MINOLTA XE-7

AUTOMATIC, ELECTRONIC EXPOSURE CONTROL SYSTEM SLR


CN 2123
CN 23

THE MINOLTA XE-7
AUTO-EXPOSURE SINGLE LENS REFLEX

An electronic camera as versatile as the photographer you want to be

If you're like most photographers today, you want a camera as modern as the times you live in. One that automatically, flawlessly and dependably calculates exact exposure, and yet still leaves you with the *unlimited creative potential* of advanced single lens reflex 35mm photography. The Minolta XE-7, with electronic shutter, through-the-lens automatic exposure *plus* manual exposure control, is truly *the* camera for the times.

The XE-7's electronic inventiveness will amaze you. The camera actually has an exposure "nerve center," with an electronic IC memory, that works in fractions of milliseconds to calculate precise exposure.

With its automatic aperture-priority exposure control, you simply choose the aperture and the camera selects the shutter speed electronically. From 1/1000th of a second to a full four seconds. This astonishing exposure system lets you concentrate on the creative aspects of photography: choosing a subject, framing and composing, total control. It should actually *improve* your photographic skills.

In all other ways, the XE-7 is a camera of unusual distinction. Its shutter release is so smooth and quiet, you'll be able to hear yourself think. Its creative-control viewfinder with split-micro focusing enhances operating ease. And then, of course, there is the incomparable versatility of the Minolta System of 35mm Photography.

All appropriate lenses and accessories designed for advanced Minolta SLR cameras fit the XE-7. More than 150 reliable products that include the full complement of interchangeable Rokkor-X Lenses—from 16mm fisheye to 1600 mm extreme telephoto.

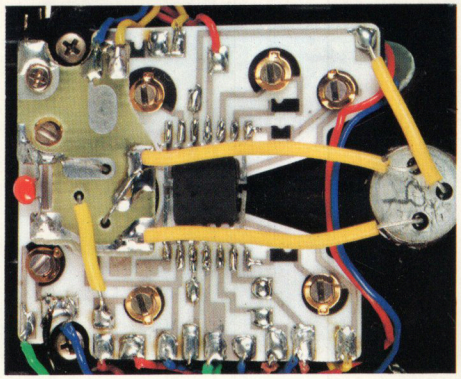
The XE-7 from Minolta. At last, an electronic camera that's as versatile as the photographer you want to be.

THE REMARKABLE XE-7 AUTOMATIC EXPOSURE SYSTEM

Automatic exposure, the XE-7 electronic way, is the key to a whole new world of photographic potential.

The XE-7's automatic exposure control relies on electronics so sophisticated—photo-conductor cells, composite printed circuits and monolithic ICs—it's no wonder at all that its shutter speeds are always perfectly-timed, its exposures flawless.

If there is a "secret" to the XE-7's automatic exposure capability, it would be in its electronic IC memory system. Built into the camera is all the circuitry necessary to electronically time and release the shutter. Special, intricate circuits calculate the influence of film speed, lens aperture, and other critical measuring factors—and this information is sent to the XE-7's "nerve center" together with the light value measured by Minolta's exclusive Contrast Light Compensator, the ideal system for an automatic exposure camera.



It is only during the instant moment of exposure, when you push the shutter release, that the memory system releases the precise electronic current required for perfect exposure. These "impulses" travel along tiny circuits in the XE-7's body—and shutter speed is timed precisely.

The entire process occurs in a fraction of a millisecond. And allows continual change of exposure inputs, right up to the instant the mirror snaps up and exposure is made.

Automatic ease is one major reason for electronic exposure control. While the XE-7 works automatically, you achieve a creative freedom unprecedented in 35mm photography. No more exposure calculations, needle centering, lining up pointers, or watching for viewfinder "exposure lights." Instead, you are free to concentrate on your subject.

Unfailing electronic accuracy is a second important reason. You can always depend on the XE-7, for there's nothing quite like non-moving, solid-state components for precision, reliability and durability. As the camera's electronic focal-plane shutter, described on the following pages, so amply demonstrates.


