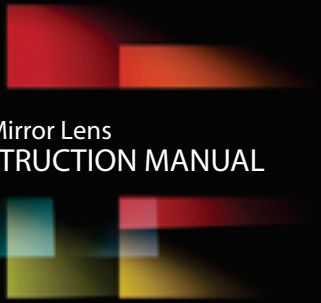

800mm Mirror Lens

INSTRUCTION MANUAL

V-800MR

Vivitar
SERIES 1

Limited Five Year Warranty

Vivitar warrants this quality product to be free of defects in material and workmanship for a period of five years from the date of purchase. During the period, Vivitar will repair or replace the product at no charge for parts or labor.

TIME PERIOD OF THIS WARRANTY

The time period of this warranty starts from the date of the original purchase and expires on the fifth anniversary date of purchase.

WHAT IS NOT COVERED BY THIS WARRANTY

No express or implied warranty is made for any defects in this product which result from accident, abuse, misuse, failure to operate the product in accordance with relevant instructions, neglect, immersion in or exposure to chemicals or liquids, extremes of climate, fungus, excessive wear and tear/cosmetic damage and defects resulting from other extraneous causes such as unauthorised disassembly, repair or modification.

This warranty shall not extend to any incidental or consequential damages arising from the purchase, use or inability to use this product even if Vivitar has been advised of such damages. The laws of some countries and some States thereof do not allow the limitation of incidental or consequential damages, so the above limitation or exclusion may apply to you.

WHAT TO DO WHEN SERVICE IS NEEDED

STEP 1. Package the product and relevant accessories carefully, using ample padding materials and a sturdy mailing container to prevent damage in transit.
STEP 2. Include in package:
a) Evidence of date and place of original purchase (for example, a copy of your sales receipt).
b) Detailed description of your problem.
c) When possible, a sample evidencing the problem.
STEP 3. Return item (insured) to: (in the U.S.):

Vivitar
Attn: Technical Support
195 Carter Drive
Edison NJ 08817

(in the U.K.)

Sakar UK
2D Siskin Parkway East
CV3 4PE, UK

When service is complete, the product will be returned to you shipping prepaid. In the event the product is deemed to be not faulty or the defect is a result in wear and tear, Vivitar may levy a handling charge for the return ofthe product. This warranty gives you specific legal rights. You may also have other rights which vary from country and State to State thereof. For more information visit our website www.vivitar.com

TECHNICAL SUPPORT

For technical support issues please visit our website at www.vivitar.com. You can find manuals, software and FAQ's at the website. Can't find what you are looking for? E-mail us at support@vivitar.com and one of our technical support team members will answer your questions. For phone support in the US please call 1-800-592-9541, in the UK call 0800 917 4831. If you would like to call from anywhere else, please visit www.vivitar.com for your local toll free number.

500mm Mirror Lens

1. Focus Ring
2. Distance Scale
3. Index for Distance
4. Macro Ratio

Specifications

Filter Size	: 30.5mm (rear mount)
Minimum Focus Distance	: 5.7 feet (1.73 m)
Focus Control	: Single focus lens
Angle of View	: 3 Degrees
Groups/Elements	: 8/8
Length	: 5.7" (144.5 mm)
Maximum Diameter	: 4.4" (111 mm)
Weight	: 1.94 lb (880 g)

Your new Catadioptric or Reflex mirror lens is a highly developed, computer designed product which uses the merits of both reflex optics and refraction optics. This gives you very sharp picture quality with less color aberration, which is considered the most harmful factor in the field of telephoto photography.

1. Required T-Mount

A proper T-Mount adapter should be threaded onto the back of your lens in order to attach your lens to your camera.

2. Mounting Your Lens to Your Camera

The T-Mount is similar in design to the mount of standard lenses designed for your camera, and is coupled and removed in the same manner. To mount the lens, attach the T-mount adapter to your camera and then simply attach the lens to the adapter.

3. Focusing the Lens

Focusing is accomplished while viewing the subject through the viewfinder of your camera and rotating the focusing ring. Since the aperture is preset, you will find under certain light conditions a shadow appearance on the split-image section of your focusing screen. In this case, simply focus on the edges of your subject with the outer center of your prism.

NOTE: In order to compensate focusing when normal positioning may be altered due to extreme temperature change, the focusing ring has been designed to allow rotation beyond the fixed marks of the distance scale. To avoid mistakes, always focus while looking through the viewfinder.

NOTE: No adjustments in focusing are necessary when taking infrared photography as required with normal lenses.

4. Light and Contrast Control
Since the reflex lens is not equipped with a diaphragm system, the use of filters plays an important factor in the control of light and contrast.

