



MINOLTA

**A GUIDE TO
THE MINOLTA SLR SYSTEM OF
CREATIVE PHOTOGRAPHY**

THE MINOLTA SLR SYSTEM OF CREATIVE PHOTOGRAPHY

Minolta makes a really complete 35mm photographic system so that you can be a really complete photographer. Now that you own one of the famous Minolta SLR cameras, you have the nucleus of the world's finest system of 35mm photography. Your potential is practically unlimited.

Judged by any standards of photographic excellence, Minolta SLR cameras are thoroughly professional instruments of uncompromising quality. With their versatile complement of specially designed Minolta lenses and many precision Minolta accessories, they are capable of mastering virtually any photographic situation imaginable.

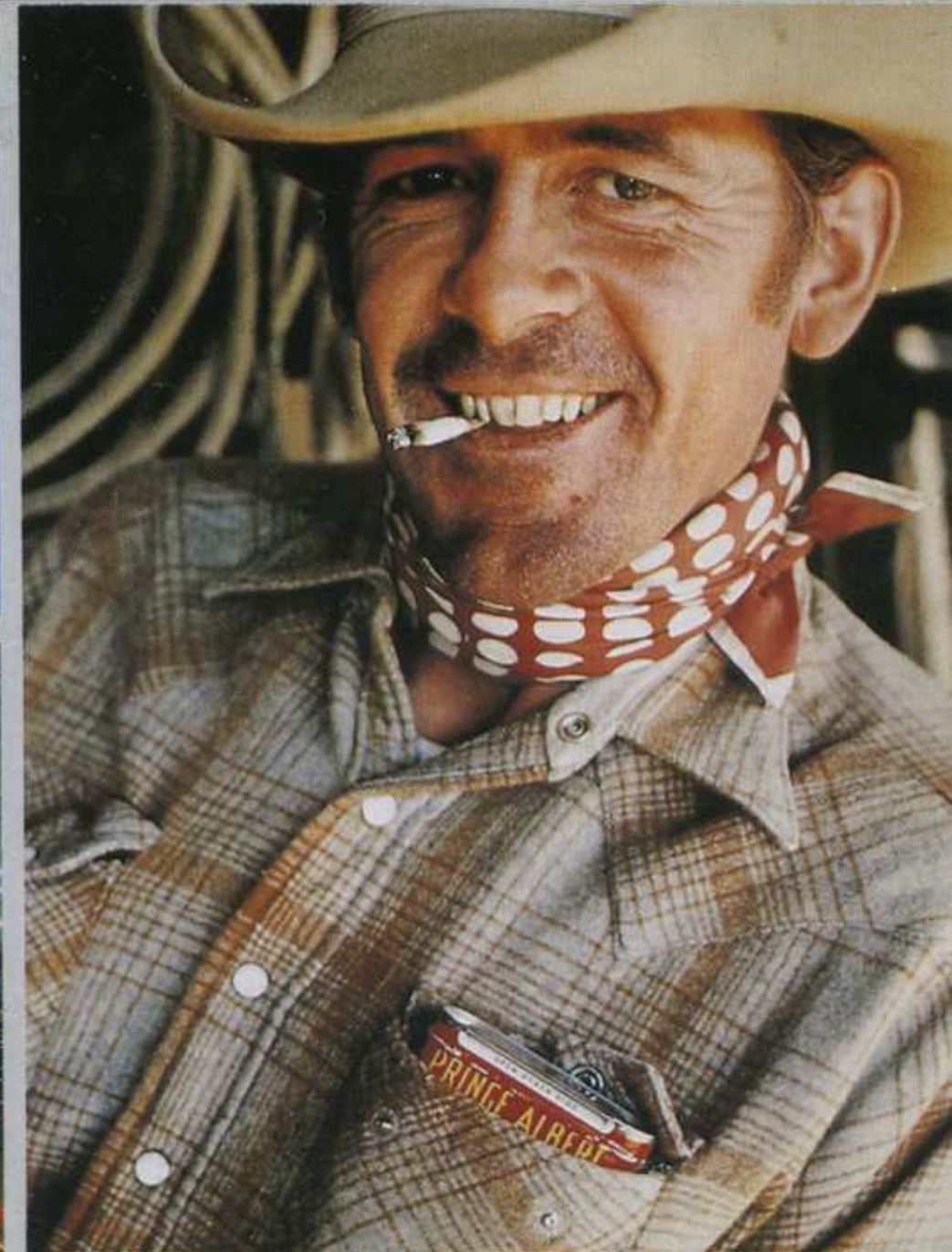
Minolta makes more than 400 lenses, accessories, and attachments for use with Minolta SLR cameras. Encompassed are interchangeable lenses, including many zoom and special-purpose types, from 7.5mm fisheye to 1600mm extreme telephoto plus the full range of accessories and attachments. Most of these are described in this booklet.

Now that you own a Minolta SLR camera, you owe it to yourself to fit it with genuine Minolta accessories and particularly with Minolta interchangeable lenses that match it in quality. These lenses and accessories are made by Minolta expressly for your SLR. To assure best results, be sure you get the genuine products; they are the only ones that will give you maximum performance every time.

The object of the Minolta SLR system is to give every photographer, of no matter what skill, a creative choice in all areas of photography. Your Minolta dealer can demonstrate the full SLR camera, lens, and accessory line and help you choose the equipment that best suits your needs. See him for technical help, too. Your adventures in creative photography may very well begin in his store.



50mm Macro Lens at f/5.6, camera on "Auto" (1/250 sec.)
75-200mm Zoom Lens at f/4.5, 5 sec. exposure while zooming



85mm Lens at f/5.6, 1/60 sec.

MINOLTA INTERCHANGEABLE LENSES



How Minolta Makes a Lens

Minolta is one of a very few camera companies in the world that make their own optical glass and lenses. This little-known fact becomes very important when you consider that only in this way can a camera company ensure the precise optical and mechanical design properties so vital to advanced photography.

Before a Minolta lens is mounted on a Minolta camera, extensive consumer research first tells us what lenses and features users want most; the concept for each new lens is formed; and design begins.

Minolta engineers then take this basic concept and using extremely sophisticated computers and programs refine it into a working lens design. Visual readout "conversational monitoring system" (photo 1, p. 5) techniques and computerized plotters help decide what types of glass will be used, number of elements, their exact curvatures, and all the many other factors that will result in the best possible lens performance and design. Only after all this has been determined does actual production of a Minolta lens begin.

The Lens Glass Ingredients

Producing its own lenses from raw materials on up by latest techniques gives Minolta lens-engineering staffs rare flexibility to experiment with new designs for characteristics considered unattainable only a few years ago. Optical glass can be selected or mixed to meet the requirements of the design—not the other way around. New glasses produced among more than 150 different types by Minolta make for higher image quality with ever more compactness and light weight.

In Minolta's up-to-the-minute optical-glass-making facility, ingredients are first selected and mixed from over 40 which include tantalum pentoxide and rare earths from exotic places. Traditional batch melting in huge earthenware crucibles has been practically replaced by forming the fused ingredients into glass granules; continuous melting (2) of these at over 1,300°C (2,372°F) in electric furnaces after extra-strict index adjustment yields precise control and consistent higher purity. After forming of continuous bars, gob forming of lens blanks was developed; now with Minolta's highly advanced

technique, closely sized lens shapes are formed direct from molten glass by automated equipment. Then without stopping, they are annealed in tunnel ovens on an endless conveyor (3) to relieve internal stresses and further adjust refractive index. This continuous process eliminates the many manual operations in selecting, cutting, sizing, tumbling, etc., as well as considerable grinding, all of which formerly had to be done separately.

Grinding, Polishing, and Achromatic Coating

The shaped glass is then made into finished lenses under continuous computerized production/stock control. Grinding and smoothing with diamond abrasives refines the pressed shapes, and the lenses are next individually precision polished on automatic machinery (4) with oxides of zirconium or cerium. Using Newton-ring gauges, curvature can be checked to an accuracy of 0.0003mm (0.3 micron).

Next comes the important operation of centering, which is crucial for lens performance.

This is done with great speed and accuracy by rows of Minolta-developed automatic machines. Cemented groups today are precision centered using ruby-laser equipment (6), then fixed with ultraviolet rays, and cleaned ultrasonically before coating and assembly.

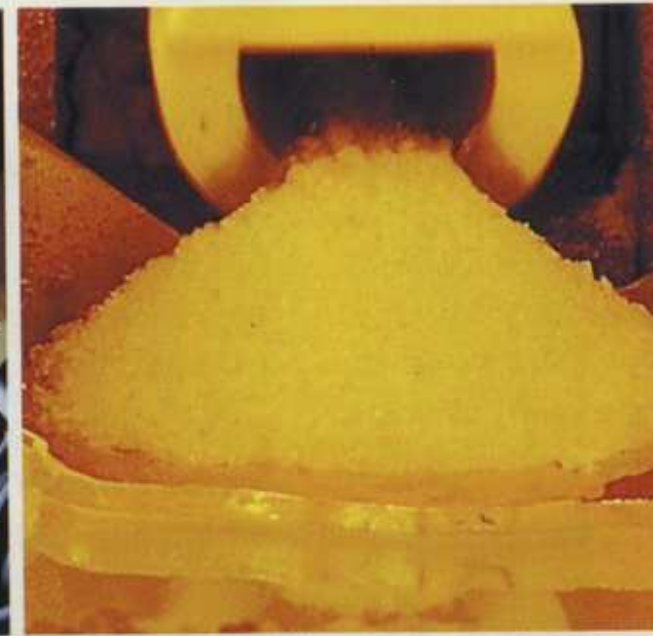
Minolta produced Japan's first coated lens in the 1940s; then more than 25 years ago, our Achromatic coating—first ever to employ more than one layer, for dramatic improvement in lens performance—became the forerunner of multi-layer coatings. Today Minolta's exclusive coating process (5) involves up to several layers of the most advanced compounds vacuum-deposited in microscopic thicknesses to meet the specific requirements of each lens design. As a result, Minolta lenses give less flare, better image contrast, and rich, true colors.

New Minolta MD lenses have a minimum aperture lock for use with X-700 or XD cameras. This lock should be released when using other cameras.