minolta
XE-7
MINOLTA LENS MADE IN JAPAN MC ROKKOR-X PG
1:1.4 f=50mm 3750008

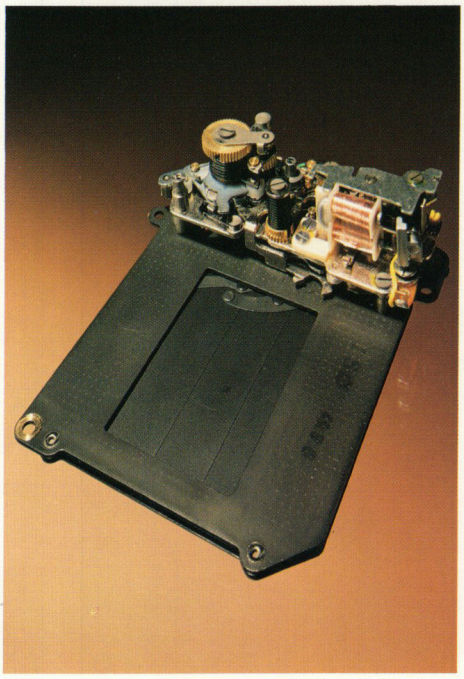
THE ELECTRONIC FOCAL-PLANE SHUTTER

One of the major advantages of an electronically controlled, vertical traverse shutter is that its speed can be varied steplessly to provide automatic exposure control. The one in the XE-7 sets itself for precise automatic exposure over a range of speeds from 1/1000th to a full four seconds. You benefit from the virtually *infinite* number of precise, electronically controlled speeds that the XE-7 selects within the automatic range . . . say, 1/11, 1/68, 1/457 of a second. The needle in the viewfinder scale constantly indicates the speed being set, in a complex, precision-coordinated series of operations which require only a fraction of a millisecond. Indeed, the process allows *continual change of exposure inputs,* to the instant the mirror snaps up and exposure is made. That's why, no matter what kind of photography interests you, the XE-7's electronic exposure system should help to make you an even better photographer.

In manual, stepped operation, the XE-7 provides the same range of shutter speeds, and includes a 1/90th second setting for flash synchronization (at "X") and "B" for bulb, which are mechanical settings and function without batteries.

The very soft and quiet shutter release of the XE-7 will be a welcome revelation. So will the smooth, virtually inaudible film advance. Even the XE-7's oversized mirror swings up and back with a "cleaner" sound—one that you are most unlikely to even hear.

This new CLS-type shutter was developed jointly by Ernst Leitz GmbH of West Germany and Copal Co., Ltd., of Japan, with full assistance from Minolta. It has no peer for precision, durability and the compact, simple construction that minimizes motion.



THE CREATIVE-CONTROL VIEWFINDER

The advantage of a total information viewfinder, such as the one in the XE-7, is the way it contributes to creative control over your photographic subject. Without taking the camera from your eye, you are able to operate *all* significant XE-7 mechanisms. You can select the aperture, and/or shutter speed, focus, frame and shoot—with maximum speed of operation. As you glance through the XE-7's finder, you will discover the following:

The mat Fresnel screen has a central split image focusing spot, and this is surrounded by a microprism band for accurate focusing. The F-number you have selected is easily visible at all times. With the shutter speed dial set to "A", the camera operates in automatic exposure mode—the letter "A" appears next to the F-number and the appropriate electronically calculated shutter speed is indicated by a fine black meter needle which moves along an easy-to-read, vertical scale. If you wish, you can also select the desired *shutter speed first* by changing the lens aperture setting. Here again, the camera continuously and automatically adjusts for perfect exposure.

When the shutter speed dial is changed from "A" to a set shutter speed, the "A" moves out of the finder and the set shutter speed appears. In this mode, you achieve correct exposure by changing the lens aperture setting until the meter needle aligns with the shutter speed that is indicated in the window.

There may also be times when you'll wish to rely on your own photographic knowledge for judging correct exposure. Even then the XE-7, like no other camera made today, provides all vital information at-a-glance. And gives you the freedom you need to concentrate on creativity.

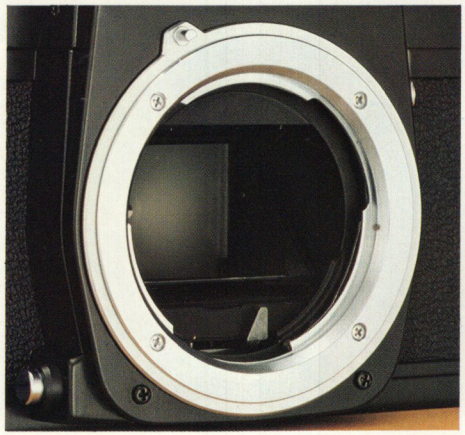
5.6 A

1000
500
250
125
60
30
15
8
4
2
1
2s
4s

XE-7 FEATURES

SLR Bayonet Lens Mount

All Rokkor-X Lenses are bayonet-mounted to the XE-7. This simple, rapid system of lens mounting is the same that Minolta has used for more than 15 years to assure a lasting precision fit of lens to camera. Mounting a lens is accomplished by inserting and twisting the lens 54° in a single, smooth motion. No special alignment techniques or adjustments are necessary. And the instant that the lens is seated against the camera's steel flange, the camera's proper metering mode is set automatically: full aperture through-the-lens with MC Rokkor-X Lenses, or stop down with Rokkor-Xs that are not meter coupled.



