Minolta MINOLTA MEANS BETTER PICTURES

HIF 204E-B 2

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MINOLTA HI-MATIC F

OWNER'S MANUAL

E

AN EASIER-HANDLING AUTO-ELECTRONIC CAMERA

The Minolta Hi-matic F is an extremely light, compact, easier-handling camera that features a highly accurate electronic shutter, with speeds from 1/724 to 4 full seconds, and a coupled, superimposed-image rangefinder.

The CdS EE system provides perfect automatic exposure in conditions where flash is not needed. Its flashmatic system switches on automatically when flash is attached and couples aperture to focus for accurate exposure adjustment throughout the flash range.

Convenient signals visible in bright-frame viewfinder tell you when there is enough light for normal hand-held auto exposure without flash, warn you when to use a tripod or flash, and confirm when camera is switched over to flashmatic mode.

Please take a few minutes to read this instruction manual through carefully for best results and longest service life from your new Hi-matic F.

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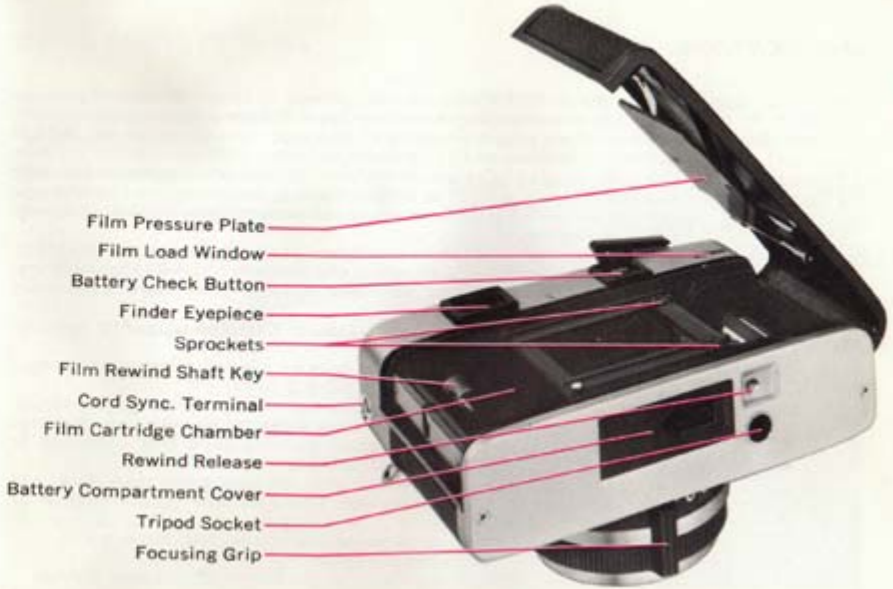
NAMES OF PARTS



SPECIFICATIONS

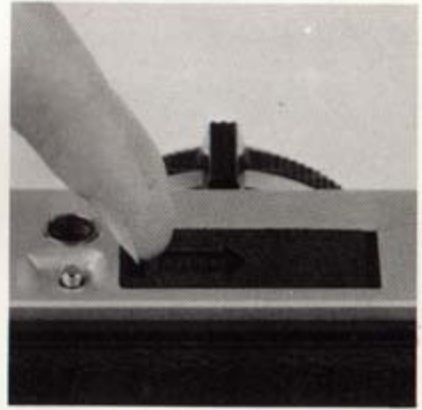
Lens:	Rokkor 38mm F2.7, 4 elements in 3 groups, 61° angle of view Filter and lens shade mount: 46mm screw-in type
Shutter:	Electronic type programmed for EE exposure from EV 0.9 (4 sec. at F2.7) to EV 17 (1/724 sec. at F13), X-synchronized at 1/20 sec.
Exposure meter:	CdS type, coupled EE range EV 0.9 to EV 17 with a film speed of ASA 100; film speed range: ASA 25 to 500; automatic compensation when filter(s) used; powered by two 1.4v mercury batteries: Mallory RM-640, Eveready E-640, or equivalent
Flashmatic system:	Flash circuit for X-synchronized exposures at 1/20 sec. automatically switches on when flash is attached, and aperture couples to focusing and guide number index rings, providing automatic exposure adjustment throughout the flash range.
Flash connections:	Both cordless "hot-shoe" and standard European-type (PC) terminal contacts are provided.
Focusing:	Front-element helicoid type, with coupled superimposed-image range-finder; minimum focusing distance 0.8m (2.6 ft.)
Viewfinder:	Tinted bright-frame type with parallax-correction marks, central range-finder "diamond," and flashmatic-mode signal visible while viewing, plus "use-flash"/slow-shutter EE exposure warning lamp that comes on at EV7.9 (F2.7 at 1/30 sec. at ASA 100) or less
Film advance:	Lever type with single 140° stroke after 30° unengaged play. Safe Load Signal system. Automatic-resetting frame counter shows number of frames exposed.
Frame size:	24mm×36mm for 12, 20, or 36 exposures on standard 35mm film
Others:	Battery check lamp located on top cover
Size:	73mm (2⅞ in.) high×113mm (4½ in.) wide×54mm (2⅛ in.) deep over-all
Weight:	350g (12.3 oz.)