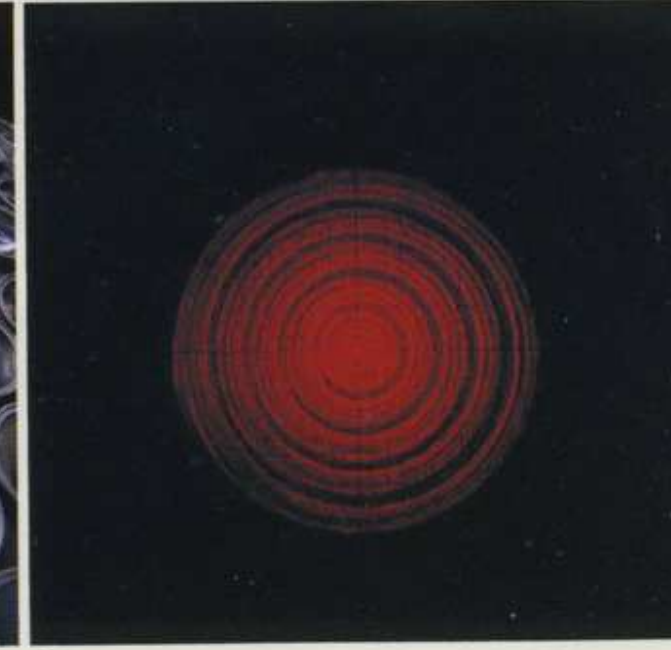
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3



4

5

6

ANGLE OF VIEW

A major advantage of 35mm SLR cameras is their ability to accept a large number of different focal-length lenses. Each different lens provides a specific degree of coverage, which is called the lens' angle of view and is an extremely important factor in the composition of a photograph. Angle of view is a diagonal

measurement in degrees of the area of a scene covered by the lens at a given distance. As focal length increases, the angle of view becomes narrower. Therefore, a 50mm lens has approximately four times the angle of view of a 200mm lens.



24mm



28mm



35mm



135mm



200mm



300mm



7.5mm Fisheye



16mm Fisheye



17mm



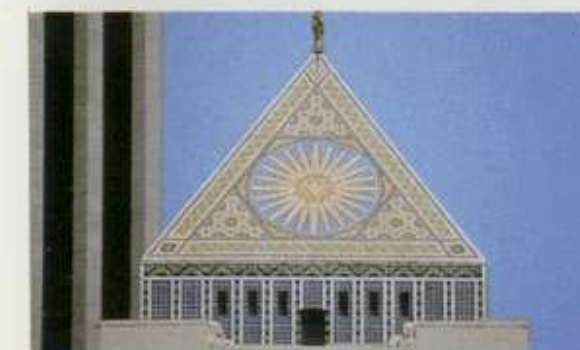
50mm



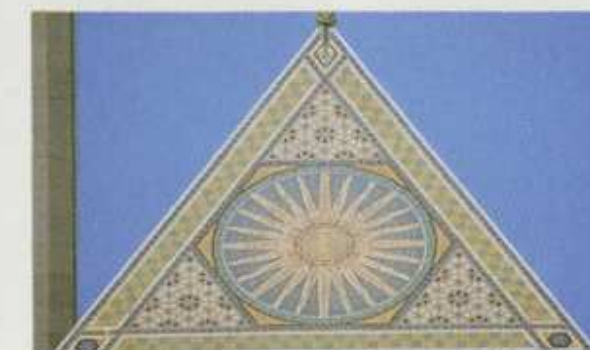
85mm



100mm



500mm



800mm



1600mm

FISHEYE LENSES

The widest of all Minolta lenses, the 7.5mm f/4 and 16mm f/2.8 fisheye lenses respectively give a circular and full-frame image with a 180° angle of view. For the creative photographer, their unique and unusual perspective can transform the most commonplace subject or scene into extraordinary images with dramatic impact. Their short focal length provides potentially enormous depth-of-field that can range from a few inches in front of the lens to infinity. And the use of special-index optical glasses assures exceptional image sharpness from edge to edge.

Both lenses feature a complement of built-in filters, and are fully meter-coupled with auto diaphragm for ease of operation.



7.5mm f/4 MD FISHEYE



16mm f/2.8 MD FISHEYE



16mm Fisheye Lens at f/8, 1/60 sec.

ULTRA WIDEANGLE LENSES

With angle of view approaching fisheye lenses but without their curving perspective, the ultrawide 17mm f/4, 20mm f/2.8, and 24mm f/2.8 lenses give sweeping and dramatic effects for pictorial and commercial photography. Their Minolta "floating" rear-element design provides exceptional edge-to-edge sharpness at minimum focus distance and maximum aperture, and makes them ideal choices when space indoors or outdoors is confined or for dramatic effects.

The short focal length of wideangle lenses gives them considerable depth of field even at large apertures or short distances. This inherent extra depth of field can aid in making sharp photos at peak action without the delay needed for adjusting focus.



17mm f/4 MD



20mm f/2.8 MD



24mm f/2.8 MD



20mm Lens at f/8, camera on "Auto" (1/125 sec.)



24mm Lens at f/16, 1/60 sec.

WIDEANGLE LENSES

The most popular and widely used wideangle lenses are 28mm and 35mm. Their moderate angles of view make them appropriate for an almost unlimited number of applications. Scenics, advertising, interiors, and group shots are just a few of the many uses these very popular lenses excel at. Minolta offers these two focal lengths in a variety of speeds to meet individual photographic needs. The extremely fast 35mm f/1.8 and 28mm f/2 lenses are unequaled for indoor and available-light photography, while the f/2.8 35mm and 28mm lenses are nearly as fast and ideal for overall general use. The f/3.5 28mm lens* is exceptionally lightweight and an especially good value. And as with all Minolta wideangles, the finest construction, design, and materials deliver critically sharp images edge to edge and at all aperture settings.

* Not available in the United States and Canada.



28mm Lens at f/8, camera on "Auto" (1/250 sec.)

24MM f/2.8 MD VFC

This is the world's first lens whose field of sharp focus can be varied continuously at will from concave through flat to convex by simply moving a control ring on the barrel. Thus, even if distances from center and edges of objects to the film plane are too different to be covered by depth of field (particularly at close range and/or large apertures), sharp photos having excellent image quality can be obtained of many subjects by appropriately curving the field. On the other hand, this capability can also be used creatively to deliberately render parts of the subject out of focus, or the lens can be used as a conventional flat-field wideangle. Either way, optimum image quality is assured by the "floating" focusing system and Minolta Achromatic coating incorporating latest techniques.



24mm f/2.8 MD VFC



VFC Lens field curved in "wrong" direction

VFC Lens field curved to conform to subject



35MM f/2.8 SHIFT CA

Minolta's exclusive mechanism for this lens makes full-circle shift very easy without rotating the barrel. Adjustment is conveniently made visually through the finder without watching scales, since movement stops at the range limit in any direction. Vertical shift enables taking in more of a subject without tilting the camera (see right). Lateral or diagonal shift is effective in avoiding intruding foreground elements (e.g., bushes, utility poles) or undersirable reflections (as on paintings, mirrors) without moving the camera, or to make panoramic exposures to be joined later. But further, this lens incorporates Minolta's widened versatility: Shift and VFC functions can also be used together in a wide variety of combinations for unique curve-tilt effects not possible with any other lens. This is the first of its type to have auto-diaphragm operation, for viewing and focusing at full-aperture brightness.



35mm f/2.8 SHIFT CA



Regular 35mm Lens



35mm Shift CA Lens

STANDARD LENSES

The Minolta MD 50mm f/2, f/1.7, f/1.4 and f/1.2 lenses are widely known as the fine "normal" or "standard" lenses for Minolta SLR cameras and are well suited for most general photographic purposes.

All are ideal for available-light photography indoors and for other low-illumination situations.

Light in weight and styled with "human-engineered" waffle-pattern rubber focusing grips, these standard lenses, are fitted with automatic iris diaphragms and MC and MD coupling lug rings. They thus provide for proper indexing/readout with Minolta multi-mode models as well as full-aperture light measuring or focusing with the diaphragm always open to maximum aperture except at the instant of exposure.



50mm Lens at f/4, camera on "Auto" (1/125 sec.)

TELEPHOTO LENSES

Minolta telephoto lenses are available in a very wide range of focal lengths that start at 85mm and extend through 1600mm. A lens for virtually any situation, limited only by the photographer's imagination, makes the Minolta telephoto lens system one of the world's largest and most highly respected. Innovative design and use of special Minolta-formulated and produced optical glasses and coatings assure image quality, contrast, and color rendition that is the finest possible. Up-to-the-minute design and engineering also make Minolta telephoto lenses among the most compact and lightweight available.

Short to Medium Telephoto

The Minolta 85mm, 100mm, and 135mm tele lenses are popular among working professionals. All are ideal for candid or portrait photography, allowing greater working distances from subjects and preventing distortion of features (nose, ears, chin) nearest the lens.



135mm Lens at f/11, camera on "Auto" (1/60 sec.)

Medium to Long Telephoto

The Minolta 200mm and 300mm telephotos offer even more optical "reach" for the sports, nature, or human-interest photographer yet are lightweight and compact enough to be handheld. They are invaluable for photographing unapproachable subjects such as distant landmarks or to keep you a safe distance from dangerous objects and situations. The 400mm f/5.6 and 600mm f/6.3 Apo Tele Lenses incorporate a fluorite element for eliminating the undesirable "secondary spectrum" that impairs images. They are ideal for long-lens work requiring particularly sharp definition, and attached with the optional 2X Tele Converter 300-L, they respectively become top-quality meter-coupled 800mm f/11 and 1200mm f/12.5 super telephotos.



400mm Apo Lens at f/5.6, 1/30 sec.

300mm Lens at f/4.5, camera on "Auto" (1/60 sec.)



MIRROR LENSES

The catadioptric-type 250mm, 500mm, 800mm and 1600mm RF lenses utilize precision ground and polished mirrors in combination with conventional refractive lens elements in their designs. Light travels nearly the length of the barrel three times in an overlapping reflex path, resulting in a relatively small bulk for such great focal lengths.

Particularly striking examples of this compactness are the 250mm RF which is only slightly larger than a standard lens but yields some five times greater magnification, and the 500mm RF which has 10 times the magnifying power yet can even be used hand-held — rare with optics of this great focal length. Similarly, the actual length of the 800mm and 1600mm RF's measure only a fraction of their focal length, which produce images respectively 16 and 32 times larger than a standard lens.