Multiple Exposures

Accurate multiple exposures with the XE-7 are achieved with ease. A special control situated next to the camera's film-advance lever lets you cock the shutter without moving the film forward to the next frame. The film remains stationary and holds its exact position regardless of the number of exposures you choose to make on a single frame.

Over/Under Exposure Control

There will be times when you'll wish to question the XE-7's exposure settings, to vary its set shutter speed and compensate for unusual or complicated lighting. You can do this by using the over/under exposure control, that manually "overrides" automatic exposure, stepless, from 2 EV (four times or two full stops) under to 2 EV over the metered value. This is accomplished by pushing the tiny button located on the knurled ASA setting dial and aligning the over/under exposure control notch with the desired "plus" or "minus" exposure setting.

XE-7 Standard Lenses

You may choose from three, newly-designed standard Rokkor-X Lenses when you purchase an XE-7. Each has a new waffle-pattern focusing grip for easy handling.

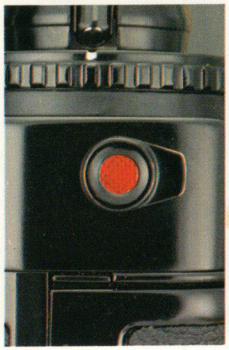
The 58mm F1.2 is for the more demanding photographer. The more popular normal lens is the 50mm F1.4 Rokkor-X. An alternative is the 50mm F1.7. No matter which lens you choose, you are assured the benefits of Minolta's exclusive Achromatic Coating. And Minolta's unqualified commitment to exceptional optics.

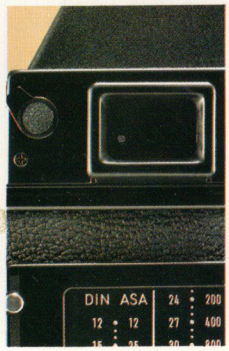
Battery Checker

The XE-7's electronic shutter and exposure control systems are powered by two tiny silver oxide batteries, installed in a chamber at the base of the camera. A battery checker light, conveniently located, glows red at a touch of a finger when voltage is sufficient.

Eyepiece Shutter

The XE-7 is equipped with a built-in eyepiece shutter, a control that closes or opens the viewfinder shutter to prevent light from entering through the eyepiece and affecting the meter. You will discover a number of significant uses for this feature, especially when you use the XE-7 for self-timed or close-up photography.



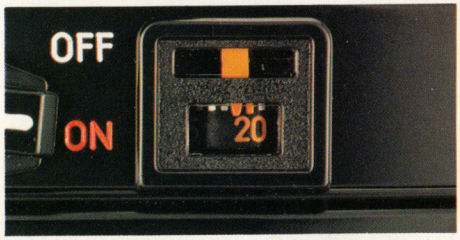


Safe Load Signal

If film is loaded incorrectly in the XE-7, or is not advancing properly, you'll know instantly. A safe load signal located above the frame counter visually confirms proper film loading and advance. This feature is exclusive with Minolta.

Self-Timer

This built-in lever-type device releases the shutter after an approximate six to 10 second delay. Its operating time is variable.



THE MINOLTA XE-7 BODY, CLOSE UP

Meter-Coupler Pin
Follows coupling lug on MC Rokkor-X Lenses.

Lens-Release Button
Pushing in and twisting bayonet-mounted lens removes lens from camera.

Self-Timer Lever
Releases shutter after approximately 6 to 10 seconds delay. Time variable.