BEFORE TAKING PICTURES

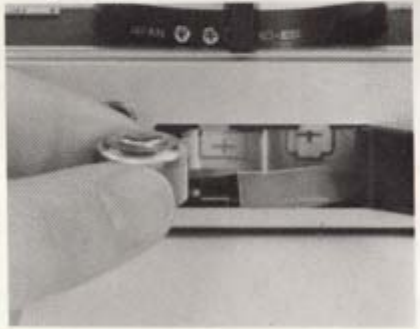
Inserting Mercury Batteries

The automatic exposure system of the Minolta Hi-matic F is powered by two long-life 1.4 volt mercury batteries for photographic applications, such as Mallory RM-640 or equivalent, which must be properly seated in the battery compartment before the camera will operate:

1. Slide the battery compartment cover in the direction of the arrow, and lift it open by means of the recessed lip slot near the square end of the arrow.



2. Making sure the end of the clear vinyl strip is projecting from the end of the compartment near the cover hinge, insert the 2 batteries as indicated by the diagrams in the bottom of the compartment. Then close and latch cover by holding it down and sliding it in the direction of the arrow, then letting it snap back in the opposite direction.



CAUTION:

- Be sure plus (+) and minus (−) terminals of the batteries are not reversed.
- Battery terminals should never be touched with the hands; before inserting batteries, their terminals should be cleaned with a clean rough cloth.
- If camera is not to be used for over a month, remove the batteries and store them in a cool, dry place.
- Pull vinyl belt gently and only to remove batteries.

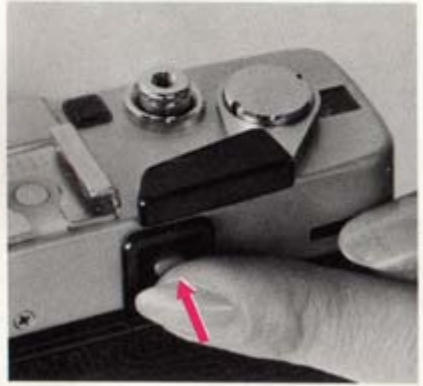
Checking Batteries

Push battery check button. If battery check lamp on top of camera lights up, batteries can be regarded as functioning properly with adequate power. If battery check lamp does not light, make sure that two batteries are properly inserted or replace the batteries with fresh ones.

Since exposure warning lamp and battery check lamp operate in parallel, the battery check indication can also be seen in the viewfinder. (Because of this parallel operation, the battery check lamp will also be lighted whenever the viewfinder exposure warning lamp is on. This parallel external lighting is also an indication that batteries are serviceable but is most useful as a slow shutter speed warning (see page 13) or indication of shutter closing (see page 13) that can be seen without looking through viewfinder.)

Batteries should generally be checked after the camera has been stored for some time or new batteries have been inserted, as well as before starting on a trip with the camera and from time to time while it is in use.

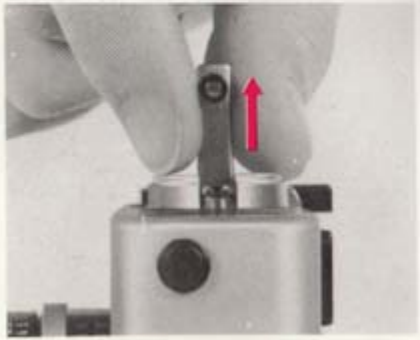
Pictures must not be taken unless battery check lamp is lighting properly, as the entire exposure system is powered by the batteries and will not operate if current supply is impaired.



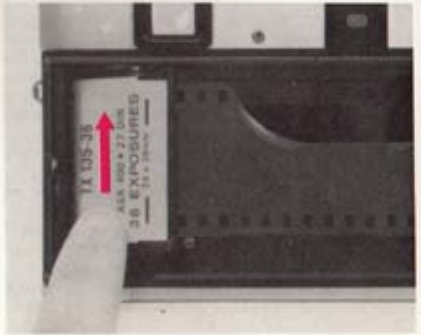
Loading Film

The Minolta Hi-matic F loads in seconds and features the unique SLS (Safe Load Signal), which provides a constant check of film alignment and advancement.