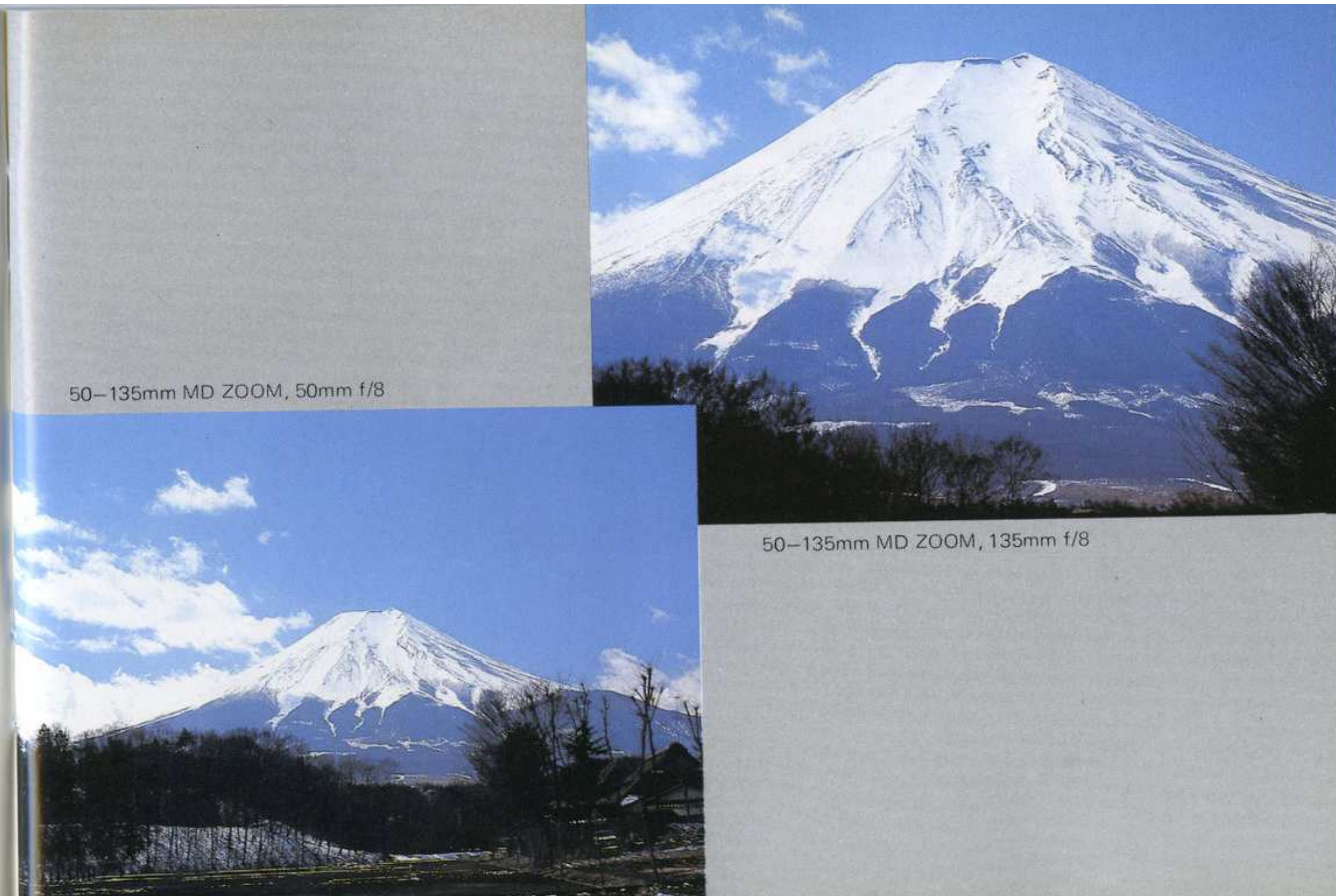
All of these mirror lenses are suited for sports, landscapes, and nature photography at extreme distances. Lens-stop settings are achieved with neutral-density filters, which like their special "sharp-cut" filters constitute elements in the optical design.



500mm RF Lens, camera on "Auto" (1/60 sec.)

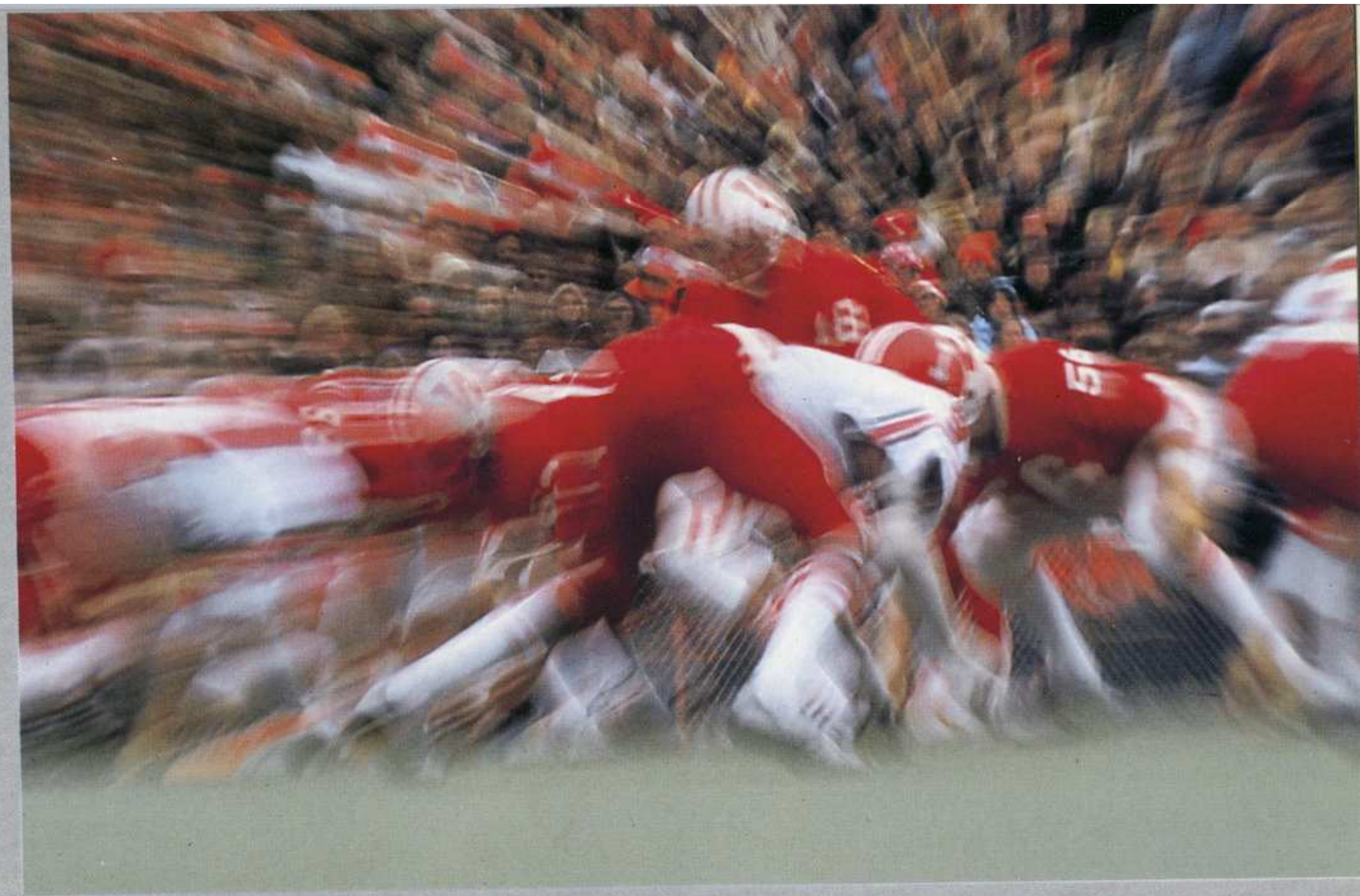
ZOOM LENSES

Each of the Minolta Zoom lenses allows the photographer to select the exact focal length he or she wants from an infinite number within a particularly useful range. The 24-35mm MD Zoom is one of the lightest and most compact of its kind, yet it provides the spectrum of very-wide to wideangle versatility so often required. The 24-50mm f/4 is another wideangle lens which provides a zoom ratio of over two times magnification now available from a major optical manufacturer. The 35-70mm f/3.5 Zoom has similar handling advantages, a light weight, as well as razor sharp optics. Like the 24-50mm Zoom it employs the inverted-telephototype optical design. The 35-105mm f/3.5-4.5 Zoom offers a wide spectrum of wide-tele-macro capabilities, which is ideal for extreme close-ups (to 0.25X magnification), fine portraits and short telephoto photo-journalism purposes. A very wide and interesting focal length range is the 50-135mm f/3.5 Zoom, which provides one-hand operation and is valuable for general photography, portraits, journalism and sports photography.



The 75-150mm f/4 Zoom is one of the smallest, lightweight mid-telephoto lenses available; its minimum focus distance of 3.94 ft. (1.2m) is one of the closest for this zoom range. The 75-200mm f/4.5 Zoom is one of the most popular zooms, useful for all kinds of general photography. A good buy is the 100-200mm f/5.6 Zoom, which offers speed in covering fast action and has multiple uses for photo-journalism. Largest of the Zoom lenses is the 100-500mm f/8, which is surprisingly lightweight and compact despite its impressive focal range.

Each of these lenses has a light, compact new design equipped for full-aperture metering/focusing and automatic diaphragm operation. And each can be zoomed and focused with one hand on a positive, comfortable grip of waffle-textured rubber-another instance of the easy handling Minolta is famous for.



100-500mm Zoom at f/8, 1/2 sec. exposure while zooming

85MM f/2.8 VARISOFT

This, the perfect portrait and general-use lens, is the world's first 35mm single-lens-reflex lens to offer continuous normal-to-soft-focus control. Merely turning the softness control ring from setting "0" (sharp focus) to "1," "2," or "3" (soft focus) increases the degree of optical softness.

At the "0" setting, the lens functions as a conventional 85mm lens. Turning the softness control ring alters the spherical aberration of the lens to create soft-focus effects.

The lens has many distinctive features. Successive softness levels and apertures can be altered separately at will, an important feature for photographers working indoors with strobe. Also, in soft-focus rendition with the Minolta Varisoft lens, every image point has a sharp image core and soft halo component surrounding the core on the film plane. Thus, subject details are rendered on the film even when covered by the broad halo, ensuring optimum soft-focus effect with virtually any subject.



85mm f/2.8 VARISOFT



85mm Varisoft Lens at f/2.8, control ring set at "0"



Control ring set at "3" at same aperture

32 MACRO LENSES

Of all the kinds of photography possible with the Minolta SLR system, the two that probably yield the most consistently unusual pictures are close-up photography and photomacrography.

For even the beginning photographer, the possibilities in these fields are practically unlimited, and the results are almost always uncommonly exciting. Everyday objects such as stamps or coins, mechanical subjects such as the movements or gears of a wrist watch, insects, plants, and so many more take on aspects missed by the human eye. The commonplace becomes extraordinary through magnification.

The 50mm f/3.5 Macro and 100mm f/4 Macro lenses combine ease of operation with superior optics and versatility. The 50mm Macro produces critically sharp pictures at any distance between 230mm (9-1/16 in.) and infinity without attachments. The 100mm Macro produces pictures of highest image quality at any distance between 450mm (17-9/16 in.) and infinity.



100mm Macro Lens at f/11, 1/30 sec.