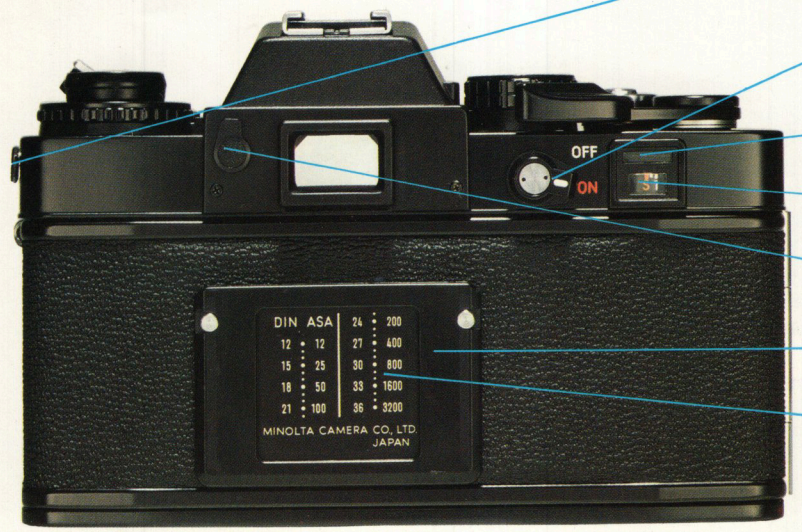
Sync. Terminal
Cord contact flash units synchronize with the XE-7 shutter through this terminal.

Sync. Selector Switch
Adjustment for either X or FP synchronization.

Stop-Down Button
For stop-down exposure metering or for depth-of-field preview.

Bayonet Lens Mount
Rugged steel flange guarantees precision fit between lens and camera.

Battery-Chamber
Accepts two silver-oxide batteries powering both shutter and exposure-control system.



Battery Checker
Light glows when batteries have ample strength as battery checker lever is pressed down.

Power Switch
Turns power on or off, activates entire electronic circuitry, unlocks shutter release.

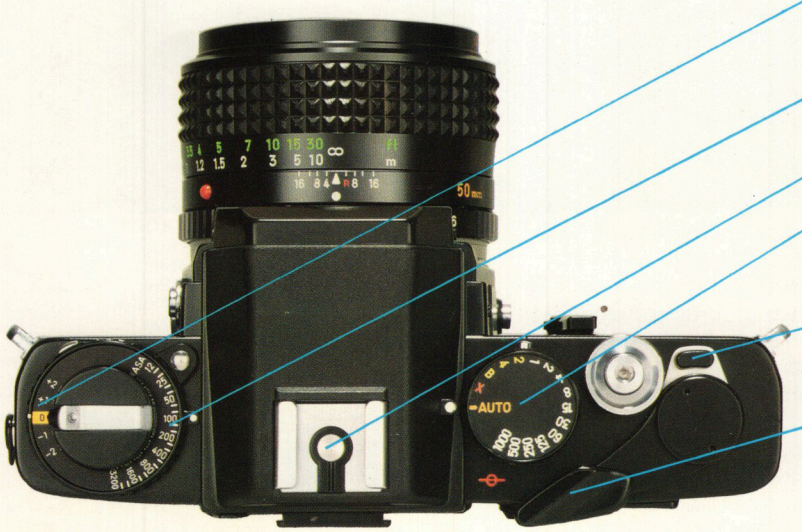
Safe Load Signal
Indicates that film has been loaded and is advancing properly.

Frame Counter
Indicates number of film frames exposed, from 1 to 36. Auto reset.

Eyepiece-Shutter Lever
Prevents extraneous light from entering the eyepiece.

Memo Holder
Holds film package end, or other information for handy reference.

ASA/DIN Conversion Table
Provides handy, quick conversion of ASA standards to comparable DIN standards, or vice versa.



Exposure-Adjustment Control
Manually adjusts automatic exposure in steps from 2 EV under to 2 EV over the metered value.

Film-Speed Selector
The Minolta XE-7 accepts films ranging from ASA 12 to ASA 3200.

Hot Shoe
Contact point for cordless flash units.

Shutter-Speed/Function Selector
"Auto" indicates automatic mode. "X" is for flash synchronization. All other positions indicate manually set step shutter speeds.

Multiple-Exposure Lever
Permits unlimited number of multiple exposures to be made by holding film stationary.

Film-Advance Lever
Comfortably cushioned lever swings out 30° before engagement. A further 130° stroke advances film and cocks shutter.

ROKKOR-X LENSES: 16 TO 1600 MILLIMETERS

XE-7 owners may choose from 26 different and uncompromising Rokkor-X Lenses, the ultimate in fine precision optics. Minolta computer-designs and manufactures each Rokkor-X Lens, a fact that assumes particular significance when you realize that almost all other camera makers rely on independent lens suppliers.

Rokkor-X Lenses are unique in other ways. The glass used in each Rokkor-X is made from a classified Minolta formula. Even the acclaimed Achromatic Coating is an exclusive process, a lens treatment that checks flare, captures colors faithfully, and passes virtually the entire light spectrum.

Which Rokkor-X Lenses for you? Choose from an impressive collection of quality optics, one for every photographic requirement.

