Tokina

TOKINA FIXED FOCAL LENGTH LENSES INSTRUCTION MANUAL

> 17mm f/3.5 24mm f/2.8 28mm f/2.8 400mm f/5.6

Congratulations on selecting a TOKINA lens. Before you start shooting, please read this instruction manual carefully to obtain optimum performance. We hope you will enjoy many pleasant hours of photography with this lens.

Description of Parts

- 1. Focusing Ring
- 2. Focusing Distance Scale
- 3. Infra-Red Index
- 4. Center Index
- Aperture Ring
- 6. Depth of Field Scale



(Photo: 28mm f/2.8)

Aperture

This lens can be used with SLR cameras with AE (Automatic-Exposure) mechanisms, such as TTL photometering, shutter-speed priority, aperture priority, programmed or multimode systems. When using this lens on cameras with these functions, the aperture will remain at open aperture for focusing. When the shutter is released the lens will stop down to the appropriate aperture and then return to open aperture upon completion of the picture taking operation.

NOTE: When mounting or dismounting the PK-A mount on the Pentax or Ricoh program camera systems, set the aperture ring to any position other than the "A" mark. If you mount or dismount the lens with the aperture in the "A" position, you may cause damage to your program switch pin.



Tokina Optical Co.,Ltd.

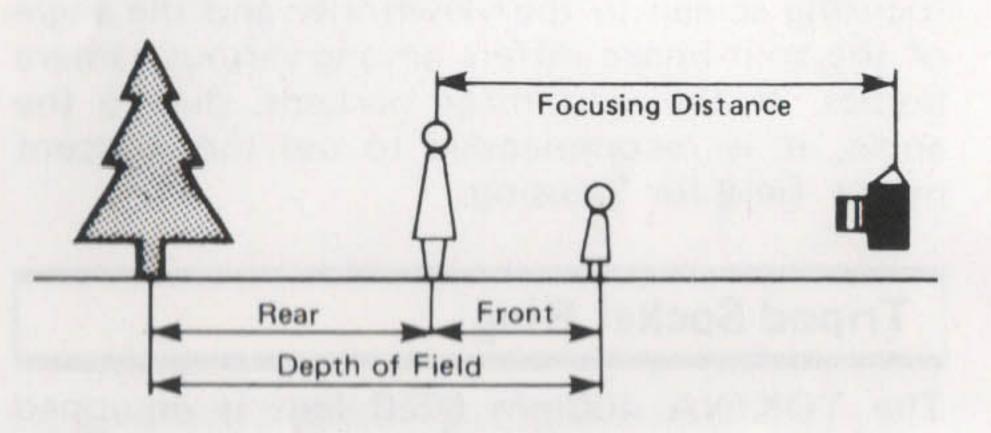
8-5, Okubo 2-Chome, Shinjuku-ku Tokyo 160 Japan

Focusing

To focus, simply turn the Focusing Ring until the subject appears sharpest in the camera's viewfinder.

Depth of Field

The term "depth of field" refers to the range of distance in which subjects appear in acceptable sharpest focus. The depth of field scale is engrabed on both sides of the center index. The range between numbers of the same f/value is the depth of field. See Photo 1.



Infra-Red Photography

This lens has an infra-red focusing line engraved on the lens barrel which allows for accurate focusing when using infra-red film and a red filter. When taking infra-red photogaphy, focus normally on your subject and read the distance on the distance scale. Then, turn the focusing ring until this distance reading is lined up with the infra-red index. See Photo 3 and 4.

Filters

Use screw-in type filters with the same diameter as shown in the specification chart of each lens. If two or more filters are used together, vignetting may occur, therefore, it is recommended to use only one filter at a time.

NOTE: Due to the greater thickness of some polarizing filters, vignetting may occur when used on wider angle lenses.