BELLOWS · MACRO/MICRO LENSES

Minolta offers four new bellows lenses for close-up photography and photomacrography. The 12.5mm f/2 Bellows Micro Lens and the 25mm f/2.5 Bellows Micro Lens are coupled to a Minolta bellows via an adaptor; each provides extremely sharp magnification in 8X to 20.5X and 3.2X to 9.3X ranges, respectively. These and two new Auto Bellows Macro Lenses may be used with either the Minolta Auto Bellows III or Bellows IV. The 50mm f/3.5 Auto Bellows Macro Lens gives a 0.8X to 3.2X magnification range, while the 100mm f/4 Auto Bellows Macro Lens focuses from infinity to life size (1:1).



50mm Auto Bellows Macro Lens at f/16, with electronic flash

TECHNICAL DETAILS

LENS	ELEMENTS	GROUPS	METER-COUPLED AUTO-DIAPHRAGM	ANGLE OF VIEW	MINIMUM FOCUS	MINIMUM F-STOP	FILTER-MOUNT DIAMETER	DIMENSIONS	WEIGHT
MINOLTA 7.5mm f/4 MD FISHEYE	12	8	Yes	180°	0.5m (1.6 ft.)	f/22	Built-in	φ68 x 63mm	355g (12-1/2 oz.)
MINOLTA 16mm f/2.8 MD FISHEYE	10	7	Yes	180°	0.25m (0.8 ft.)	f/22	Built-in	φ64.5 x 43mm	265g (9-5/16 oz.)
MINOLTA 17mm f/4 MD	11	9	Yes	104°	0.25m (0.8 ft.)	f/22	72mm	φ75 x 53mm	325g (11-7/16 oz.)
MINOLTA 20mm f/2.8 MD	10	9	Yes	94°	0.25m (0.8 ft.)	f/22	55mm	φ64 x 43.5mm	240g (8-7/16 oz.)
MINOLTA 24mm f/2.8 MD	8	8	Yes	84°	0.25 m (0.8 ft.)	f/22	49mm	φ64 x 39mm	200g (7-1/16 oz.)
MINOLTA 28mm f/3.5mm MD	5	5	Yes	75°	0.3m (1 ft.)	f/22	49mm	φ64 x 40mm	170g (5-15/16 oz.)
MINOLTA 28mm f/2.8 MD	7	7	Yes	75°	0.3m (1 ft.)	f/22	49mm	φ64 x 43mm	185g (6-7/16 oz.)
MINOLTA 28mm f/2 MD	9	9	Yes	75°	0.3m (1 ft.)	f/22	49mm	φ64 x 50mm	265g (9-5/16 oz.)
MINOLTA 35mm f/2.8 MD	5	5	Yes	63°	0.3m (1 ft.)	f/22	49mm	φ64 x 38mm	170g (5-15/16 oz.)
MINOLTA 35mm f/1.8 MD	8	6	Yes	63°	0.3m (1 ft.)	f/22	49mm	φ64 x 48mm	240g (8-7/16 oz.)
MINOLTA 50mm f/2 MD	6	5	Yes	47°	0.45m (1.5 ft.)	f/22	49mm	φ64 x 36mm	155g (5-7/16 oz.)
MINOLTA 50mm f/1.7 MD	6	5	Yes	47°	0.45m (1.5 ft.)	f/22	49mm	φ64 x 36mm	165g (5-13/16 oz.)
MINOLTA 50mm f/1.4 MD	7	6	Yes	47°	0.45m (1.5 ft.)	f/16	49mm	φ64 x 40mm	235g (8-5/16 oz.)
MINOLTA 50mm f/1.2 MD	7	6	Yes	47°	0.45m (1.5 ft.)	f/16	55mm	φ65 x 46mm	310g (10-15/16 oz.)
MINOLTA 85mm f/2 MD	6	5	Yes	29°	0.85m (2.8 ft.)	f/22	49mm	φ64 x 53.5mm	285g (10-1/16 oz.)
MINOLTA 85mm f/1.7 MD	6	5	Yes	29°	1m (3.3 ft.)	f/22	55mm	φ71 x 62mm	455g (1 lb.)
MINOLTA 100mm f/2.5 MD	5	5	Yes	24°	1m (3.3 ft.)	f/22	49mm	φ64 x 65.5mm	310g (10-15/16 oz.)
MINOLTA 135mm f/3.5 MD	5	5	Yes	18°	1.5m (4.9 ft.)	f/22	49mm	φ64 x 72.5mm	285g (10-1/16 oz.)
MINOLTA 135mm f/2.8 MD	5	5	Yes	18°	1.5m (4.9 ft.)	f/22	55mm	φ64 x 81mm	385g (13-9/16 oz.)
MINOLTA 135mm f/2 MD	6	5	Yes	18°	1.3m (4.3 ft.)	f/22	72mm	φ79 x 96mm	725g (1 lb. 9-1/2 oz.)
MINOLTA 200mm f/4 MD	5	5	Yes	12° 30'	2.5m (8.2 ft.)	f/32	55mm	φ64 x 116.5mm	410g (14-7/16 oz.)
MINOLTA 200mm f/2.8 MD	5	5	Yes	12° 30'	1.8m (6 ft.)	f/32	72mm	φ78 x 133mm	700g (1 lb. 8-11/16 oz.)
MINOLTA 300mm f/5.6 MD	5	5	Yes	8° 10'	4.5m (14.8 ft.)	f/32	55mm	φ65 x 186mm	695g (1 lb. 8-1/2 oz.)
MINOLTA 300mm f/4.5 MD	7	6	Yes	8° 10'	3m (9.8 ft.)	f/32	72mm	φ77.5 x 177.5mm	705g (1 lb. 8-7/8 oz.)

★ Integral lens-element type ★★ Auto diaphragm ★★★ Optional gelatin-filter holder

LENS	ELEMENTS	GROUPS	METER-COUPLED AUTO-DIAPHRAGM	ANGLE OF VIEW	MINIMUM FOCUS	MINIMUM F-STOP	FILTER-MOUNT DIAMETER	DIMENSIONS	WEIGHT
MINOLTA 400mm f/5.6 MD APO	7	6	Yes	6° 10'	5m (16.4 ft.)	f/32	72mm	φ82.5 x 256.5mm	1490g (3 lb. 3-9/16 oz.)
MINOLTA 600mm f/6.3 MD APO	9	8	Yes	4° 10'	5m (16.4 ft.)	f/32	*	φ108.5 x 373.5mm	2400g (5 lb. 4-5/8 oz.)
MINOLTA 250mm f/5.6 RF	6/2 mirrors	5	No	10°	2.5m (8.2 ft.)	f/16	*	φ66.5 x 58mm	250g (8-13/16 oz.)
MINOLTA 500mm f/8 RF	6/2 mirrors	5	No	5°	4m (13.1 ft.)	f/16	*	φ83 x 98.5mm	600g (1 lb. 5-1/8 oz.)
MINOLTA 800mm f/8 RF	8/2 mirrors	7	No	3° 10'	8m (26.2 ft.)	f/16	*	φ127 x 178mm	1960g (4 lb. 5-3/16 oz.)
MINOLTA 1600mm f/11 RF	6/2 mirrors	5	No	1° 30'	20m (65.6 ft.)	f/22	*	φ179 x 325.5mm	6290g (13 lb. 13-7/8 oz.)
MINOLTA 24-35mm f/3.5 MD ZOOM	10	10	Yes	84°-63°	0.3m (1 ft.)	f/22	55mm	φ67 x 50mm	285g (10-1/16 oz.)
MINOLTA 24-50mm f/4 MD ZOOM	13	11	Yes	84°-47°	0.7m (2.3 ft.)	f/22	72mm	φ75 x 69.5mm	390g (13-3/4 oz.)
MINOLTA 35-70mm f/3.5 MD ZOOM	8	7	Yes	63°-34°	1m (3.3 ft.)	f/22	55mm	φ69 x 65.5mm	355g (12-1/2 oz.)
MINOLTA 35-105 f/3.5-4.5 MD ZOOM	16	13	Yes	63°-23° 0'	1.6m (5.2 ft.)	f/22	55mm	φ65 x 90.5mm	480g (1 lb. 15/16 oz.)
MINOLTA 50-135mm f/3.5 MD ZOOM	12	10	Yes	47°-18°	1.5m (4.9 ft.)	f/32	55mm	φ68.5 x 118mm	480g (1 lb. 15/16 oz.)
MINOLTA 75-150mm f/4 MD ZOOM	12	8	Yes	32°-16° 30'	1.2m (3.9 ft.)	f/32	49mm	φ64 x 113.5mm	445g (15-11/16 oz.)
MINOLTA 75-200mm f/4.5 MD ZOOM	15	11	Yes	32°-12° 30'	1.2m (3.9 ft.)	f/22	55mm	φ70 x 155mm	640g (1 lb. 6-9/16 oz.)
MINOLTA 100-200mm f/5.6 MD ZOOM	8	5	Yes	24°-12° 30'	2.5m (8.2 ft.)	f/22	55mm	φ64 x 171.5mm	595g (1 lb. 4-15/16 oz.)
MINOLTA 100-500mm f/8 MD ZOOM	16	10	Yes	24°-5°	2.5m (8.2 ft.)	f/32	72mm	φ90.5 x 330mm	2110g (4 lb. 7-3/8 oz.)
MINOLTA 24mm f/2.8 MD VFC	9	7	Yes	84°	0.3m (1 ft.)	f/22	55mm	φ64.5 x 50.5mm	340g (12 oz.)
MINOLTA 35mm f/2.8 SHIFT CA	9	7	No**	63°	0.3m (1 ft.)	f/22	55mm	φ83.5 x 71.5mm	555g (1 lb. 3-9/16 oz.)
MINOLTA 85mm f/2.8 VARISOFT	6	5	Yes	29°	0.8m (2.6 ft.)	f/16	55mm	φ70 x 80mm	430g (15-3/16 oz.)
MINOLTA 50mm f/3.5 MD MACRO	6	4	Yes	47°	0.23m (9 in.)	f/22	55mm	φ64 x 55.5mm	200g (7-1/16 oz.)
MINOLTA 100mm f/4 MD MACRO	5	4	Yes	24°	0.45m (1.5 ft.)	f/32	55mm	φ66 x 88.5mm	385g (13-9/16 oz.)
MINOLTA 12.5mm f/2 BELLOWS MICRO	4	4	No	-	-	f/16	***	φ33 x 23.5mm	40g (1-7/16 oz.)
MINOLTA 25mm f/2.5 BELLOWS MICRO	6	4	No	-	-	f/16	***	φ33.5 x 17mm	40g (1-7/16 oz.)
MINOLTA 50mm f/3.5 AUTO BELLOWS MACRO	6	4	No**	-	-	f/32	****	φ57 x 24.5mm	110g (3-7/8 oz.)
MINOLTA 100mm f/4 AUTO BELLOWS MACRO	5	4	No**	-	-	f/32	****	φ57 x 28.5mm	145g (5-1/8 oz.)