Of the eight wideangle Rokkor-Xs, the 16mm is the widest and offers an incomparable fisheye view of the world. This lens is exceptionally fast at F2.8 and does not vignette your subject. Other unusual lenses include a bellows Rokkor-X and two Macros for close-up photography. The two automatic diaphragm Zoom Rokkor-X Lenses are each highly compact, easy-to-handle and lightweight, assuring smooth, one-hand zooming and focusing. The remaining ten telephoto lenses include two that take advantage of the folded optical path design—the 800mm and 1600mm—which permit the experienced photographer to work with super-long focal lengths in the relatively compact mirror reflex configuration.

For the right lens for your photographic applications, talk with your Minolta dealer.

16mm F2.8 MC FISHEYE ROKKOR-X
21mm F2.8 MC W ROKKOR-X
24mm F2.8 MC W ROKKOR-X
28mm F3.5 MC W ROKKOR-X
28mm F2.8 MC W ROKKOR-X
28mm F2 MC W ROKKOR-X
35mm F2.8 MC W ROKKOR-X
35mm F1.8 MC W ROKKOR-X
50mm F1.7 MC ROKKOR-X
50mm F1.4 MC ROKKOR-X
58mm F1.2 MC ROKKOR-X
85mm F1.7 MC ROKKOR-X
100mm F2.5 MC TELE ROKKOR-X
135mm F3.5 MC TELE ROKKOR-X
135mm F2.8 MC TELE ROKKOR-X
200mm F4.5 MC TELE ROKKOR-X
200mm F3.5 MC TELE ROKKOR-X
300mm F5.6 MC TELE ROKKOR-X
300mm F4.5 MC TELE ROKKOR-X
800mm F8 RF ROKKOR-X
1600mm F11 RF ROKKOR-X
80–200mm F4.5 MC ZOOM ROKKOR-X
100–500mm F8 MC ZOOM ROKKOR-X
50mm F3.5 MC MACRO ROKKOR-X
100mm F3.5 MC MACRO ROKKOR-X
100mm F4 AUTO BELLOWS ROKKOR-X

THE MINOLTA XE-7 SYSTEM

The XE-7 is more than a camera, it is the heart of an unusual and complete photographic system that, if you choose, can involve you in every conceivable aspect of advanced photographic applications.

Close-up Photography

Photography at extremely close range reveals fascinating new perspectives of the commonplace through magnification. With the XE-7's electronic exposure control and Minolta close-up accessories, virtually all difficulties associated with exposure determination are eliminated and close-up photography is made easier than ever.

In the close-up category Minolta makes a variety of important accessories. Two bellows attachments are available, one of which allows automatic diaphragm operation, both of which accept a macro stand plus slide and strip-film copier. Additionally, Minolta offers meter coupled extension tubes, various viewing and focusing aids, a microscope adapter, copy stand and other close-up equipment.

Automatic Flash

Versatility and automation are the keynotes of the three Minolta electronic flash units. Above all, they entirely eliminate flash failure and guesswork.

The Auto Electroflash 450 is one of the world's most sophisticated flash units. The Auto Electroflash 280, like the 450, employs the series thyristor circuitry, permitting swift sequence photography owing to rapid electronic recycling. With both units, perfect flash exposure is obtained, even in bounce techniques. Thyristor circuits regulate power to emit the lowest possible charge necessary for the flash burst required. Aperture adjustment is easy. Both flash units may be removed from the camera for angle lighting, or tilted with ease for bounce techniques.

Minolta's compact flash unit is the Auto Electroflash 22. This easy-to-use unit may also be used as a conventional non-auto flashgun, and has a guide number of 37.

