MINOLTA 40-80MM F2.8 MD ZOOM ROKKOR ROKKOR-X



OWNER'S MANUAL



Your 40-80mm f/2.8 MD Zoom Rokkor is a fast, compact, easy-to-use lens that zooms over a very useful wide-normal-tele range and features convenient close focusing. Its unique design combines with Minolta Achromatic coating incorporating latest developments in the field to provide top image quality

This booklet is intended to help you obtain best results and longest service with this lens. Please read it carefully and keep it for reference later as necessary

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NAMES OF PARTS



LENS HOOD

ATTACHING AND REMOVING

Focal-length scale Aperture scale Meter-coupling lug Mounting index Aperture ring Normal/close changeover button Diaphragm-control pin

ATTACHING AND REMOVING

LENS HOOD

To attach

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Align the red-bead mounting index near the lens' aperture ring with the red dot on or near the lens-mount flange on the camera.

Insert the lens bayonet into the mount and turn the lens clockwise until it locks securely in place with a click.

To remove

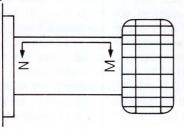
While pushing the lens-release button on the camera, turn the lens counterclockwise as far as it wil go. Then lift the lens bayonet out of the mount. The flexible rubber lens hood is folded back as needed for storage, etc. To help shield the front glass surface from stray light and physical damage, it should be pulled forward into place when the lens is in use.

NORMAL USE

For usual zooming and focusing at the values indicated on the control dials, the normal/close changeover button must be at its outer position so that the "N" on its shank is visible.

It can be moved to this position, if from the "M" position by turning it counterclockwise until the shaft of the arrow is aligned with the red ine and pulling it out as far as it wil go.

"N" position



Zooming

This is accomplished by moving the zooming lever to the desired position. Focal length values are indicated by figures at the base of the lever



Focusing

For either visual or distance-scale focusing, the focusing dial is turned by means of its milled outer grip.



NOTE

For precise focusing, it is recommended that focus be checked and adjusted if necessary after setting aperture and zooming, particularly at apertures larger than f/5.6.

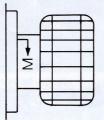
CLOSE-UP OPERATION

To focus subjects at distances closer than 1m (3.3 ft. the normal/close changeover button must be at its inner position so that only the "M' on its shank can be seen.

The button can be moved to this position by turning it counterclockwise until the shaft of the arrow is aligned with the red ine and pushing it in as far as it wil go. Focusing in this case is accomplished by moving the zooming lever

The range of distances that can be focused depends upon the position at which the focusing dial is set. With the infinity symbol (∞) on the distance scale set to the index focusing range extends from infinity down to 45cm 17-11/16 in. With the distance-scale's 1m (3.3 ft. figure set to the index, subjects from that distance down to 37cm 14-9/16 in. can be focused. Intermediate settings will result in focusing ranges between these extremes.

"M" position



INFRARED FOCUSING

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For proper focus when making pictures with infrared radiation, proceed as follows:

With the normal/close changeover button at its outer "N" position, first focus your subject with visible light as described on page 6. Then turn the dial to the left until the point on the infraredcorrection scale that was opposite the main index line is opposite the infraredindex value corresponding to the focal length at which the zooming lever is set.

With the normal/close changeover button at its inner 'M'' position, infrared adjustment is made as above though focusing is done by moving the zooming lever as described on page 7

NOTE

Infrared focusing adjustment cannot be made with the focusing dial set near to 1m, as this limits the movement of the focusing dial.

SPECIFICA HONS



Distance visually focused



Adjusted for infrared



CARE AND STORAGE

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 Never touch glass surfaces with the fingers. Should one become dirty gently whisk loose, dry matter off it with a bellows lens brush. If necessary the glass surface may then be wiped gently with a soft, clean cotton cloth or special photographic lens tissue.

> Liquid lens cleaner should be used only when fingerprints or other matter cannot be removed with a dry cloth or lens tissue. *Never drop such fluid directly on lens surface;* instead, apply only one drop to the cloth or tissue and wipe the glass surface gently from center to edge. The lens barrel and other metal parts may be wiped with a silicone-treated cloth.

> Never force any part of the lens at any time. If operation is not as you think it should be, carefully re-study the

applicable instructions or consult an authorized Minolta service representative.

• When the lens is not in use, glass surfaces should be protected by attaching front and rear caps and the lens stored in its case.

Do not place it where temperature or humidity is high or near corrosive chemicals or gases.

If the lens is to be stored for an extended period, it is best to put it in its case in an airtight container (such as a heavy or double plastic bag) along with a small bag of drying agent (such as si ica gel

SPECIFICATIONS

Type: Meter-coupled mechanical-compensation zoom lens with closefocusing capability

Construction 12 elements in 12 groups divided into 3 components, al moved by compound cam

- Angle of view: $57^{\circ} 30^{\circ}$
 - Coating: M nolta Achromatic
 - Zooming By lever coaxial with focusing dial

Focusing Normal by dial at side of barrel infinity to 1m (3.3 ft.); close focusing by zooming lever range varying with focus dial setting, e.g., infinity to 45cm 17 11/16 in. with dial set at infinity or 1m down to 37cm 14-9/16 in. with dial set at 1m (max. image magnification on film 1/6X) normal/close changeover button
Aperture scale: 2.8, 4 5.6, 8 11 16, 22, with half and full click-stops Diaphragm Fu ly automatic, meter-coupled
Filter thread diameter 55mm Dimensions: \$\$\phi(6 x 93.5 x 98.5mm (\$\phi2-5/8 x 3-11/16 x 3-7/8 in.)\$

Weitht 560g 1 lb. 3-3/4 oz.

