

# M645 SUPER / M645

## Mamiya-Sekor C Interchangeable Lenses

Mamiya

[www.ianbfoto.com](http://www.ianbfoto.com)

### Instructions

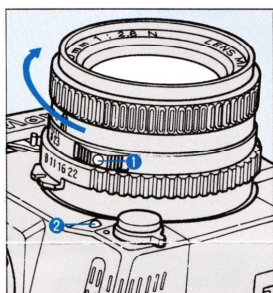
#### Description of parts



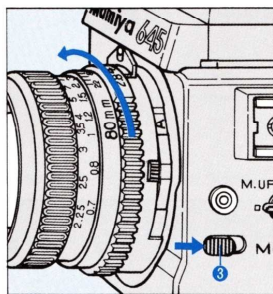
#### Features

Mamiya-Sekor C Lenses have long been established as a standard for lenses of professional calibre. Whether you are using a wide, standard, or telephoto lens, the name "Mamiya-Sekor" is your assurance that you are using the highest quality optics. In order to make the most of the intrinsic contrast, high resolution, rich color saturation, and clear definition of Mamiya-Sekor lenses, all the lenses for the M645 have been multi-coated. Virtually all flare and ghost image have been eliminated, even when shooting under highly unfavorable lighting. In addition, the lenses feature the M645 bayonet mount, full-automatic diaphragm, Auto/Manual (A-M) Change Lever (to confirm the depth of field) and Exposure metering coupling system.

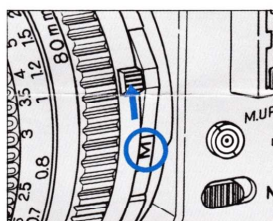
#### How to Use The Lenses



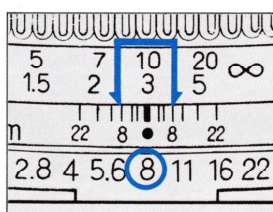
While aligning the two alignment dots (1 & 2), insert lens into the camera body. Then twist lens clockwise until it clicks and locks into place.



While depressing the Lens Release Button (3), grasp the part of the lens barrel that has the Depth-of-field Scale and twist the lens counterclockwise until it stops. Then lift out.



Depth-of-field refers to the total area which will appear in focus. The area of sharpness (depth-of-field) depends upon the distance the lens is focused at, the f/stop being used, and the focal length of the lens. The area that will appear sharp can be determined in two ways. By setting the A.M. Lever to the M (Manual) position, the depth-of-field for the aperture set on the lens can be previewed by looking through the finder.



The depth-of-field can also be determined by referring to the depth-of-field scale engraved on the lens. The f/stop numbers are engraved on both the right and left-hand sides of the center reference mark. Simply locate the f/stop (aperture) you are using and read the figures which appear above the f/stop number on the distance scale of the lens.

For example, with the 80mm f/2.8 lens focused at 3m (10ft.), and the Aperture Ring set to f/8, the depth-of-field scale reveals that everything from about 2.5m (8.5ft.) to about 4.0m (15ft.) will appear sharp.

\* Please re-set A.M. Lever to A (auto) position after viewing of the depth-of-field to assure proper exposure.

#### Types and Applications

Mamiya-Sekor C Lenses are available from wide angle to telephotographics focal length as shown in the table at the back.

For shooting in cramped quarters, for extensive depth-of-field, dynamic, perspective and exciting panoramas, you will enjoy the wide-angle lenses. For flattering portraiture, shallow depth-of-field, sports, and candid photography, the telephoto lenses are ideal.

As each lens alters perspective, a choice of lenses offers you a choice in photographic expression. Mamiya-Sekor C Lenses are your tools for creative photography.

The **Fisheye 24mm f/4** lens is designed so that the distance from the picture center to any point is always proportional to the angle from the optical axis to that point (equidistant projection). Angle of view is 180° measured on the diagonal of the image and it produces a full frame (56 × 41.5mm) image. Four filters are built-in: LB-A (81C), SL-LB, Y48 (Y2), and 065(02).

Because the Mamiya-Sekor C 35mm f/3.5 and 45mm f/2.8 lenses incorporate a floating system in which some of lens elements automatically move forward or backward as the lens is focused, high resolution, even at the very edges of field, is assured even at the minimum (closest) focusing distances.

The **Shift 50mm f/4** lens is a special application lens enabling some degree of control in perspective correction. Since this lens has a mechanism to correct the image distortion, it can be extremely useful in architectural photography.

The **Macro 80mm f/4** lens has a built-in floating element system that automatically corrects close-distance aberration to ensure sharp resolution to the very edges of the picture in close-ups, copying and other short-distance work. Use as an ordinary lens from 1/2 life-size to infinity is possible, and by using the optional Auto Macro Spacer, close-ups can be made with magnification ratios from 1/2 to life-size.

The **145mm f/4 SFC** lens is a high quality soft-focus lens designed with major emphasis placed on portraiture. The soft-focus effect can be varied continuously by rotating the Softness Control Ring and the aperture ring. It is also possible to use this as a "normal" lens with sharp images, by stopping down to f/8 or smaller apertures.

The **Zoom 75 – 150mm f/4.5** and **105 – 210mm f/4.5** Lenses are suitable for both portraits and telephotography. The zoom function can also be used for easy, accurate focusing. First, turn the Zoom Ring to maximum focal length; the subject now appears large in the viewfinder and depth-of-field is shallow, so accurate focusing is easy. After focusing you can "zoom" (change the focal length) and vary the composition to your liking.

The **Reflex 500mm f/8** lens is a compactly designed, telescope lens and fulfills its performance in photographing sports, or any distant subject.

#### Lens Hoods

An important accessory to eliminate the detrimental effects of stray light entering the lens.