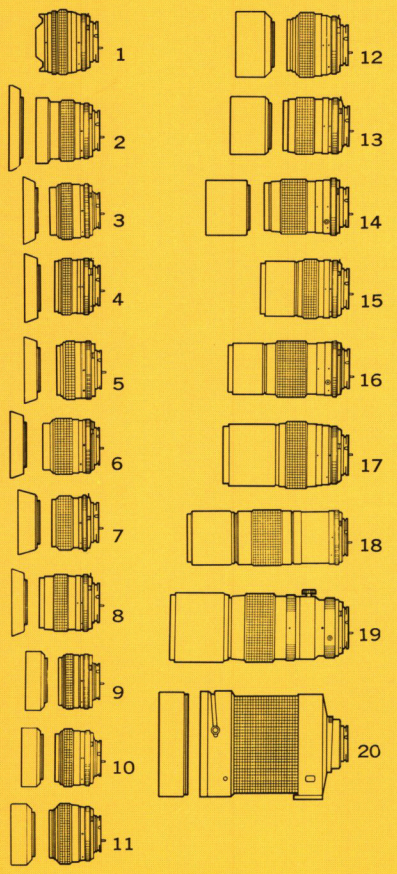
Additional Accessories

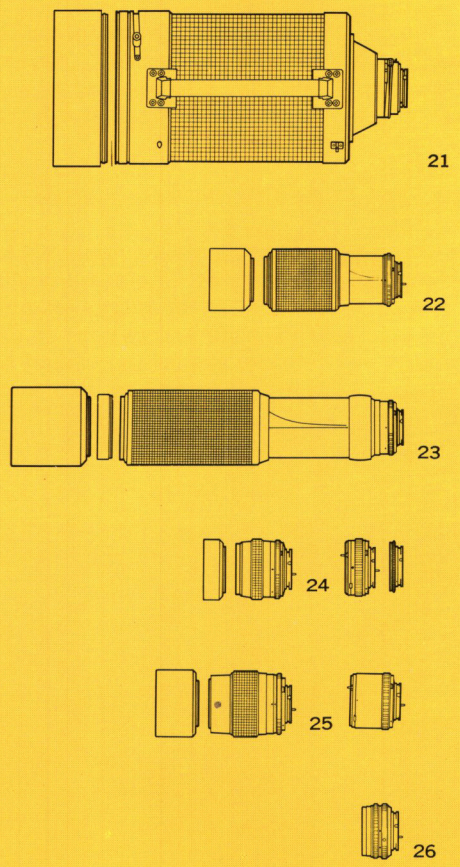
Minolta makes many other accessories. There is a quality optical glass filter for every use, items ranging from a panorama head to a cable release, even three gadget bags. When selective, precision light measurement is required, choose an advanced Minolta light meter. The extent of the XE-7 system is really limited only by your imagination.

THE MINOLTA XE-7 SYSTEM

ROKKOR-X LENSES

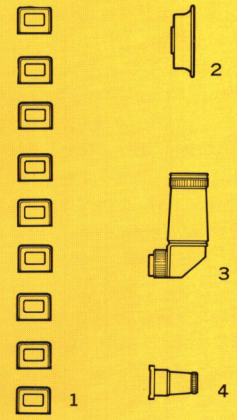
1. 16mm F2.8 MC FISHEYE ROKKOR-X
2. 21mm F2.8 MC W ROKKOR-X
3. 24mm F2.8 MC W ROKKOR-X
4. 28mm F3.5 MC W ROKKOR-X
5. 28mm F2.8 MC W ROKKOR-X
6. 28mm F2 MC W ROKKOR-X
7. 35mm F2.8 MC W ROKKOR-X
8. 35mm F1.8 MC W ROKKOR-X
9. 50mm F1.7 MC ROKKOR-X
10. 50mm F1.4 MC ROKKOR-X
11. 58mm F1.2 MC ROKKOR-X
12. 85mm F1.7 MC ROKKOR-X
13. 100mm F2.5 MC TELE ROKKOR-X
14. 135mm F3.5 MC TELE ROKKOR-X
15. 135mm F2.8 MC TELE ROKKOR-X
16. 200mm F4.5 MC TELE ROKKOR-X
17. 200mm F3.5 MC TELE ROKKOR-X
18. 300mm F5.6 MC TELE ROKKOR-X
19. 300mm F4.5 MC TELE ROKKOR-X
20. 800mm F8 RF ROKKOR-X
21. 1600mm F11 RF ROKKOR-X
22. 80–200mm F4.5 MC ZOOM ROKKOR-X
23. 100–500mm F8 MC ZOOM ROKKOR-X
24. 50mm F3.5 MC MACRO ROKKOR-X
25. 100mm F3.5 MC MACRO ROKKOR-X
26. 100mm F4 AUTO BELLOWS ROKKOR-X

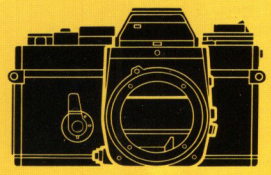




FINDER ACCESSORIES

1. Eyepiece Correction Lenses (No. 1—No. 9)
2. Rubber Eyecup
3. Angle Finder V
4. Magnifier V





Minolta XE-7

CLOSE-UP ACCESSORIES

1. Macro Stand
2. Slide Copier
3. Auto Bellows I
4. Accessory Holder
5. Focusing Rail
6. Connector
7. Bellows III
8. Close-Up Lens No. 0
9. Close-Up Lens No. 1
10. Close-Up Lens No. 2
11. MC Auto Extension Tube Set
12. Extension Tube Set II
13. Copy Stand II
14. Microscope Photo Unit II