**** Optional gelatin-filter holder/55mm filter with hood

LENS ACCESSORIES

Minolta MD 2X Tele Converter 300-L and 300-S

These accessories effectively double the focal length of the Minolta lenses they are used with, providing precision with little or no loss of image quality, contrast or color balance. The 300-S is used with lenses of 300mm or shorter focal lengths. The 300-L is used with lenses of 300mm or longer focal lengths. Either can be attached quickly and easily between the lens and the camera body.

Lens Monocular Converter

The Minolta Lens Monocular Converter has been specially developed for use with Minolta interchangeable lenses. When attached to standard or telephoto lenses, it converts them into high-quality spotting scopes and telescopes. It enables highly-magnified views of small subjects when combined with macro lenses, bellows, or close-up accessories.

MD 2X TELE CONVERTER 300-S



MD 2X TELE CONVERTER 300-L



LENS/MONOCULAR CONVERTER



50mm Lens



50mm Lens with 300-S Tele Converter attached

MINOLTA PROGRAM SYSTEM



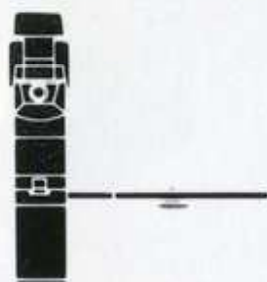
The Minolta Program System is the realization of Minolta's efforts to achieve sophisticated photographic versatility with simple operation. It is an ideal brought to reality by Minolta's continuing commitment to improve what is already excellent . . . to incorporate the latest state-of-the-art advancements into the age-old art of photography . . . to help make everyone—whether you're a novice photographer or a seasoned professional—as good as he or she can be. Achieving these goals was not easy. It was accomplished by designing a truly remarkable 35mm SLR, the X-700, along with a series of sophisticated accessory components that allow you to build the exact photographic system you want now . . . and to expand it at a later date as your interests grow.

The Minolta Program System combines the X-700, the Auto electroflash 280PX, the Motor Drive 1, the Multi-Function Back and the Wireless Controller IR-1 Set into a fully-integrated electronic network of incredible sophistication and, yet at the same time, of utter simplicity to operate.



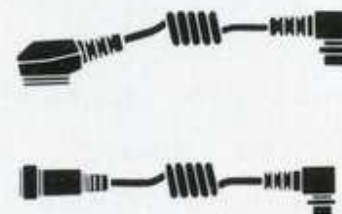
Auto Electroflash 280PX

Auto Electroflash 280PX is designed for use with the X-700 for programmed flash control. In program mode, the camera and flash unit work in concert to automatically select a suitable aperture, indicate flash-ready, set the shutter speed to the proper X-sync, fire, precisely control duration and provide proper exposure confirmation . . . all done without a manual setting. In aperture priority mode, flash emission is adjusted to the selected aperture. Operation in manual exposure mode is, likewise, simple and perfect. Attached to the Power Grip 2, flash sequences at up to 3.5 frames-per-second with Motor Drive 1. Used with the other accessories, Auto Electroflash 280PX offers TTL-metered autoflash, close-up, bounce flash pictures and a variety of other creative options when used off camera.



Power Grip 2

The Power Grip 2 supplements the batteries of Auto Electroflash 280PX 320X, or 320, enabling flash sequences at up to 3.5 frames per second with Motor Drive 1. Power can be supplied by six AA-size batteries inserted in the set's Battery Cartridge PG or by optional accessory Ni-Cd Battery Pack NP-2 to decrease recycling time and increase flash per charge or set of batteries. The unit's power saving circuit automatically switches it off approximately two minutes after the grip switch is released. This can be mounted on either the camera's right or left by using Camera Bracket 2, and bounce head tilts up and down and rotates right to left for bounce autoflash photography.



Off Camera Set

A range of creative techniques can be attained using the Auto Electroflash 280PX in any off-camera position. Off-Camera Shoe, Cable OC and Cable EX allow the photographer to creatively control autoflash illumination by positioning the 280PX away from the camera itself while maintaining accurate exposure control due to the X-700's unique Minolta Direct Metering System.



X-700 set in P mode with Auto Electroflash 280PX



Multi-Function Back

The Multi-Function Back is designed for the X-700 camera, and features a built-in quartz clock and a microcomputer to provide a variety of functions with LCD indications. Each film frame can be imprinted with the precise moment of exposure and the month/day/year can be imprinted in any of three ways, with a full autocalendar to 2099. Any desired number up to 6 digits can numerically code photographs and sequential camera-control from 1 to 999999 can, likewise, be imprinted. In addition, the Multi-Function Back provides unmanned camera control. Interval shooting can be selected in any time segment from 1 second to 99 hours/59 minutes/59 seconds when using the Motor Drive 1 or Auto Winder G; long exposure (time exposures) up to several hours' duration; or interval, number of frames and long exposure modes used in combination. Imprinting and modes used in combination. Imprinting and camera control function can also be used simultaneously.



Wireless Controller IR-1 Set

Minolta Wireless Controller IR-1 set gives extended versatility to use of the X-700 by allowing cordless remote control photography with the operator up to 60 meters (about 200 feet) away. Equipped with three separate channels, Wireless Controller IR-1 Set components allow any number of cameras to be operated simultaneously or independently in up to three individual groups, by appropriately setting transmitter and receivers. When connected on the X-700, the receiver IR-1 is set for continuous (C) or single (S) frame operation, senses infrared pulses emitted from the transmitter IR-1 and sends a signal to trigger shutter release.



Interval pictures with Multi-Function Back and Motor Drive 1

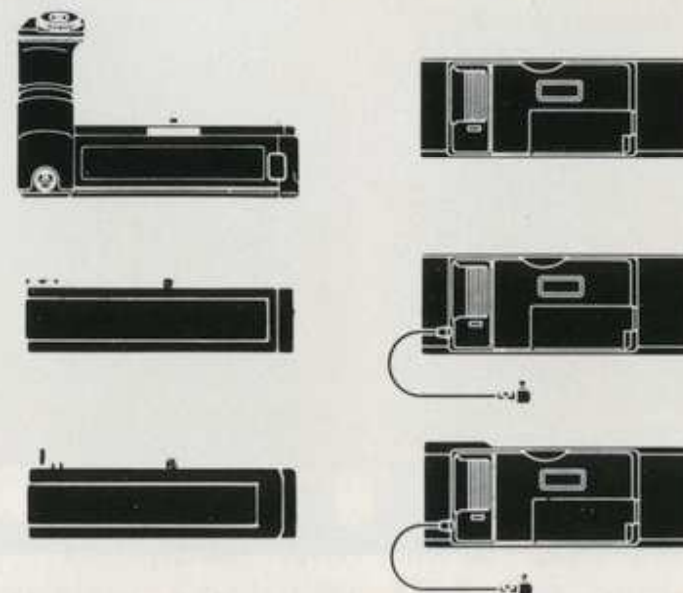


Accessories for X-700, XD and XG Series Cameras

Motor Drive 1 (for X-700 and XG-M)

This versatile, speedy motor drive lets you follow and capture the action with a choice of three settings: single frame, 2, and 3-1/2 frames-per-second. Attaching the drive is quick and simple, as there are no caps to remove or store away. Its design is attractive as well as providing positive and comfortable camera handling.

The operating buttons allow ease of operation in either vertical or horizontal framing positions, and both buttons feature the exclusive Minolta "Touch Switch" for instant metering and viewfinder readout.



Auto Winders D and G

A versatile, fast-attaching Minolta Auto Winder provides up to two frames per second automatic film winding. It is lightweight, compact and quiet. Film winding automatically stops at the end of each roll of film, to prevent film damage. Additionally, the extremely quiet, smooth operation makes this accessory ideal for remote-control operation and close-up photography. The Auto Winder D mates with any Minolta XD-series 35mm SLR; the Auto Winder G, with X-700 and any XG-series camera.

Quartz Data Back 1, G, and D

Controlled by an extremely accurate quartz clock and auto/calendar microcomputer, the Minolta Quartz Data Back accurately registers the time, data (in any of three configurations), code number (up to 999999) or sequential camera counts on the film frame about to be exposed. Leap years and irregular months are automatically compensated for, up to 2099. Replacement with a Minolta SLR standard back is simple and quick; no special tools are required thanks to a spring-loaded pin fitting. The Quartz Data Back 1 fits the Minolta X-700, and the D and G models fit the Minolta XD series and XG series (except XG-1).



50mm Lens at f/8, camera on "Auto" (1/250 sec.) with Auto Winder



MINOLTA ELECTRONIC FLASH UNITS



Whether it's the economy and simplicity of a manual Electroflash or the versatility of a system Auto Electroflash, Minolta makes just the unit to fit your flash-photography needs. With the Auto Electroflashes, a sensor receives light reflected from the subject and turns the flash off at the microsecond that proper exposure is reached, and the series-thyristor models such as the 200X give maximum flashes per battery/charge and shortest recycle times. The new-generation X-series units take automation a step farther by setting the shutter of XD and XG cameras for X-sync. and starting a viewfinder flash-ready signal blinking when ready to fire. Auto Electroflash 320 and 320X system units represent the vanguard of the industry in offering many advanced features besides those above, including variable power/GN for winder/motor-drive sync. and other advantages.



Auto Electroflash 320X and 320

The world's first flashes to offer variable guide-number/power control in both automatic and manual modes, the 320X and 320 units are the center of a complete flash system. Both yield maximum guide numbers of 32 (in meters at ASA 100, 52 in feet at ASA 25) and incorporate an energy-saving series-thyristor circuit for shortest recycle time and maximum number of flashes per battery. Perfectly exposed autoflash exposures are available at any of three apertures, or the units can be used manually. Each has a movable head for bounce flash, FDC autoflash check lamp and lighted computer dial with LED auto flash aperture indication. In addition, the 320X has a camera-control contact for use with XD and XG cameras.



Auto Electroflash 200X

This new-generation compact flash unit is designed for use on the XD and XG Series Cameras and can also be used cordlessly on many other cameras.

Offering series-thyristor circuitry for fastest recycling and maximum number of flashes, it makes perfectly exposed autoflash exposures at either of two apertures or can be operated manually. When attached to the XD or XG camera and ready to fire, the 200X starts a flash-ready LED blinking in the viewfinder and automatically sets the camera at the fastest speed for proper sync. when the shutter is released. Guide number is up to 20 for meters at ASA 100, 33 for feet at ASA 25.