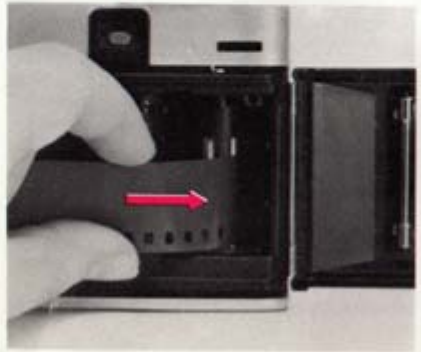
1. Lift the film rewind crank and grasp it to pull up the back release; back cover will automatically spring open.



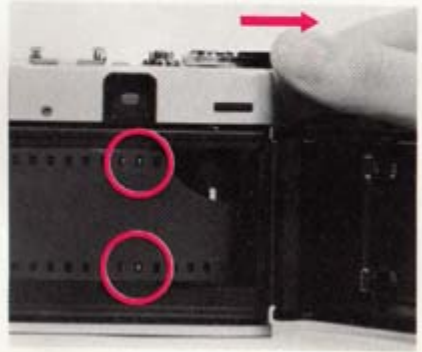
2. Place film cartridge into the film cartridge chamber. If film rewind key does not engage properly in end of cartridge, rotate film crank in either direction until it does so.



3. Insert leader of film about 1cm (1/2 in.) into one of the slots in the take-up spool. Be sure that a film perforation is engaged on a tooth of the slot.



4. While pressing film gently against the sprockets, actuate film advance lever slowly until the perforations on both edges of the film are engaged with sprocket teeth. Then close the back cover.



5. A large red dot should now appear opposite the red index in the frame counter window. Actuate the film advance lever until it stops; then press the shutter release button. Repeat this lever actuation and shutter release until the number "1" appears opposite the counter index.

6. A red signal should also now appear at the right in the film load window on the back of the camera. This indicates that the film is loaded and properly engaged with the take-up spool slot. If this Safe Load Signal does not appear, open camera back and ensure that end of film leader is firmly engaged with tooth in spool slot. Then close back cover and advance film to "1" as above. As you continue to take pictures, the red signal will move gradually toward the right in the window, indicating that film is advancing properly.

CAUTION:

- Be sure that the film perforation engaged with the tooth of the take-up spool slot is not the very last one on the end of the leader. The perforation used should be the third or fourth one from the end of the leader.
- Load and unload film in subdued light, never in direct sunlight.

Setting Film Speed (ASA Number)

To enable your Hi-matic F to calculate exposure correctly, you must set the scale for the applicable ASA number, which is a rating of film sensitivity to light and is available for each film on the market. To set this, turn the grooved black ring that surrounds the lens until the ASA rating number indication of the film you are using is aligned with the index in the film speed window.

The film speed scale is:

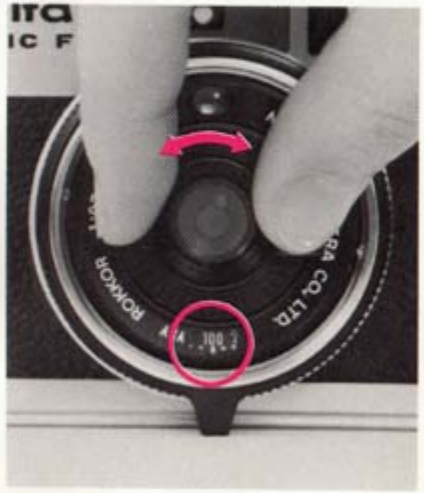
25 ·· 50 ·· 100 ·· 200 ··· 500

Dots denote ASA speeds of 32, 40, 64, 80, 125, 160, 250, 320, and 400, respectively, from left to right.

European system conversion is:

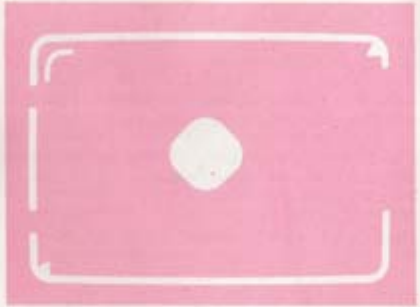
ASA 25 ·· 50 ·· 100 ·· 200 ··· 500

DIN 15 18 21 24 28



Fully Automatic Electric-Eye Control

1. Framing your subject in the viewfinder, determine light level and picture-taking mode by pushing the shutter release button down slightly, but not more than halfway.
   A. If no lamp appears in the viewfinder at the right frame, light is adquate for normal hand-held exposure without flash, and you can proceed to take the picture of your properly composed and focused subject.