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DEPTH-OF-FIELD TABLES

NORMAL

IN FEET

IN METERS

	F-No. Dist. ft.	2.8	5.6	22	F-No. Dist. m	2.8	5.6	22
F = 40mm F = 60mm F = 80mm	∞	∞ 60' 8''	∞ 30′ 5′′	∞ 7′11′′	∞	∞ 18,49	∞ 9.28	∞ 2.42
	20	29' 6'' 15' 2''	56′7′′ 12′3′′	∞ 5′10′′	7	11.13 5.12	27.50 4.04	∞ 1.84
	10	11'10'' 8' 8''	14′7′′ 7′8′′	∞ 4′7″	3	3.54 2.60	4.33 2.30	∞ 1.39
	3.5	3' 8'' 3' 4''	3'10'' 3' 2''	5′ 8″ 2′ 7″	1	1.05 0.96	1 10 0.92	1.55 0.75
	∞	∞ 127′5′′	∞ 63'10′′	∞ 16′5′′	∞	∞ 38.85	∞ 19.46	∞ 5.00
	20	23' 7'' 17' 4''	28'10'' 15' 4''	∞ 9′2′′	7	8.49 5.96	10.81 5.19	∞ 2.96
	10	10'10'' 9' 4''	11' 9'' 8' 9''	24' 2'' 6' 4''	3	3.23 2.80	3.51 2.62	7.09 1.92
	3.5	3′7′′ 3′5′′	3' 8'' 3' 4''	4' 3'' 3' 0''	1	1.02 0.98	1.04 0.96	1.20 0.86
	∞	∞ 213′10″	∞ 107′0′′	∞ 27′5″	~	∞ 65.17	∞ 32.62	∞ 8.35
	20	22' 0'' 18' 4''	24′5′′ 16′11′′	70' 6'' 11' 9''	7	7.82 6.34	8.85 5.79	40.27 3.86
	10	10' 5'' 9' 7''	10'11'' 9' 2''	15' 3'' 7' 6''	3	3.13 2.88	3.28 2.76	4.54 2.25
	3.5	3' 7'' 3' 5''	3′7′′ 3′5′′	3'11'' 3' 2''	1	1.01 0.99	1.02 0.98	1 11 0.91

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CLOSE-UP

IN FEET

IN METERS

	F-No.		the second		No. State (State)	F-No.				Sec. Sec.
	Dist. scale	Actual dist. ft.	2.8	5.6	22	Dist. scale	Actual dist. m	2.8	5.6	22
F = 40mm F = 60mm	∞	1.48	1′ 6″ 1′ 5½″	1′ 6¼″ 1′ 5¼″	1′ 81⁄16′′ 1′ 315⁄16′′	∞	0.45	0.46 0.44	0.46 0.44	0.51 0.41
	20	1.43	1′ 5¾″ 1′ 4¾″	1′55%′′ 1′4 ¹¹ ⁄16′′	1' 7¼'' 1' 3½''	7	0.44	0.45 0.43	0.45 0.43	0.50 0.40
	10	1.38	1′ 4¾′′ 1′ 4⅔′′′	1′5′′ 1′4½″	1′ 67⁄16′′ 1′ 31⁄16′′	3	0.42	0.43 0.41	0.43 0.41	0.47 0.38
	3.5	1.22	1′2¾′′ 1′2½16′′	1′2 ¹⁵ ⁄16′′ 1′2 ⁵ ⁄16′′	1′ 3 ¹⁵ /16′′ 1′ 19/16′′	1	0.365	0.369 0.361	0.372 0.358	0.397 0.339
	8	4.33	4' 5½'' 4' 2½16''	4′71⁄8′′ 4′11⁄16′′	5′7%″ 3′6%″	∞	1.32	1.36 1.28	1.40 1.25	1.72 1.08
	20	3.74	3'10'' 3' 7¾''	3'11¾6'' 3' 6¾''	4' 7 ¹¹ /16'' 3' 1 ¹¹ /16''	7	1.17	1.20 1 14	1.23 1.11	1.46 0.98
	10	3.22	3' 37/16'' 3' 1 ¹³ /16''	3' 4¼'' 3' 1½''	3′101⁄8″ 2′95⁄16″	3	0.99	1.01 0.97	1.03 0.95	1.18 0.85
	3.5	2.19	2' 29/16'' 2' 1 ¹⁵ /16''	2′2 ¹⁵ ⁄16′′ 2′15⁄8′′	2′51⁄8′′ 1′1115⁄16′′	1	0.64	0.65 0.63	0.66 0.63	0.71 0.59

At F = 80mm, figures are the same as indicated in the "NORMAL" table for that focal length.

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