

# THREE MAXXUM LENSES

## AF 35mm f/1.4, AF 200mm f/2.8, and AF 500mm f/8 Mirror

by Jack and Sue Drafa



Here's an interesting combination of lenses for Maxxum cameras: the super-fast AF 35mm f/1.4, the updated (with high-speed focus and focus-lock button) AF 200mm f/2.8, and the first autofocus mirror lens, the AF 500mm f/8.

### 35mm f/1.4

Minolta's 35mm f/1.4 wide-angle lens is somewhat of a contradiction to the general rule of thumb about fast lenses. Most photographers believe that some sharpness at small apertures has to be sacrificed in order to gain such speed. Not only does this 35mm lens maintain sharpness throughout the f-stop range, but it is sharper overall than most of the normal wide-angle lenses we have reviewed in the past! The lens is twice as long as a normal 35mm lens, but when you look through the viewfinder and discover the extremely bright image, even in low light, the increased lens size is quite tolerable.

The distance scale is located  $\frac{2}{3}$  the distance back from the front of the lens and displays distances from infinity down to approximately 1 foot (0.3 meter). An additional infrared-focus mark is located inside this window, but you are required to switch over to manual focus to accomplish infrared focusing.

The full focusing range takes under 0.3 second, allowing the photographer to capture even the fastest-moving subjects. A specially designed ROM IC is built into the lens and communicates lens information in real time for accurate focus and exposure. If manual focus is desired, a small focus ring is located near the front of the lens.

Field tests at several indoor sporting events demonstrated to us that shooting with ISO 100 films under

low light is now possible using this high-speed lens. Additional tests outdoors in bright sunlight using apertures of f/11 and f/16 provided extremely sharp images, proving that wide-angle lenses can be fast and sharp at all apertures.

### 200mm f/2.8

Minolta's updated white 200mm f/2.8 telephoto lens is another welcome addition to an impressive battery of fast lenses. This superfast beauty includes several special features that



make telephoto photography a breeze. Starting at the front of the lens, you will find a rubberized lip on the telescoping lens hood. We found this feature useful when bracing ourselves against something for support and wanting to avoid scratching the lens barrel.

In the middle of the lens you will find a special manual-focus grip cover. Turn the cover to the left and slide it forward under the next extension, exposing the manual-focus ring. This ring is also made out of a rubberized material, and allows easy and accurate manual focusing.

The focus-range limiter is located right behind the manual-focus collar, and allows the photographer to minimize the focusing range of the lens. This feature is really handy if you find your autofocus falling through holes in the image area. For example: You are photographing race cars

coming around a corner. You would first autofocus on the most distant focus point. Turn the preset focus collar to the right until it stops. Tighten the preset screw, and the lens will not focus beyond the preset point.

Another method for controlling autofocus with the updated lens is by using the focus-hold button on the left side of the lens. Autofocus on the subject first, press the hold button, and reframe your subject to a point outside the focus grid. As long as you depress the focus-hold button, the

lens will remain at the original focus point. As soon as you release the hold button and press the shutter release again, the lens will refocus.

A trip to the Portland Zoo proved to be an excellent testing ground for this lens. We photographed birds located inside a building using available light, and were impressed that we could handhold the lens and get acceptable shutter speeds in such low light. More impressive were the

sharpness and clarity of the images after they were processed.

### 500mm f/8 MIRROR

One of the primary problems with mirror lenses is keeping up with the shallow field of focus. Not only do you have to keep the subject framed, but you also have to keep the lens steady and the subject in focus. Minolta has solved this problem with a beautifully designed autofocus 500mm f/8 mirror lens. We found this lightweight lens ideal for follow-focusing on very distant subjects. With the exposure accuracy of the Maxxum 7000i camera and the fast lens autofocusing, we only had to worry about steadiness and framing the subject properly. (Note: The 500mm mirror lens autofocuses only with Maxxum 5000i, 7000i, and 8000i cameras. With other Maxxums—5000, 7000, 9000, and 3000i—