   B. If the exposure warning lamp at the upper right-hand frame lights and then goes out as you continue to depress the shutter release button, a shutter speed of 1/30 sec. or slower is indicated, and use of a tripod is recommended if you are not using flash. Your Hi-matic F will continue to make accurate auto exposures down to 4 full seconds without flash. Adequate attention should of course be paid to subject movement at slow shutter speeds.

The exposure warning lamp will go on again when the shutter opens and will stay on until it closes. It is important to remember that you MUST HOLD THE SHUTTER RELEASE BUTTON DOWN UNTIL THE LAMP GOES OUT. If it is inconvenient to look into viewfinder, as under certain conditions when using a tripod, instead watch the battery check lamp, which lights and goes out along with the viewfinder's EE indicator lamp, and keep the shutter button or cable release plunger depressed until it goes out.

2. Focus by looking through the viewfinder and moving the grooved ring or focusing grip on the lens barrel until the two subject images in the "diamond" at the center of the viewfinder frame come together and appear as one.

Out of Focus
Your subject is not properly focused if a double image of it appears in viewfinder's diamond-shaped area as shown.

In Proper Focus
When the two images merge into one as shown, subject is in sharp focus. Camera-to-subject distance is indicated by the scale and index located on the top of the lens barrel farthest from the camera body.

3. For usual distances, compose your picture by framing your subject as you wish within the bright-frame visible in the viewfinder; the area inside this frame is what will appear on the film.

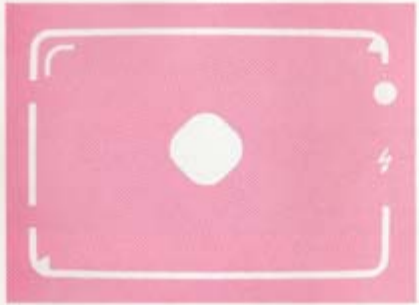
To correct for the slight difference in viewing angle between the viewfinder and the camera's taking lens (i.e., for parallax), frame subjects closer than about 1.2m (3.8ft.) within the short curved line in the upper left corner and the short pointer marks at the upper right and lower left corners.

Automatic Flash Photography

Lighting of the EE indicator lamp when the shutter release is pressed slightly also indicates that you should use flash if suitable for your subject and if slow shutter speeds using a tripod are not desired.

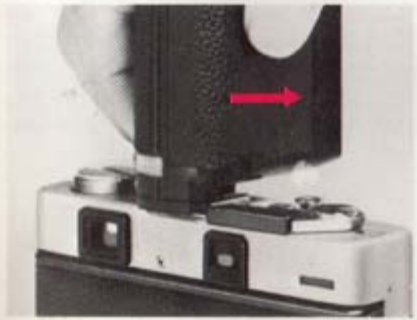
When a flash unit is properly attached to the Hi-matic F, it automatically switches over for aperture-distance-GN-coupled exposures at 1/20 sec., and the flashmatic signal (ϟ) will appear at the right in the viewfinder below the EE warning lamp's position.

(The EE warning lamp will come on and go out as the shutter release is pressed when the camera is in flashmatic mode, but this may be disregarded as long as the flashmatic symbol appears in the viewfinder.)

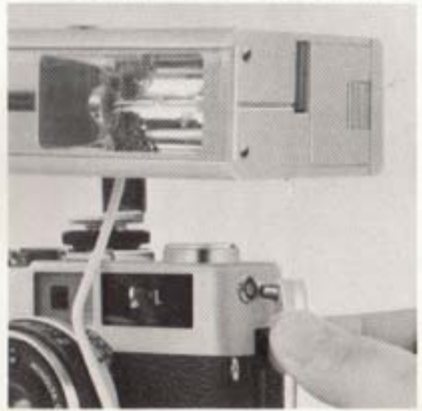


1. Attaching Flash Unit

The Minolta Hi-matic F is equipped with a cordless hot-shoe contact as well as with a standard European-type (PC) terminal for flash units having cords. When using a Minolta Electroflash P or other cordless flash unit, all you have to do to attach the unit is slide it into camera's accessory shoe.



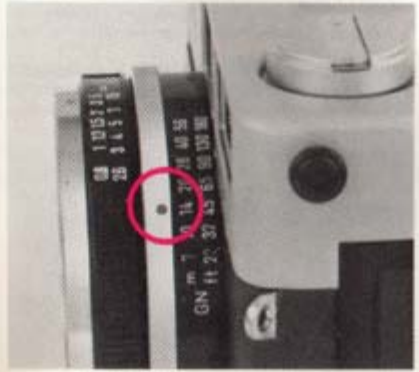
If you use a flash unit such as the regular Minolta Electroflash, which has a sync. cord, be sure to connect the plug of the flash cord with the sync. terminal of the camera as well.