FLASH ACCESSORIES

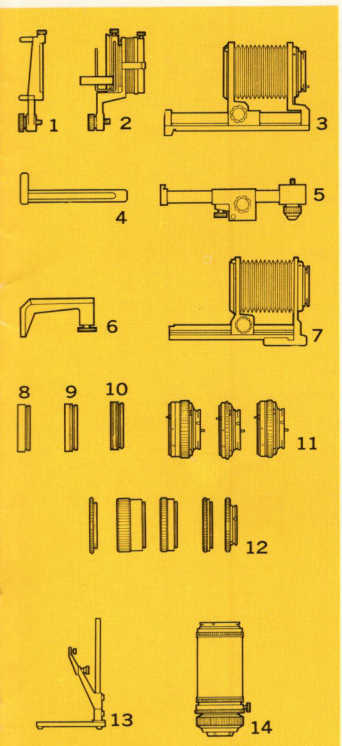
1. Deluxe III Flash Gun
2. Electroflash S
3. Auto Electroflash 22
4. Auto Electroflash 280
5. Ni-Cd Quick Charger 280
6. Auto Electroflash 450
7. Battery Cartridge for Alkaline Batteries
8. Battery Cartridge for Ni-Cd Batteries
9. Ni-Cd Battery Charger
10. Separate Sensor
11. 510v Battery Pack
12. Sensor Sync. Cord
13. Sync. Cord

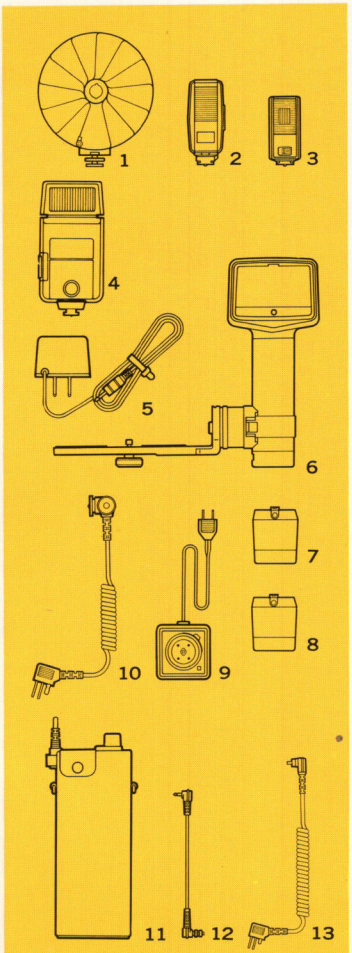
METERS

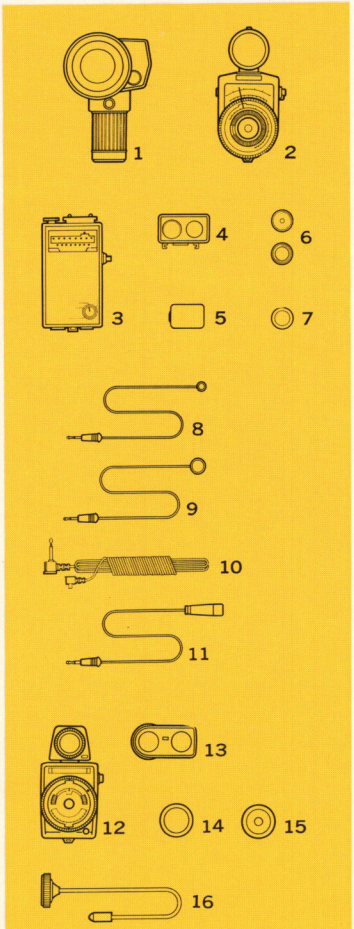
1. Auto Spot 1°
2. Color Meter
3. Flash Meter
4. Reflected-Light Attachment
5. Accessory Connector Shoe
6. ND Filters
7. Incident-Light Diffuser
8. Micro-Disk Receptor 1H
9. Micro-Disk Receptor 2H
10. Sync. Cord
11. Pinpoint Receptor
12. Autometer Professional
13. Reflected-Light Attachment
14. Disk-Type Diffuser
15. Spot Mask Attachment
16. Pinpoint Receptor