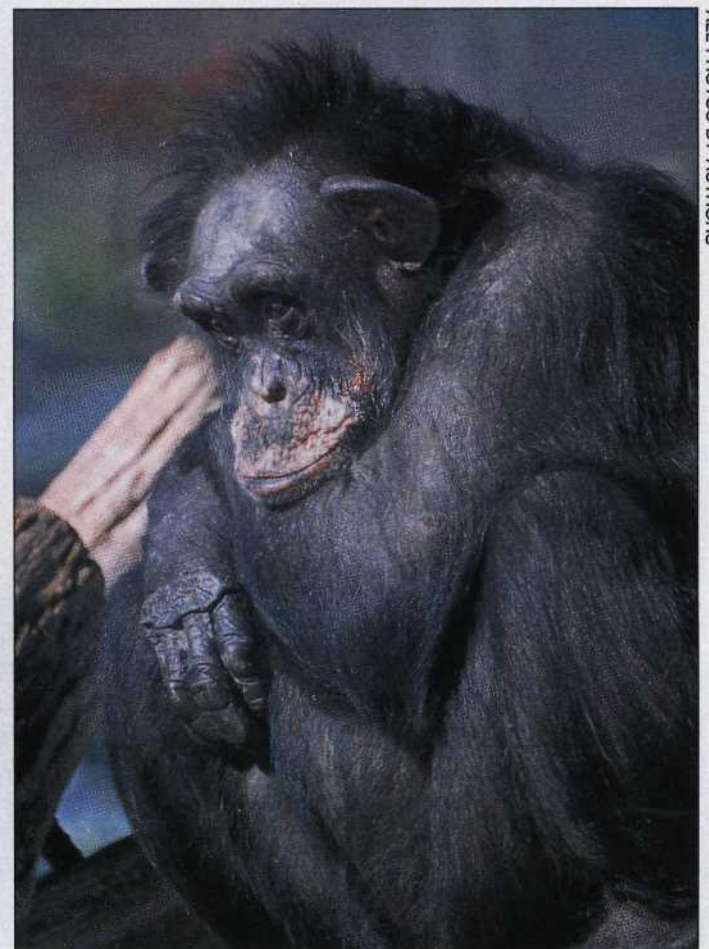
**AF 500mm f/8**



**AF 35mm f/1.4**



**AF 200mm f/2.8 Apo**



**AF 500mm f/8**

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AF 35mm f/1.4



AF 35mm f/1.4



AF 200mm f/2.8 Apo



AF 500mm f/8

**MAXXUM LENSES**

LENS	APERTURE RANGE	OPTICAL CONST.	MIN. FOCUS	MAX. REPRO.	FILTER SIZE	LENGTH	DIAMETER	WEIGHT	LIST PRICE
AF 16mm f/2.8 Fisheye	f/2.8-22	11 elements in 8 groups	0.7 ft. (0.22m)	NA	Built-in	2.63 in. (66.8mm)	2.94 in. (74.7mm)	14.1 oz. (400.8g)	\$1017
AF 20mm f/2.8	f/2.8-22	10 elements in 9 groups	0.8 ft. (0.25m)	NA	72mm	2.13 in. (54.1mm)	3.06 in. (77.7mm)	10.1 oz. (285.5g)	\$744
AF 24mm f/2.8	f/2.8-22	8 elements in 8 groups	0.8 ft. (0.25m)	NA	55mm	1.75 in. (44.5mm)	2.56 in. (65mm)	7.6 oz. (214.5g)	\$436
AF 28mm f/2	f/2-22	9 elements in 9 groups	1 ft. (0.31m)	NA	55mm	1.94 in. (49.3mm)	2.63 in. (66.8mm)	10.1 oz. (285.5g)	\$658
AF 28mm f/2.8	f/2.8-22	5 elements in 5 groups	1 ft. (0.31m)	NA	49mm	1.69 in. (42.9mm)	2.56 in. (65mm)	6.5 oz. (184.4g)	\$209
AF 35mm f/1.4	f/1.4-22	10 elements in 8 groups	1 ft. (0.31m)	NA	55mm	3 in. (76.2mm)	2.56 in. (65mm)	16.6 oz. (471g)	\$1214
AF 35mm f/2	f/2-22	7 elements in 6 groups	1 ft. (0.31m)	NA	55mm	1.94 in. (49.3mm)	2.63 in. (66.8mm)	8.4 oz. (239.5g)	\$402
AF 50mm f/1.4	f/1.4-22	7 elements in 6 groups	1.5 ft. (0.46m)	NA	49mm	1.5 in. (38.1mm)	2.56 in. (65mm)	8.3 oz. (235.5g)	\$243
AF 50mm f/1.7	f/1.7-22	6 elements in 5 groups	1.5 ft. (0.46m)	NA	49mm	1.5 in. (38.1mm)	2.56 in. (65mm)	6.5 oz. (184.4g)	\$111
AF 85mm f/1.4	f/1.4-22	7 elements in 6 groups	2.8 ft. (0.86m)	NA	72mm	2.81 in. (71.4mm)	3.06 in. (77.7mm)	19.4 oz. (549.8g)	\$872
AF 100mm f/2	f/2-32	7 elements in 6 groups	3.3 ft. (1m)	NA	55mm	3 in. (76.2mm)	2.63 in. (66.8mm)	16.9 oz. (479.5g)	\$607
AF 135mm f/2.8	f/2.8-32	7 elements in 5 groups	3.3 ft. (1m)	NA	55mm	3.25 in. (82.6mm)	2.56 in. (65mm)	12.9 oz. (365.3g)	\$209
AF 200mm f/2.8 Apo	f/2.8-32	8 elements in 7 groups	4.9 ft. (1.51m)	NA	72mm	5.25 in. (133.4mm)	3.38 in. (85.9mm)	27.9 oz. (27.9g)	\$1334
AF 300mm f/2.8 Apo	f/2.8-32	11 elements in 9 groups	8.2 ft. (2.52m)	NA	Integral	9.38 in. (238.3mm)	5.06 in. (128.5mm)	87.5 oz. (2482.8g)	\$5282
AF 500mm f/8 Reflex	f/8 (fixed)	7 elements in 5 groups	13.2 ft. (4m)	NA	Slip-in	4.6 in. (118mm)	3.5 in. (89mm)	24.7 oz. (700g)	\$684
AF 600mm f/4 Apo	f/4-32	10 elements in 9 groups	20 ft. (6.15m)	NA	Integral	17.69 in. (449.3mm)	6.63 in. (168.4mm)	194 oz. (5504.8g)	\$8547
AF 24-50mm f/4	f/4-22	7 elements in 7 groups	1.1 ft. (0.34m)	NA	55mm	2.38 in. (60.5mm)	2.69 in. (68.3mm)	10.1 oz. (285.5g)	\$496
AF 28-85mm f/3.5-4.5	f/3.5-22/27	13 elements in 10 groups	2.6 ft. (0.8m)	NA	55mm	3.38 in. (85.9mm)	2.69 in. (68.3mm)	17.3 oz. (490.9g)	\$325
AF 28-135mm f/4-4.5	f/4-22/27	16 elements in 13 groups	4.9 ft. (1.51m)	NA	72mm	4.3 in. (109.2mm)	2.94 in. (74.7mm)	26.4 oz. (26.4 oz.)	\$512