The Lens Hood for the 45mm lens is a square, slip-on type. Attach so that the sides are parallel with the sides of the camera body.

Special hoods are required for the 55mm, 70mm, 80mm f/1.9, 145mm SFC, and Zoom 105 – 210mm lenses. Even though the diameters are the same, the use of a lens hood designed for a long focal length lens with a short focal length lens will result in vignetting of the picture edges. The 80mm f/2.8 and 110mm lenses share the same lens hood. The telephoto lenses have built-in lens hoods. The built-in lens hood can be used by simply pulling it out. However if you rotate and pull it out, it comes out even more smoothly.

#### Care and Cleaning

Do not store the lens in a damp or salty atmosphere.

Never touch the lens surface. If a lens needs cleaning, blow away the dust particles with a blower, and clean the surface with lens cleaning tissue and lens cleaner.

After removing the lens from the camera body, protect the lens by using front and rear lens caps.





## Mamiya-Sekor C Interchangeable Lenses



### Mamiya-Sekor C Lenses

Lens	Optical Construction	Angle of View	Minimum Aperture	Diaphragm	Minimum Focusing Distance	Magnification	Area Coverd	Equivalent focal-length for 35mm	Filter size	Lens Hood	Dimension Weight
<b>Fisheye</b> 24mm f/4	10 elements, 8 groups	180°	22	Automatic	30cm	0.14 ×	298 × 402mm	15mm	Built-in	None required	82 × 100mm 785g
<b>35mm f/3.5</b>	9 elements, 7 groups	90°	22	Automatic	45cm	0.11 ×	387 × 552mm	22mm	77mm	None required	61.5 × 80mm 445g
<b>45mm f/2.8N</b>	9 elements, 7 groups	76°	22	Automatic	45cm	0.15 ×	286 × 386mm	28mm	67mm	Slip-on	70.5 × 75mm 475g
<b>Shift</b> 50mm f/4	10 elements, 8 groups	70°	32	Manual	45cm	0.18 ×	230 × 310mm	31mm	77mm	None required	105.5 × 80mm 735g
<b>55mm f/2.8N</b>	8 elements, 6 groups	65°	22	Automatic	45cm	0.18 ×	231 × 312mm	34mm	58mm	Screw-in	59.4 × 70mm 305g
<b>70mm f/2.8E</b>	6 elements, 4 groups	53°	22	Automatic	80cm	0.11 ×	382 × 515mm	43mm	58mm	Screw-in	50 × 70mm 285g
<b>70mm f/2.8</b> (lens-shutter type)	6 elements, 4 groups	53°	22	Automatic	80cm	0.11 ×	392 × 515mm	43mm	58mm	Screw-in	50 × 76mm 395g
<b>80mm f/1.9</b>	7 elements, 6 groups	47°	22	Automatic	70cm	0.15 ×	284 × 384mm	50mm	67mm	Screw-in	59 × 75.5mm 420g
<b>80mm f/2.8N</b>	6 elements, 5 groups	47°	22	Automatic	70cm	0.15 ×	281 × 380mm	50mm	58mm	Screw-in	43.5 × 70mm 220g
<b>Macro</b> 80mm f/4	6 elements, 4 groups	47°	22	Automatic	36cm	0.50 ×	83 × 112mm	50mm	67mm	None required	75 × 79mm 585g
<b>110mm f/2.8</b>	5 elements, 5 groups	35°	22	Automatic	120cm	0.11 ×	374 × 505mm	68mm	58mm	Screw-in	60 × 70mm 390g
<b>Soft Focus</b> 145mm f/4	7 elements, 5 groups	27°	32	Automatic	150cm	0.13 ×	326 × 440mm	90mm	77mm	Screw-in	115.5 × 81.5mm 900g
<b>150mm f/3.5N</b>	5 elements, 5 groups	26°	32	Automatic	150cm	0.12 ×	344 × 465mm	93mm	58mm	Built-on	80 × 70mm 420g
<b>210mm f/4</b>	5 elements, 5 groups	19°	32	Automatic	250cm	0.10 ×	406 × 547mm	130mm	58mm	Built-on	137 × 70mm 715g
<b>300mm f/5.6</b>	6 elements, 5 groups	13°	32	Automatic	400cm	0.09 ×	445 × 600mm	186mm	58mm	Built-on	164 × 70mm 710g
<b>Reflex</b> 500mm f/8	7 elements, 5 groups	8°	—	—	400cm	0.14 ×	305 × 412mm	310mm	Drop-in	Built-on	135 × 101mm 880g
<b>500mm f/5.6</b>	6 elements, 5 groups	8°	45	Automatic	900cm	0.07 ×	622 × 839mm	310mm	105mm	Built-on	358 × 114mm 2,280g
<b>Zoom</b> 75-150mm f/4.5	11 elements, 10 groups	50°-26°	32	Automatic	180cm	0.05-1.10 ×	75-777 × 1049mm 150-407 × 545mm	47-93mm	77mm	Slip-on	144 × 83.5mm 975g
<b>Zoom</b> 105-210mm f/4.5	13 elements, 11 groups	36°-19°	32	Automatic	180cm	0.07-1.14 ×	105-558 × 754mm 210-294 × 396mm	65-130mm	58mm	Built-on	158 × 74.5mm 875g

The image circle for 50mm f/4 Shift Lens is ø97mm.

Note: The lens affixed with "N" is the one developed lately for M645 SUPER, and is common to the conventional M645, M645 1000S series cameras.

- When using Reflex 500mm f/8 Lens, please change filters before amount-

ing the lens to the camera body since dedicated filter holder of lens is not removal after the lens is amount.

\* To use the Auto Extension Ring No. 3 for 80mm f/1.9, please specify as No. 3-S, No.3 Ring without "S" affix may cause vignetting at corners.

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