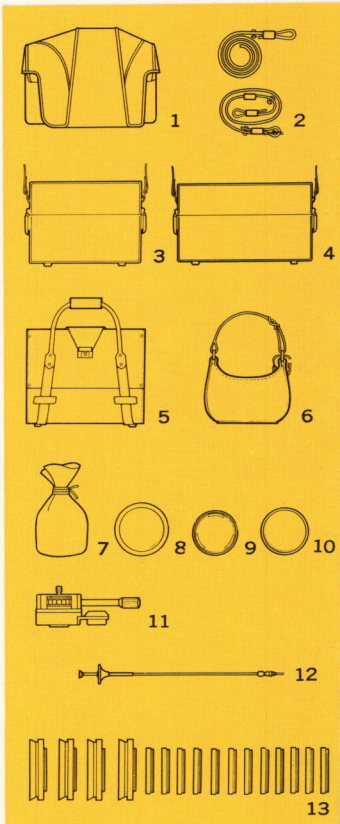
OTHER ACCESSORIES

1. Semi-Hard Case
2. Leather Neck Strap
3. Gadget Bag XB-3
4. Gadget Bag XB-5
5. Gadget Bag XB-7
6. Professional Gadget Bag
7. Flexible Lens Pouch
8. Lens Cap
9. Lens Rear Cap
10. Body Cap
11. Panorama Head
12. Cable Release
13. Filters









SPECIFICATIONS

Type
35mm single-lens reflex with automatic and metered/full-manual exposure control.
Lens Mount
Minolta bayonet, 54° rotating angle. Full-aperture metering and automatic diaphragm coupling with MC Rokkor-X Lenses. (Stop-down metering for other Rokkor-X Lenses.) Standard Lenses: MC Rokkor-X 50mm F1.7, 50mm F1.4 or 58mm F1.2.
Auto-Exposure Control
Special low-voltage circuit incorporating two monolithic ICs varies shutter speed continuously and steplessly, yielding proper exposure according to meter system indication at set aperture, film speed and exposure adjustment. Auto-exposure range: EV 1 to EV 17 (e.g., 1 sec. at F1.4 to 1/1000 at F11) at ASA 100 with F1.2 lens.
Shutter
Vertical-traverse metal-blade focal-plane type. Electronically controlled speeds 1/1000 to 4 seconds, steplessly on automatic or in steps on manual. Mechanically controlled settings (no battery power required): "X" (1/90 sec.), "B". Shutter release locked when power switch off.
Light Metering
Full-aperture TTL type with overlapping readings taken by two CdS cells mounted on pentaprism, circuited to provide optimum exposure in flat and most contrast-lighting situations. Stop-down metering also possible. Film-speed range: ASA 12 to 3200 set by dial (situated around rewind-crank/back-release knob) with lock. Device opposite film-speed dial provides up to ±2 EV continuous adjustment of electronic exposure, with 1 EV click-stops and lock at zero setting.
Mirror
Oversize quick-return type (PO value: 140mm; finder image cutoff negligible even with extreme telephoto lens).
Finder
Eye-level fixed pentaprism type showing 94% of 24×36mm film-frame area. Magnification: 0.84X with 50mm lens at infinity. Mat-Fresnel-field focusing screen with central horizontally oriented split-image focusing spot surrounded by microprism band. F-number set and step shutter speed or "A" (for "auto" mode) visible above frame; stepless speeds or metered-manual exposure setting indicated by needle on scale at right of frame. Eyepiece shutter positioned by lever.
Flash Sync.
Threaded PC terminal and hot shoe with switch for X or FP delay. X contact: Electronic flash synchronizes at "X" (1/90 sec.) and lower stepless and step speeds. FP contact: FP flashbulbs synchronize at all speeds.
Film Advance
Lever type, single 130° stroke after 30° unengaged movement. Safe Load Signal indicates film loading and film advance condition. Multiple-exposure lever coaxial with advance lever allows unlimited recocking of shutter without advancing film. Advancing-type frame counter resets automatically when camera back is opened. Counter does not advance with multiple exposures.
Self-Timer
Lever type, operating time variable from approximately 6 to 10 seconds.
Power
Two 1.5v silver-oxide cells contained in camera base power both auto exposure control and shutter's electronically governed operation; battery checker situated on side of body. Mirror stays up (no exposure made) as warning when voltage too low for electronic operation. With power switch "off", shutter release is locked.
Other
Four-slot take-up spool; memo holder and ASA-DIN conversion scale on back cover.
Dimensions
61×97×148mm (2 3/8 × 3 13/16 × 5 13/16") without lens.
Weight
775g (27 5/16 oz.) without lens.

Specifications subject to change without notice

Minolta

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XE7 412E-A1

Printed in Japan