AF 35-80mm f/4-5.6	f/4-22/32	8 elements in 8 groups	1.6 ft. (0.49m)	NA	46mm	2.3 in. (58.4mm)	2.56 in. (65mm)	7.1 oz. (200.3g)	\$231
AF 35-105mm f/3.5-4.5	f/3.5-22/27	12 elements in 10 groups	2.8 ft. (0.86m)	NA	55mm	2.3 in. (58.4mm)	2.69 in. (68.3mm)	10.3 oz. (290.8g)	\$376
AF 70-210mm f/3.5-4.5	f/3.5-22/27	12 elements in 12 groups	3.6 ft. (1.11m)	NA	55mm	3.94 in. (100.1mm)	2.9 in. (73.7mm)	14.8 oz. (14.8g)	\$376
AF 75-300mm f/4.5-5.6	f/4.5-32/38	13 elements in 11 groups	4.9 ft. (1.51m)	NA	55mm	6.4 in. (162.6mm)	2.9 in. (73.7mm)	30.5 oz. (865.4g)	\$744
AF 80-200mm f/2.8 Apo	f/2.8-32	16 elements in 13 groups	5.9 ft. (1.82m)	NA	72mm	6.56 in. (166.6mm)	3.4 in. (86.4mm)	47.6 oz. (1351.5g)	\$1641
AF 80-200mm f/4.5-5.6	f/4.5-22/27	9 elements in 9 groups	4.9 ft. (1.51m)	NA	46mm	3.06 in. (77.7mm)	2.63 in. (66.8mm)	10.6 oz. (300.8g)	\$282
AF 100-200mm f/4.5	f/4.5-22	8 elements in 7 groups	6.2 ft. (1.91m)	NA	49mm	3.75 in. (95.3mm)	2.75 in. (69.9mm)	13.3 oz. (377.4g)	\$171
AF 100-300mm f/4.5-5.8	f/4.5-32/38	11 elements in 9 groups	4.9 ft. (1.51m)	NA	55mm	3.94 in. (100.1mm)	2.9 in. (73.7mm)	14.4 oz. (408.6g)	\$487
AF 50mm f/2.8 Macro	f/2.8-32	7 elements in 6 groups	0.7 ft. (0.22m)	1:1	55mm	2.3 in. (58.4mm)	2.69 in. (68.3mm)	10.3 oz. (292.3g)	\$521
AF 100mm f/2.8 Macro	f/2.8-32	8 elements in 8 groups	1.1 ft. (0.34m)	1:1	55mm	3.9 in. (99.1mm)	2.81 in. (71.4mm)	18.3 oz. (519.3g)	\$829
AF 45-52mm f/1.7-2.8 3X-1X Macro Zoom	f/1.7-27	7 elements in 5 groups	1 in. (24.4mm)	3X	36mm	3.38 in. (85.7mm)	3.75 in. (95.3mm)	38.8 oz. (1101g)	\$TBA

the lens must be focused manually.)

The only control on the lens is the focus-hold button. We found this control to be very important with this lens, because of the long focus range and the recovery time when the focus brackets fall through a hole in the picture. To use it, simply auto-focus on your main subject, press the hold button, and reposition the subject to a different point in the picture.

Because of the large front element,

filters for the 500mm lens are inserted into a filter holder at the back.

Field tests with the 500mm mirror were made at a nearby airport, where security would not allow close pictures. As a colorful seaplane made its exit, we made a series of rapid-fire photos. Despite the plane's constantly changing distance and speed, the camera-lens combination made an impressive series of sharply focused action shots. We found it extremely

comforting to know that we could concentrate solely on framing and controlling camera movement.

Each time we see a new lens introduced into the marketplace, we say to ourselves, this is probably about as good as it's going to get. Then there's another design breakthrough, and best gets even better. After running these three beauties through the paces, we would definitely describe these as Minolta's *crème de la crème*. ■