CAUTION:

- With flash attachments using standard flashbulbs, be sure not to insert a bulb until unit has been properly attached to camera.
- Be careful to push flash unit all the way into accessory shoe until it stops.
- When using a cordless flash unit, be sure to insert the cap of the sync. terminal to avoid getting an electric shock.

2. Setting Guide Number
Rotate the guide number index ring to set the index dot to the point on the scale indicating the guide number of the flash in use. Settings between click stops may be used.



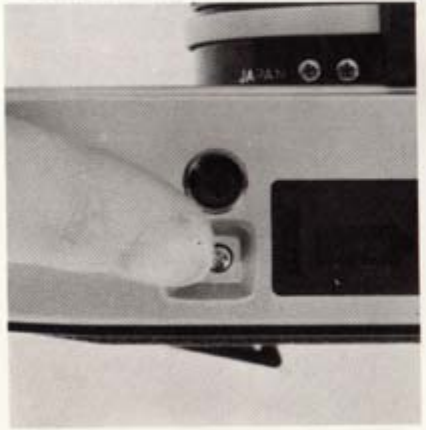
3. Focus your subject with the coupled rangefinder, and lens aperture is automatically adjusted for correct exposure within the working range of the flash. Working ranges for various flashes are indicated in the accompanying table.

Guide number and distance table

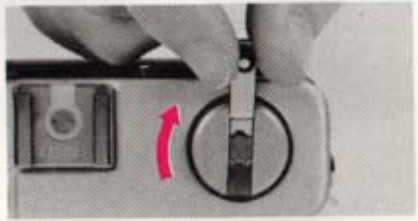
Guide number at ASA 100		Distance to subject	
m	ft.	m	ft.
56	180	2.5 ~10	7.5 ~33
40	130	1.77~10	5.8 ~33
28	90	1.24~10	4.1 ~33
20	65	0.88~ 7.2	2.8 ~24
14	45	0.8 ~ 5	2.65~16.5
10	32	0.8 ~ 3.6	2.65~12
7	22	0.8 ~ 2.5	2.65~8.25

Unloading Exposed Film

1. Depress the film rewind release on the bottom of the camera.



2. Lift the film rewind crank and turn it clockwise. This will rewind the film into the film cartridge. When all but the film leader is completely rewound and off the camera's spool, the red signal in the film load window will disappear. As you continue to turn the crank, you will feel a slight resistance. This means that the film leader is leaving the take-up spool. Continue winding a few more turns.
3. When you are sure the film is completely rewound, pull out on the rewind crank to open the camera back and remove the film cartridge.



OPTIONAL ACCESSORIES

Minolta Electroflash P

Extremely light and compact (about the size of an ordinary cigarette pack), this direct-contact electronic flash unit automatically switches itself on or off when it is attached or removed from the camera "hot-shoe."

Minolta Lens Shade

The lens shade prevents extraneous harmful light from entering the lens, and is recommended for all outdoor photography.

Minolta Electroflash-2

This compact, efficient electronic flash unit features a pulsating "flash-ready" monitor lamp visible in viewfinders of the Hi-matic E and F, for which it was specially designed, as well as of the Hi-matic 5 and certain others. It can be used with any camera having the convenient cordless "hot shoe" and features constant light output throughout life of batteries.

Slide 300 Projector

This lightweight unit projects both 35mm and 16mm slides with sharp Rokkor Lenses. It has an efficient condenser system and a high-performance sirocco fan for bright, safe projection. Optional accessories include an auto-changer, tele/wide conversion lens, strip-film carrier, and projection screens.

Minolta filters

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

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.

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

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).

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.

CARE AND STORAGE

Your Minolta Hi-matic F is made for long, carefree service. But there are a few things that you should do.

Never touch the camera lens with fingers. Should lens become dirty, clean it with a blower lens brush and a soft, lint-free cloth, using a gentle motion.

If you do not plan to use your camera for a long period of time, it is best to remove the batteries.

Store your camera in a cool, dry place away from dust or chemicals. An airtight container that has a drying agent like silica gel in it would be ideal.

Camera should never be put or left in glove compartment or other places in motor vehicles or elsewhere in which it may be subject to relatively high temperatures.

If you have any questions, ask your Minolta dealer. He is knowledgeable in all aspects of photography, and can help you with all your photographic needs.

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