Auto Electroflash 132X and 128

Compact cordless/corded units with respective guide number of 32 and 28 (in meters for ASA 100, 52 and 46 in feet at ASA 25). Both units feature a tiltable flash head for bounce flash and special flash-distance check lamp that lights when brightness is sufficient for correct autoflash exposure. Auto Electroflash 132X has an illuminated control dial with LED autoflash aperture-setting indication and two different apertures can be selected. When attached to an XD or XG camera and ready to fire, it starts a flash-ready signal in the viewfinder blinking and automatically sets the camera for X-sync. when the shutter is released. Optional Ni-Cd battery charger, wide panel for 24mm lens coverage and color filter set are available.



Camera set on "Auto" without flash

With Auto Electroflash 320X used for "fill"



Auto Electroflash 118X

Most compact of Minolta's new-generation autoflash units, the Auto Electroflash 118X connects cordlessly to Minolta XD or XG series or other cameras for perfect autoflash exposures at either of two settings or can be used manually. Attached to an XD or XG and ready to fire, it starts a flash-ready finder signal blinking and automatically sets the camera for X-sync. when the shutter is released. Guide number is up to 18 for meters at ASA 100, 30 for feet at ASA 25.



Auto Electroflash 25

This compact cordless/cordless unit with a guide number of up to 25 for meters at, ASA 100 (41 for feet, ASA 25) slides into the hot shoe on Minolta SLR cameras and makes completely automatic electronic flash exposures by means of a built-in sensor or can be used as a conventional non-auto unit. Recycling is indicated by a monitor lamp.

Electroflash 20

This non-automatic unit connects cordlessly to the hot shoe of any camera, and is powered by two AA-size batteries. Guide number is 20 in meters with ASA 100 film, 33 in feet with ASA 25. Its easy-to-read computer dial makes setting exposure fast and easy.



Camera set on "Auto" with Auto Electroflash 200X

THE TOOLS OF CLOSE-UP PHOTOGRAPHY AND PHOTOMACROGRAPHY



Close-Up Lenses

These lenses screw into the filter mount of normal Minolta lenses to permit focusing at close-up distances. Lenses 1 and 2 may be used in combination to allow work as close as 23cm (9 in.) from the subject. Lens 0 allows closer focusing with short telephoto lenses. With any of these close-up lenses, aperture is set as it would be when used alone.



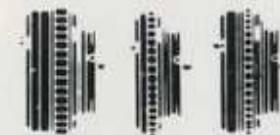
Extension Tube Set II

This set of five separate rings and tubes can be used in various combinations for close-up photography with Minolta lenses. Function of the parts is to increase magnification by lengthening the lens-to-film distance. Selection of the proper extension part or combination depends on the area to be covered or the image size required. When used with TTL Minolta SLR cameras, no compensation for exposure is necessary since the exposure reading is taken directly through the extended lens.



Reverse Ring II

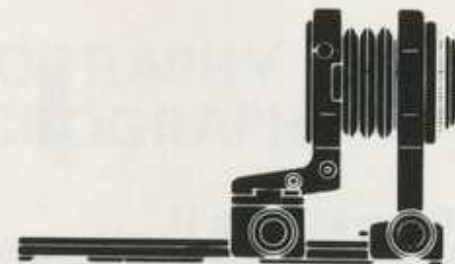
The Minolta Reverse Ring II enables using various Minolta lenses, particularly wideangle and normal, turned front to rear for considerably improved image quality at magnifications greater than life size (1:1 image-to-subject reproduction ratio).



MC Auto Extension Tubes

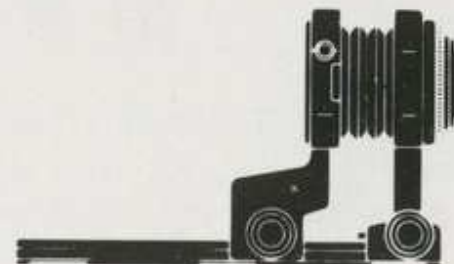
The purpose of this set of three tubes is the same as for the Extension Tube Set II, but it offers refinements that provide greater ease of use. Full meter and automatic-diaphragm coupling enables full-aperture metering/focusing, with the diaphragm closing down to the preset aperture only at the moment of exposure with Minolta SLR's and meter-coupled Minolta lenses. Each of the three tubes has a Minolta SLR bayonet on one end and a matching receptacle on the other; this all-bayonet system makes for fast, easy attaching and changing.

THE TOOLS OF CLOSE-UP PHOTOGRAPHY AND PHOTOMACROGRAPHY



Auto Bellows III

The heart of a highly advanced close-up system, this unit features independently moving camera and lens standards for precise control of magnification and focusing. Its versatile swinging and shifting mechanisms can be used separately or together for unique effects that are observable through the viewfinder. Magnifications from 0.78X to 3.79X can be obtained with a 50mm standard lens.



Bellows IV

Except for swinging and shifting mechanisms and auto diaphragm provision, all features and accessories of the Auto Bellows III are common to this unit. A detachable bellows for easy lens reversing and rotating camera mount are other features shared by both units.



Slide Copier AB-III

This handy unit can be attached to the Minolta Auto Bellows III and Bellows IV for copying transparencies up to 35mm, in mounts or strips. With a vertical shift of 7mm up and 6mm down, and a horizontal shift 8.5mm left or right, it provides great versatility in composing or cropping slides, 0.8X to 2.6X magnifications may be achieved.



Focusing Rail AB-III

This single-rail rack-and-pinion unit allows 110mm movement for easier, more precise focusing. It attaches to any Minolta Auto Bellows III and Bellows IV or to the Minolta Macro Stand easily and quickly. The built-in rotating hot shoe with sync. cord is most advantageous for positioning flash equipment for illuminating close-up subjects, and a socket is provided for tripod use.



100mm Auto Bellows Lens at f/16 on Auto Bellows III, 1/60 sec.



Magnifier Vn

This is a useful tool for precise focusing when making photomicrographs, copying, and taking distant telephoto pictures. It features an adjustable eyepiece and 2.3X magnifying power. Its pivoted attaching shoe permits swinging the magnifier away from the eyepiece for normal viewing of the entire finder without removal.



Microscope Adapter

This two-piece device is used to connect an SLR camera to a microscope. One section bayonets onto the camera body in place of the lens, while the other end fits into the ocular adapter tube section of the microscope. Taking photomicrographs is convenient with this adapter because you can follow moving specimens up to the precise moment of exposure. The adapter fits ocular tubes from 23mm to 29mm in diameter.



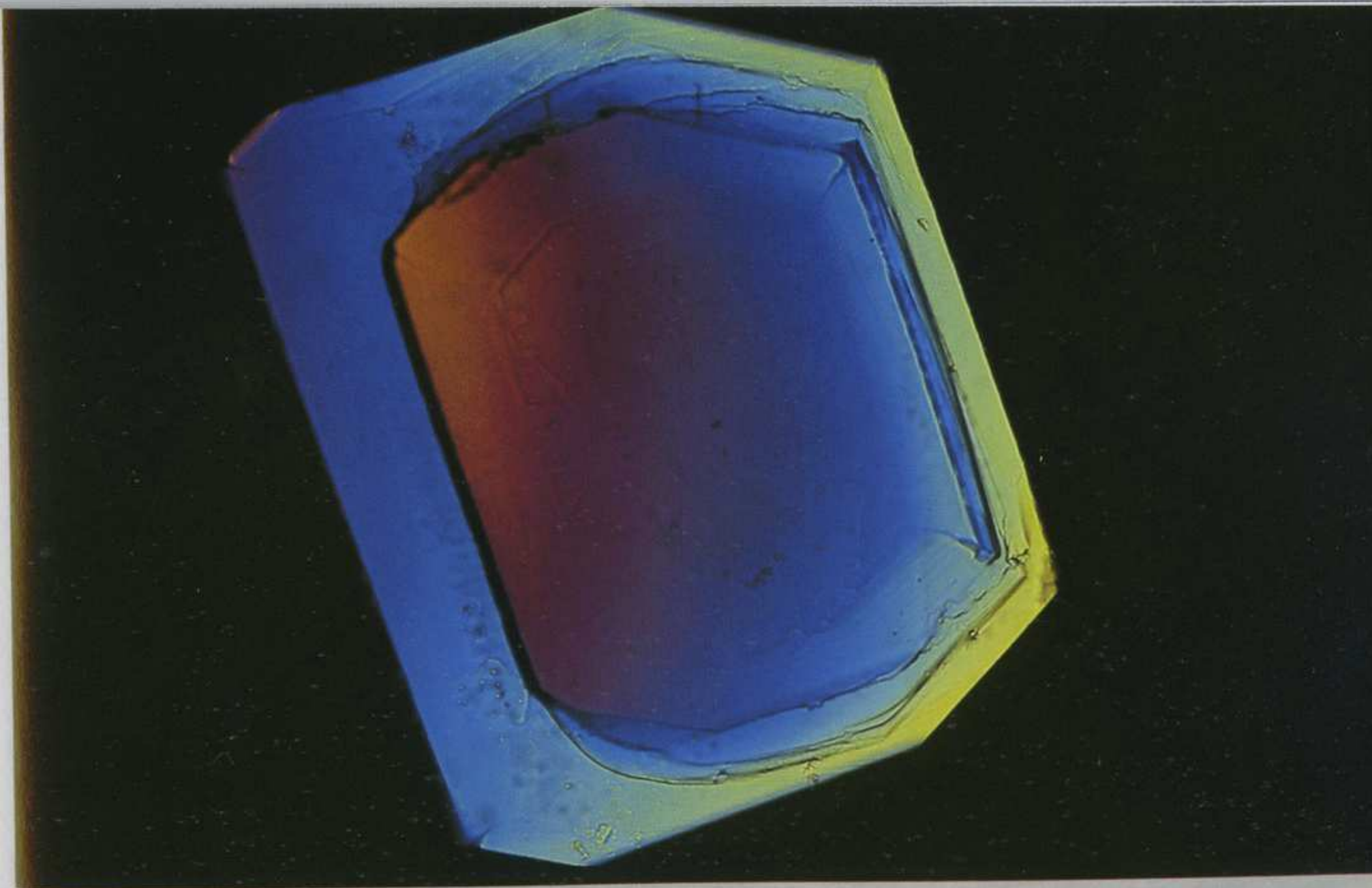
Copy Stand II

A rigid camera support that assures maximum stability in all close-up and photography, this unit is highly recommended when photographing either flat or three-dimensional objects. Unusually sturdy, the stand features a heavy-duty 39.4 x 45cm (15-1/2 x 17-3/4 in.) baseboard and a 61cm (24 in.)-high chrome tube 5cm (2 in.) in diameter to provide rigid support for camera and macro equipment.



Macro Stand AB-III

This easily portable folding unit is light in weight yet sturdy for exacting close-up/macro work, with 28 to 85mm lenses mounted normally or reversed, or 20 to 24mm lenses reversed only. Its 78mm (3-1/16-in.)-diameter rotating stage has convenient 18-percent reflection, can be locked at any point, and has clips to hold flat specimens.