Lens Hoods

Lens hoods are designed to prevent flare and ghost image caused by strong diagonal or side rays hitting the front of the lens. It is recommended that one be used on your lens, to insure clear, sharp photographs. TOKINA manufactures optional lens hoods. Using a lens hood other than the TOKINA may cause some vignetting or lens flare problem.

Telephoto Lens Photography

Many SLR cameras use a split-image type focusing screen in the viewfinder and the angle of the split-image differs among various camera bodies. If the split-image darkens, due to the angle, it is recommended to use the adjacent matte -field for focusing.

Tripod Socket Ring

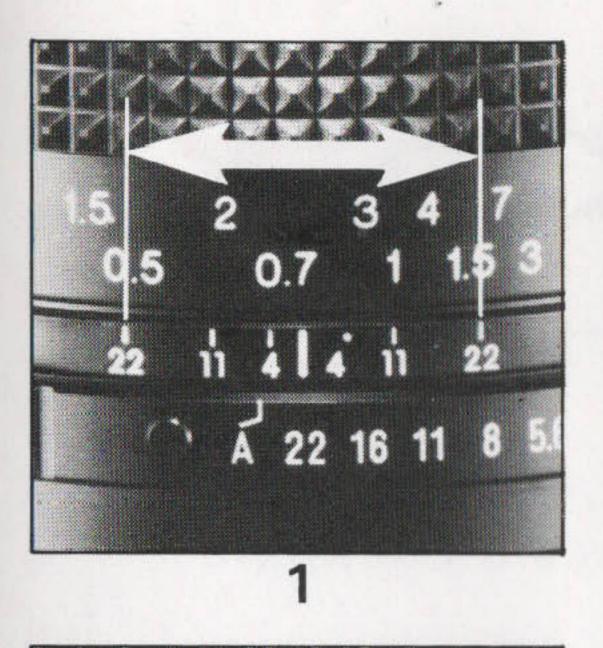
The TOKINA 400mm f/5.6 lens is equipped with a removable tripod stocket. When mounted on a tripod, the lens can be rotated a full 360°. There are horizontal and vertical index markings engraved on the lens. To use the camera in the horizontal position, align the center index line on the lens barrel with the tripod socket ring index mark. To use in the vertical position, align the vertical line index marks on either side of the lens barrel with the tripod socket ring index mark. To remove the tripod socket, simply loosen the two locking knobs located on the tripod socket. See Photo 2.

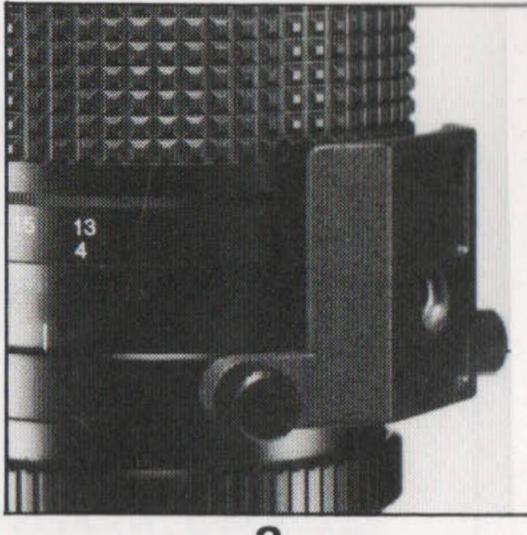
NOTE: When changing the camera position, be careful not to loosen the tripod socket locking knobs.

