this lens.

## Flash Photograpy (Red-eye phenomenon)

When people are photographed with the aid of a flash, their eyes sometimes become red. This is called the "red-eye phenomenon". Follow the manual of your camera for information on how to remove red eye.

## Rotating course of the focus ring

It is just same as the rotating course of Nikon and Canon lenses.

\* Depending on the lens itself, a sound may be heard from inside the lens when the lens is shaken lightly. This is the sound of the ball bearings that are designed to smooth the movement of the focus ring. It does not indicate a problem with the general functioning of the lens

	16-28mm F2.8 PRO FX	17-35mm F4 PRO FX	70-200mm F4 PRO FX VCM-S	
	16 – 28 mm	17 – 35 mm	70 – 200 mm	
	F2.8	F4	F4	
	24 x 36 mm Full size exclusive for digital cameras			
	F22	F22	F22	
roups)	15 -13	13 -12	19-14	
	Multi-coating			
	107.11° – 76.87°	103.96° – 64.74°	34.45° – 12.42°	
	Cannot be attached	82mm	67mm	
	0.28 m	0.28 m	1.0 m	
ation	1 : 5.26	1:4.82	1:3.57	
	Front Inner Focusing			
ragms	9			
	90.0 mm	89.0 mm	82.0 mm	
	133.3 mm	94.5 mm	167.5 mm	
	950 g	600 g	980 g	
	Fixed lens hood	BH-821	BH-672	

ata is based on the use of the lens with a Nikon camera.

\* The " C  $\in$  " mark (certification mark for conformance with the European export inspection requirements) is shown on lenses containing