

**Vivitar®**

**Automatic Fixed Mount Lenses  
Telephoto**

Owner's Manual

## **Before you begin . . .**

to use your new Vivitar Automatic Telephoto Lens, please take time to carefully study this Owner's Manual and Specification Sheet insert. Keep it with you as a handy guide and refer to it whenever questions arise on the use and care of your lens. The information should help you get the maximum enjoyment from your lens, enjoyment that comes from the satisfaction of taking pictures with that "professional touch."

## Getting Acquainted with your Lens



*(Vivitar 135mm f2.8 shown as typical telephoto lens)*

## Mounting your Lens

Your Vivitar telephoto lens has been designed to mount in the same manner as your normal lens. Because telephoto lenses are slightly longer, however, extra care should be taken while mounting it to your camera. Holding the lens firmly around the lens barrel will give you better balance and a more secure grip during the mounting procedure.



## Holding your Lens

While using your lens, it is best to support the camera/lens combination with most of the weight resting in the palm of the left hand as shown. This leaves your right hand free to operate the controls of your camera and helps ensure proper balance and stability.



## Focusing

Your new Vivitar telephoto lens has been designed to provide you with the utmost in fast and easy focusing. To focus, simply turn the Focusing Ring ③ until the subject appears sharpest in the camera's viewfinder.



## DISTANCE SCALES

Your lens has two Distance Scales ④ engraved on the lens barrel to show you the approximate distance from the subject in focus to the film plane. The white numbers indicate the distance in feet while those in green show the distance in meters.



## DISTANCE INDEX MARK

The Distance Index Mark ⑤ is the reference point for the correct focus position of your lens. Reading the distance indicated on the Distance Scales ④ opposite this mark lets you estimate the distance from the subject in focus to the film plane. You'll find the Distance Index Mark especially useful in flash photography, where it can be used to make sure your subject is within the effective operating range of your flash.



## INFRARED INDEX MARK

Your Vivitar telephoto lens has an Infrared Index Mark ⑥ for use with infrared film. Depending upon which lens you have, this mark appears on the Depth of Field Scale ⑦ as a) red line, b) a red "R," or c) a red f-stop number.

When using infrared film, focus normally on your subject and read the distance on the Distance Scale ④ as indicated by the Distance Index Mark ⑤. Then turn the Focusing Ring ③ until the distance reading is opposite the Infrared Index Mark ⑥ and your lens will



be focused for average infrared photography.

**NOTE:** Since infrared radiation is variable by nature, the Infrared Index Mark should be used only as an approximation for focusing.

## Aperture Control

The Aperture Ring ⑨ controls the amount of light allowed to reach the film by controlling the size of the lens diaphragm opening. The higher the f-stop number, the smaller the diaphragm opening and the smaller the amount of light allowed to reach the film.

The automatic diaphragm operation of your lens allows you to focus and compose your picture with the diaphragm at maximum aperture, or "wide open," when the viewfinder image is brightest and easiest to see. The diaphragm will automatically "stop down" to the preselected aperture at the moment of exposure and immediately re-open.



## EE COUPLED LENSES

Vivitar EE coupled lenses for the Konica Autoreflex series cameras differ from other lenses as follows:

- A. Aperture Scale** — Since the Konica EE mechanism works automatically to f16 only, the aperture range of the EE coupled lenses goes to f16 only.
- B. EE Lock Button** — To ensure that the lens is not accidentally removed from EE operation, the Aperture Ring locks with a positive click when placed

in the EE position. To set the aperture manually, press the EE Lock Button and rotate the Aperture Ring to the desired setting.

## Depth of Field

Depth of field is the area in acceptable sharpness in front of and behind the subject in focus. This area is determined by the aperture you choose and the distance from the subject to the film plane. As you move closer to your subject or as you open your lens, e.g. from f16 to f4, the depth of field becomes shallower. By stopping your lens down, e.g. from f4 to f16, or moving farther away from your subject, the depth of field or zone of acceptable sharpness will increase.

Another factor affecting depth of field is the focal length of your lens. As a rule, the longer the focal length, the shallower the depth of field. Knowing the depth of field limitations of your lens will give you greater creative control in your photography. Long focal length lenses can add impact to your photographs by throwing distracting backgrounds and foregrounds out of focus, making your subject stand out clearly. In portraiture a soft, out of focus background gives "separation" that is very flattering to your subject.



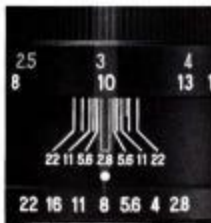
f4



f16

## Depth of Field Scale

Your lens has a double set of numbers representing f-stops engraved on the Depth of Field Scale (7). Once you have focused on your subject, everything within the distance range indicated between the two aperture numbers you have selected will be in the zone of acceptable sharpness. As shown in the illustration, with your lens focused at 10 feet and the Aperture Ring set to f8, everything between 9'8 $\frac{3}{8}$ " and 10'3 $\frac{3}{4}$ " will be in focus.



## Depth of Field Preview

You can actually see depth of field in your camera's viewfinder by using the depth of field preview control located either on your camera or on your lens. Vivitar Automatic Lenses designed for use on cameras not having depth of field preview controls on the camera body provide them built into the Lens Mount (11).

Your lens may have any of the following Depth of Field preview controls:

- A. Preview Button** — Slide or press it to stop diaphragm down. When released, diaphragm returns to automatic operation.
- B. Auto/Manual Switch** — Set to "M" position to stop diaphragm down. Return to "A" position to re-activate auto diaphragm mechanism.



## Using the Lens Hood

Vivitar Automatic telephoto lenses have built-in retractable Lens Hoods ② which should be used to protect against extraneous light striking the lens and causing unwanted glare. To extend or retract the lens hood, use a gentle, twisting motion.



## Adjustable Tripod Mounting Socket

Some longer focal length lenses are equipped with a tripod mounting socket that allows you to use a tripod for maximum stability. Attach the camera/lens combination to the tripod through the threaded socket on the lens Tripod Mounting Ring. To adjust for vertical or horizontal framing, loosen the knob on the Mounting Ring until the camera swivels free. Once set to the desired angle, tighten the screw securely before shooting.



## Caring for your Lens

- A.** When attaching threaded accessories (filters, etc.) to your lens, align the accessory very carefully with the Filter Thread ① to prevent damage to the threads.
- B.** Keep your lens dust free by using both front and rear lens caps when the lens is not being used.
- C.** Clean your lens with an air brush, anti-static brush, good quality camel-hair brush, or use a lens tissue to gently brush away loose particles. To remove fingerprints and smudges use a very small amount of lens cleaning fluid and gently swab the lens surface with a lens tissue. **NEVER RUB THE LENS ELEMENTS WITH YOUR FINGERS, CLOTHING, OR OTHER ABRASIVE MATERIAL.** Attempting to clean your lens this way can scratch the lens coating and damage the glass surface.
- D.** Always store your lens in a cool, dry place. It's a good idea to store it with the silica gel packet supplied, especially during wet or humid weather. A lens case with a silica gel packet is a handy means of storage and provides excellent protection for your lens.

## NOTES:

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