Lens Care

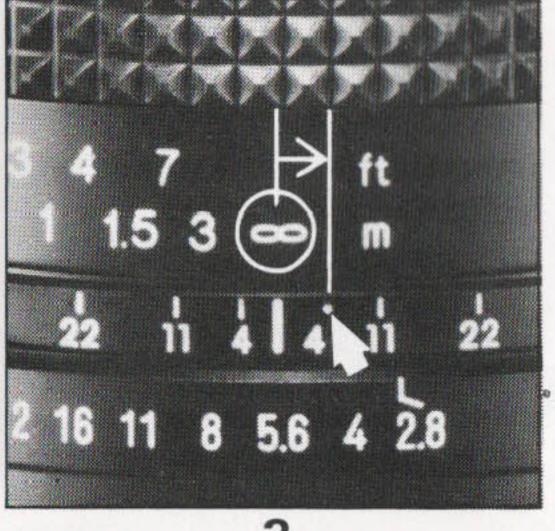
A lens cannot be expected to perform satisfactorily without good maintenance. Therefore we urge you to take good care of your lens and it will reward you with long and efficient service.

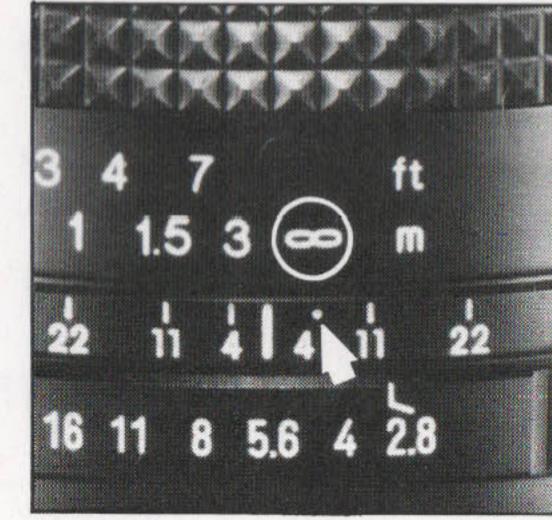
- Do not touch the lens surface with your fingers. To remove unwanted finger prints from this lens surface, use a mixture of denatured alcohol and ether, wiping with a lens tissure in a gentle circular motion from center to the outside of the front element.
- If the lens has been exposed to moisture, wipe carefully with a dry cloth. After use on the beach or near salt water, make sure all traces of salt are removed.
- 3. It is important to avoid exposing the lens to a rapid change of temperature, for example, going from the ski slope to a heated hotel room or vice versa. This can cause droplets of moisture to condense on the inside of the lens which can cause rust and mold. It is recommended that the lens be kept in a lens bag to increase the time period of temperature adjustment.
- 4. After lens servicing has been completed, attach both the front and rear lens caps and keep in a dry place away from high humidity and temperature. If the lens is going to be stored for a long period of time, place it in an air-tight container and include a package of silica gel.





2





Specifications

| Focal Length/ Maximum Aperture | 17mm f/3.5 | 24mm f/2.8 | 28mm f/2.8 | 400mm f/5.6 |
|-------------------------------------------|-------------------|--------------------|---------------------|--------------------|
| Optical Construction (Elements-Groups) | 11-9 | 7-7 | 5-5 | 8-5 |
| Lens Coating · | Multilayer | Multilayer | Multilayer | Multilayer |
| Aperture Range | f/3.5-f/16 | f/2.8-f/22 | f/2.8-f/22 | f/5.6-f/22 |
| Angle of View | 103°40′ | 84° | 75°20′ | 6°10′ |
| Minimum Focusing Distance | 0.25m (0.8ft) | 0.19m (0.6ft) | 0.22m (0.7ft) | 4.0m (13.1ft) |
| Filter Size | $67\text{mm}\phi$ | 52 mm ϕ | $49 \text{mm} \phi$ | 72mmφ |
| Maximum Diameter | 70mmφ (2.8in) | 63.5mmφ (2.5in) | 63.5mmφ (2.5in) | 78mmφ (3.1in) |
| Length (With Nikon Mount) | 49.2mm (1.9in) | 39mm (1.6 in) | 37mm (1.5in) | 207.5mm (8.2in) |
| Weight (With Nikon Mount) | 305g (10.8oz) | 190g (6.7oz) | 165g (5.8oz) | 970g (34.2oz) |
| Hood | Separate | Separate | Separate | Built-in |