12.5mm Bellows Micro Lens at f/5.6 on microscope using Minolta Microscope Adapter, 1 sec. exposure

OTHER MINOLTA SLR ACCESSORIES



Minolta Solid Glass Filters

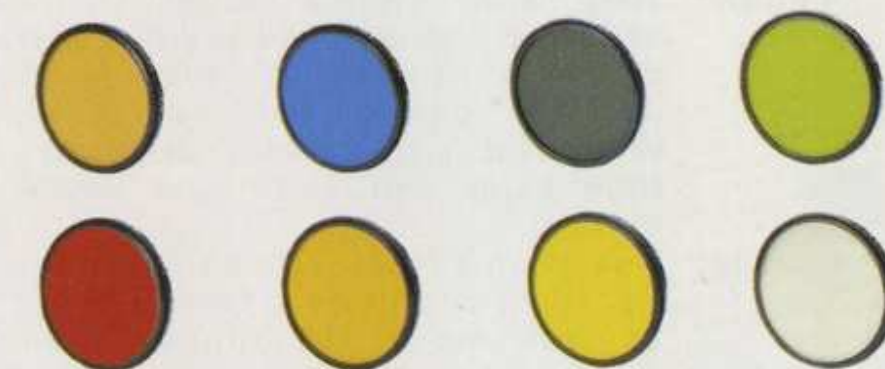
Minolta's filters are invaluable for correcting or obtaining various photographic effects. They are made of solid glass ground optically flat in Minolta's own facilities to prevent distortion and mounted in satin finish metal rings.

Refer to the following brief explanations to determine which filters best suit your photographic purposes, or consult your Minolta dealer for further information.

For Black-and-White Photography

UV: This filter absorbs excessive ultraviolet rays when shooting mountain, snow, and distant scenes. Exposure is the same as without a filter, and it may be kept attached to protect the lens.

Green: For correct monochromatic rendition of colored subjects as they appear to the eye, this filter is used with panchromatic film.



Filter Sizes Available

L37 (UV)	49mm	55mm	72mm
Y52 (Yellow)	49mm	55mm	72mm
60 (Red)	49mm	55mm	72mm
O56 (Orange)	49mm	55mm	72mm
GO (Green)	49mm	55mm	
Polarizer	49mm	55mm	
B12 (80B)	49mm	55mm	72mm
A12 (85)	49mm	55mm	72mm
1A			72mm
1B	49mm	55mm	
ND x 4	49mm	55mm	72mm

All Achromatic coated (except polarizer)

Yellow: Red and yellow subjects are rendered lighter than the eye sees them by this filter. It tends to increase overall contrast somewhat and is often used to darken blue skies and emphasize white clouds.

Orange: Use of this filter with panchromatic films produces effects similar to but more pronounced than those with a yellow filter.

Red: This filter used with panchromatic materials greatly lightens red, produces strong contrast, and can be used for exaggerated cloud effects. Used in combination with infrared film, it eliminates atmospheric haze and produces spectacular, high-contrast effects.

For Color Photography

1A: Use this filter to improve bluish rendition of subjects in shade, illuminated by blue sky, on overcast or rainy days, or obscured by atmospheric haze. It requires no increase in exposure and is often used with color or monochromatic materials to protect the lens.

80B: This filter is used for shooting with daylight-type color film indoors with artificial light of 3400°K color temperature (as of photoflood lamps).

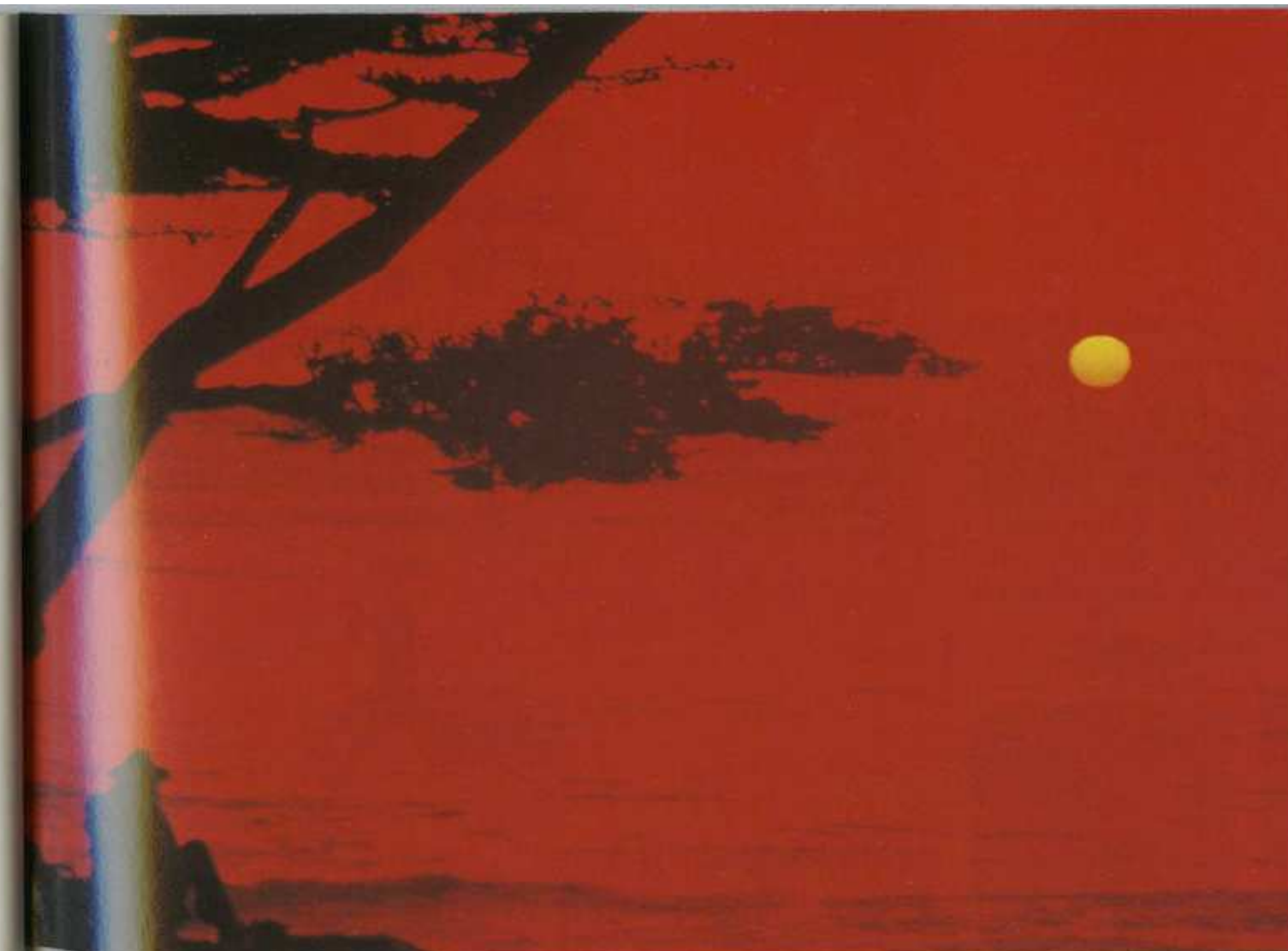
85: Type A color films (balanced for exposure with light of 3400°K color temperature) can be used in daylight by exposing through this filter.

For Black-and-White and Color Photography

Polarizing

Filter: This filter is ideal for reducing or eliminating specular reflections as from glass or water to provide clearer views or richer tones or textures; it can also be used to darken skies in either color or monochrome.

ND X4: Used to adjust light volume from a scene or subject, this neutral density filter can be employed to avoid overexposure (as when shooting beach or brilliant snow scenes, especially with fast films). It is also useful for depth-of-field control under certain conditions to emphasize a subject against an out-of-focus background.



50mm Lens at f/8 with R60 Filter, 1/60 sec.

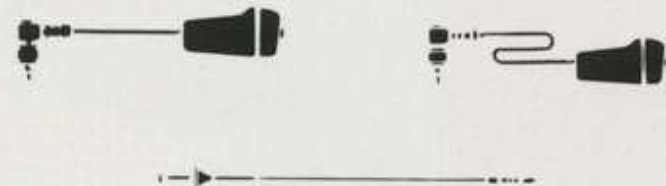


Without Polarizing Filter
With Polarizing Filter



Rubber Eyepiece Cup

This soft rubber cup is ideal for photographers who wear eyeglasses. It permits close proximity to the eyepiece for accurate composing and focusing, without damage to glasses' lens or camera body.



Cable Release II and Remote Cord S/L

These high-quality, durable accessories aid in steady picture-taking. In addition to being extremely flexible, the cable release features a coaxial-type lock for time exposures. It is also a standard accessory for the Minolta Auto Bellows III. The remote cords come in both short and long sizes, 50cm (approx. 20 inches) and 5m (16-1/2 feet), for both XD- and XG-series Minolta SLRs.



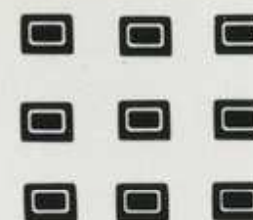
Lens Mount Adapter

Minolta makes a Praktica lens adapter, which locks securely on Minolta SLR camera bodies with the special key provided. Any Praktica-mount lenses can thus be used with Minolta SLR cameras and can be focused throughout its full range.



Mini Tripod TR-1

The compact, convenient Minolta Mini Tripod TR-1 features a lockable ball head and rotating socket that allows camera positioning — either vertically or horizontally — over a full 360° range. A large fixing screw and positioning stops enable setting up and locking the three-leg support in seconds. When not in use, the legs fold for easy storage. And the Minolta Mini Tripod TR-1 can also be used as a handy chestpod.



Eyepiece Corrector VN

Focusing aid for far- and near-sighted photographers is provided by these special lenses which snap into grooves provided in the camera eyepiece. Minolta makes nine different diopter strengths, from -4 to +3.



Panorama Head II

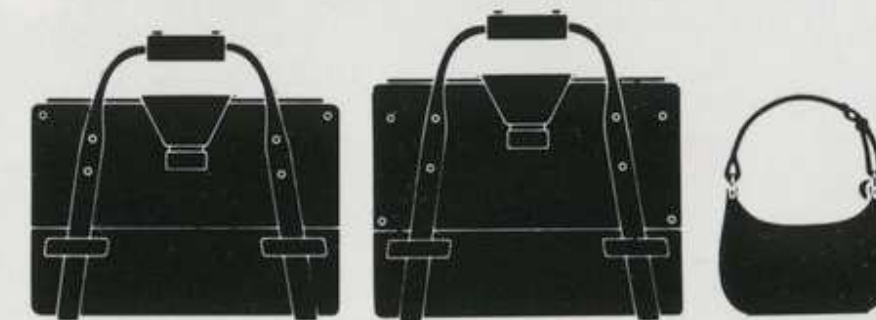
The Minolta Panorma Head II is specially designed to be attached between a Minolta single-lens-reflex camera and a tripod for photographing panoramic views up to a full 360° in a sequence of photos that can be matched accurately.