5. Filters
Normal (IA Skylight): This filter should be used when no other filters are necessary.

ND 2X & ND 4X (Neutral Density): These filters control the passage of light since no diaphragm is provided in the lens. Exposure factor is 4X with a ND4X, so that the light intake through the lens is decreased as if a similar lens were stopped-down by 2 stops. Note that ND filters reduce light passage only, while the depth of field is not changed.

Y52 (Yellow): This filter is used when taking black and white pictures. It also makes a blue background darker. It is quite effective when taking shots of clouds on a blue horizon.

056 (Orange): This filter makes blue or green color lines darker and yellow or red color lines lighter than they seem to the human eye. It is most effective when stronger contrasts are desired.

R60 (Red): This filter is used to make daytime scenery appear as night time scenery, or to emphasize and strengthen contrast. It is also necessary when taking infrared black and white exposures.

NOTE: If the subject being photographed shows too much light or seems overexposed when measured by a meter or as indicated by an LED warning signal of the camera, then adjustment of the light intake can be controlled by using one of the ND filters. When using an R60 filter with an aperture preferred camera, an aperture adjustment of +0.5 to +1.0 is required.

6. Exposure or Aperture Adjustments with TTL Cameras
Since the aperture of the reflex lens cannot be changed, the exposure is controlled entirely by the shutter speed being used. The speed dial is set according to your TTL reading. Cameras with automatic aperture and shutter priority will automatically set the right speed with their auto exposure mechanisms, with the exception of a few models which require manual function.

With aperture priority or manual operation of your camera, the apropriate shutter speed must be adjusted using three neutral density filters in case of over exposure readings or if the camera's LED warning light is activated. If your camera has a manual TTL system, then simply follow the exposure indicator in the viewfinder by compensating with the shutter speed. If there is excessive light beyond the shutter speed capability, then attach a Neutral Density filter to reduce the overall passage of light.

7. Exposure or Aperture Adjustments on Cameras Without a TTL System
When using a camera with no TTL system and only a normal filter, the exposure must be stopped down as indicated by the table on the following page to the shutter speed adusted as indicated by an exposure meter reading. So, for example, with a 300mm f5.6 reflex lens, the setting would be f5.6. If a Y52 filter is used in daylight, the stop down would be 1. Also, if the appropriate shutter speed is metered as 1/1000 seconds using a single exposure meter with an f stop of 5.6, then the shutter speed setting would be 1/500 seconds.

Filter Ultilization Chart (Exposure Adjustment)

		Under Daylight		Under Tungsten Light	
Kind of Filter	Color	Exposure	Shutter Stop Down	Exposure	Shutter Stop Down
Normal	Clear	1	No Adjustment	1	No Adjustment
Y52	Yellow	2	1	1.5	1/2
056	Orange	2	1	1.5	1/2
R60	Red	6	2	4	2
ND2X	Gray	2	1	2	1
ND4X	Gray	4	2	4	2
ND6X	Gray	8	3	8	3

NOTE: Generally, if a 1/2 shutter speed adjustment is indicated to negative film, a full stop should be taken. When a reversal film is being used, disregard the half-stop setting and use a normal shutter speed.

8. Depth of Field

The area in acceptable sharpness in front of, and behind the subject in focus is called the depth of field. The aperture selected and the distance of the subject as well as the focal length of a lens determines the depth of field. Because of the long focal length of your lens, the depth of field is narrow. For example, with a 800mm f8.0 lens, at a distance of 6 feet, the depth of field is only 1/2 inch wide. It is recommended that you practice focusing with your lens before taking any serious pictures, especially in close up photography. Also, we recommend using a focus magnifier to help determine the depth of field sharpness under extreme conditions.

9. Cleaning and Maintenance Tips

A. The lens should always be capped when not in use. Only wipe with cleaning papers or cloth specifically made for optics.
B. Accumulated dust should be blown off with a syringe or blower brush specifically designed for this purpose. To remove fingerprints or smears, shred the end of a lens tissue and roll it to make a swab: dampen it with a lens cleanerspecially made for photographic optics and gently wipe the surface without applying too much pressure. If necessary, repeat using a new swab. To clean, start at the center of the lens using a circular motion and working to the edge of the lens for best results.
C. When the lens is not in use, it should be stored in a cool dry place, or if not possible, then in a leather case with a silica gel packet, or aluminum case with polyfoam liner.

YOUR LENS IS A HIGHLY COMPLEX PRECISION OPTICAL INSTRUMENT. IT IS INDIVIDUALLY ASSEMBLED BY SKILLED CRAFTSMEN. WITH PROPER CARE AND MAINTENANCE IT SHOULD GIVE YOU YEARS OF SATISFYING AND ENJOYABLE PHOTOGRAPHIC RESULTS.

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