It can be set to automatically provide proper interval and overlap between successive frames with various Minolta lenses and has a built-in level. Excellent panoramas can thus be easily made without the need of checking coverage of each frame through the viewfinder.



Angle Finder VN

Selectable dual magnification (1X or 2X, selectable by lever), 360° rotation for full-frame finder image viewing, and -9 to +3 diopter eyepiece adjustment are some of the versatile features of the Minolta Angle Finder VN that make it an ideal accessory for photographers who work with SLRs below eye level. Also ideal for photomicrography and copywork.



Gadget Bags XB-5s, XB-7s and Soft Bag Professional III

Minolta offers the photographer on the go three gadget bags in varying sizes, to hold almost anything you'd desire. These are well-constructed, thoughtfully designed bags made expressly to keep your Minolta equipment dry and secure.

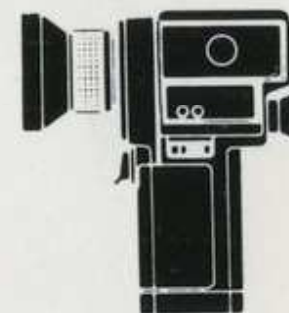
MINOLTA LIGHT METERS



Besides world-renowned cameras, lenses, and other products, Minolta makes and markets a full line of meters for every major photoexposure purpose. And at Minolta we produce our own CdS and silicon photo cells for these and the meters built into our cameras.

At the request of NASA, the U.S.A.'s National Aeronautics and Space Administration, Minolta developed and produced the Space Meter, which was used for critical exposure measurement on epoch-making Apollo missions to the moon. This feat gives some indication of the distinguished state of the photometric art at Minolta.

You put this same superior technology to work for you whichever of the remarkable Minolta light meters you may choose.



Auto-Spot II

These single-lens reflex exposure meters with 1° angle of acceptance have silicon photo cells, and operate as rapidly as you sight your subject. Illuminated scales in Auto-Spot II enables easy and accurate readings under dim conditions. ASA range: 3 to 25,000; EV range: 3 to 17; aperture range: 1 to 45; shutter-speed range: 1/2000 to 30 sec.; cine range: 8 to 128 fps (with 180° sector opening).



Spotmeter M

The latest microprocessor technology, liquid-crystal digital/analog multiple display, and memory function, give the Spotmeter M the most sophisticated measuring abilities to date. This includes the first processor-calculated exposure-zone system that adjusts display indication to bias exposure for highlight or shadow rendition, or average two readings for best overall exposure.

Its high-sensitivity silicon photo cell provides an extremely wide measuring range, and its Minolta optical system gives a bright, clear image for precise measurement of the central 1° spot.



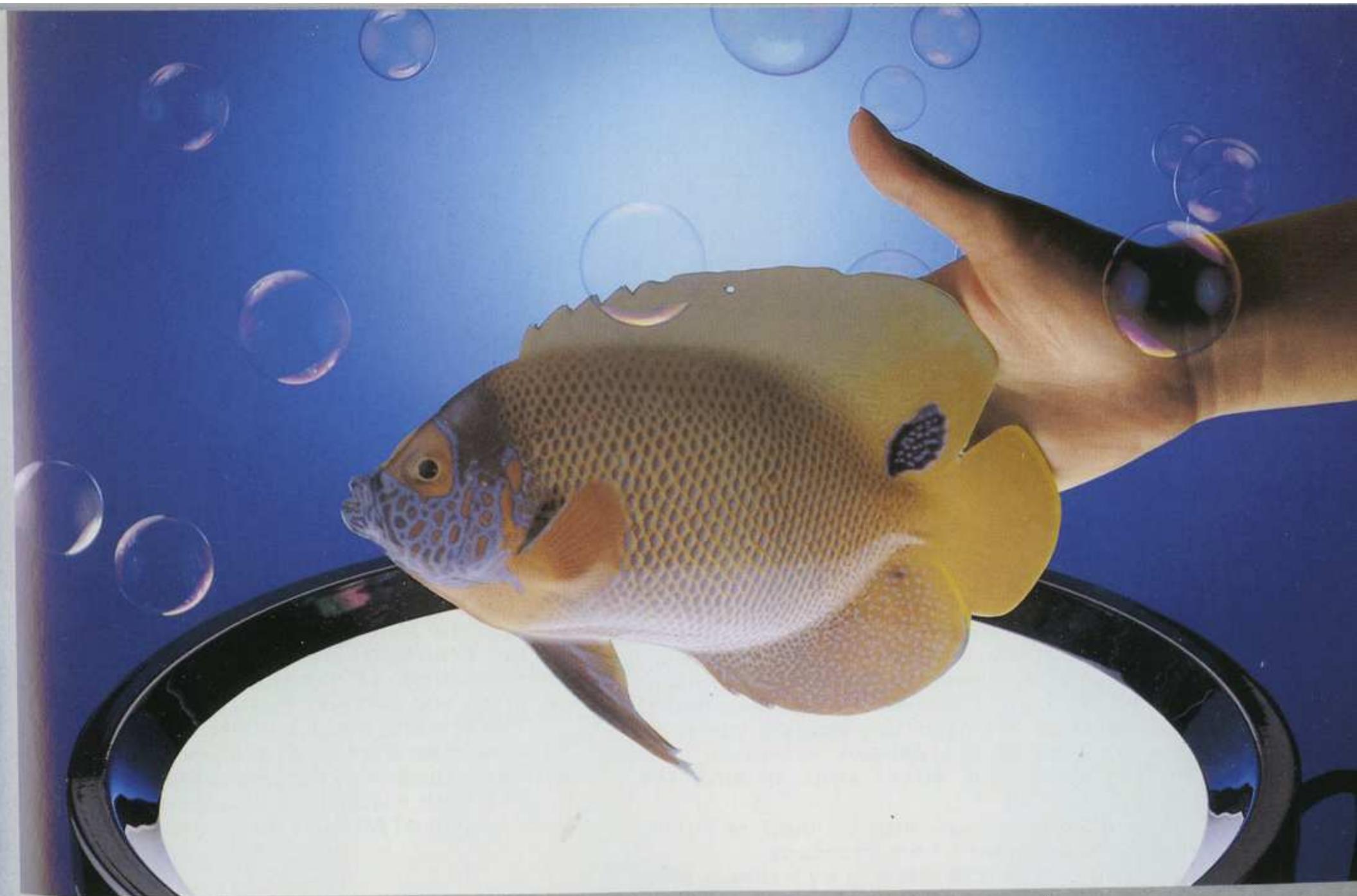
Color Meter II

This lightweight and incredibly easy-to-use three-color meter utilizes the latest LSI microprocessor circuitry and easy-to-read liquid-crystal display to give unequalled accuracy and range.

Three high-sensitivity silicon photo cells take simultaneous readings of the blue/red and green/red light ratios, and light-balancing and color-compensation indexes are instantly displayed in digital form at the push of a button. All data is inputted or displayed by simply pressing the proper keys, eliminating complicated dial settings and multiple needle or scale readings.

A three-position preset film-type selector instantly sets the meter for added convenience, and a variable setting allows precise adjustments for any film type or your own color-balance preference.

A detachable receptor head and continuous reading capability further increase the meter's capabilities.



Exposure calculated using Spotmeter M

Auto Meter III

Using for the first time a special microprocessor circuit, digital/analog liquid-crystal display with memory capability, and a high-sensitivity silicon photo cell, this multi-function meter makes precise measurements of incident or reflected light. Simply pressing the proper key inputs or changes ASA and time settings, and gives the correct EV or f-number readout to within 1/10 of a stop.

The memory can store up to two measurements and display them on the analog scale for simplified comparison of readings.

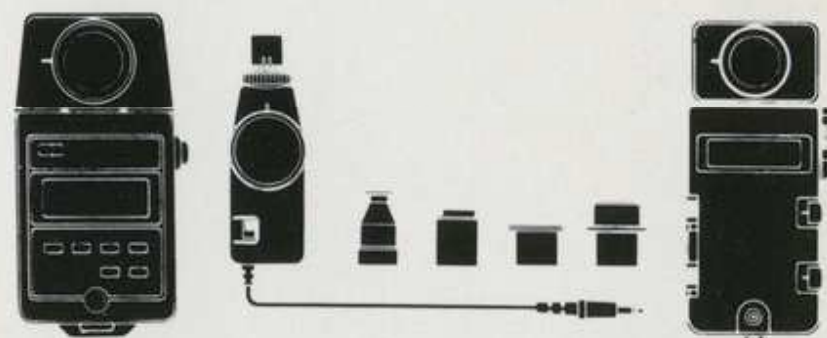
The Auto Meter III is also compatible with a full system of accessories that further expand its versatility.

Minolta Booster II

A unique accessory for the Auto Meter II, Auto Meter III, and Flash Meter III, the booster permits taking measurements directly from the film plane or eyepiece of a 35mm camera, and the groundglass of larger format cameras. This gives extremely accurate results and eliminates the need to calculate the compensation needed for bellows extension, and other variables that effect light striking the film.

The booster II can also be used to meter through the eyepiece of a microscope.

Attachment to the meter is by a simple plug and socket arrangement.



Flash Meter III

Remarkably accurate due to a high-response silicon photo cell and specially developed LSI (large-scale integrated circuit), this multi-function exposure meter makes precise readings of electronic or bulb flash as well as continuous illumination. Simply pushing a button registers the applicable f-number or exposure-index number directly on a large liquid-crystal digital display to within 1/10-stop accuracy. Its unique exposure-index display mode simplifies determination of lighting ratios, flash guide numbers, and measuring subject brightness.

The Minolta-designed microcomputer is able to store measurements for cumulative exposure with any number of successive flashes.

The flash meter III is also compatible with a fully system of Minolta meter accessories.



Exposure determined by Flash Meter III



Minolta Camera Co., Ltd.

Minolta Camera Handelsgesellschaft m.b.H.

Minolta France S.A.

Minolta (UK) Limited

Minolta Vertriebsgesellschaft m.b.H.

Minolta Nederland B.V.

Minolta (Schweiz) GmbH

Minolta Svenska AB

Minolta Corporation

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Chicago Branch

Atlanta Branch

Minolta Canada Inc.

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Montreal Branch

Vancouver Branch

Minolta Hong Kong Limited

Minolta Singapore (Pte) Ltd.

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3000 Tollview Drive, Rolling Meadows, IL 60008, U.S.A.

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