Minolta Uniomat III

OWNER'S MANUAL

Introduction

You are now the owner of a Minolta Uniomat. This is a completely new type of camera.....as simple to operate as a box camera.....yet with precise adjustments to meet every difficult requirement.

This wonderful, new, easy-to-use camera automatically makes you an authority on perfect pictures.

You do not even have to know the meaning of F stops and shutter speeds to get perfect exposure every time.

But, before using it, read the instructions carefully, follow them religiously and you will have more fun with a camera than you ever had before.

Contents

Specifications of Minolta Uniomat

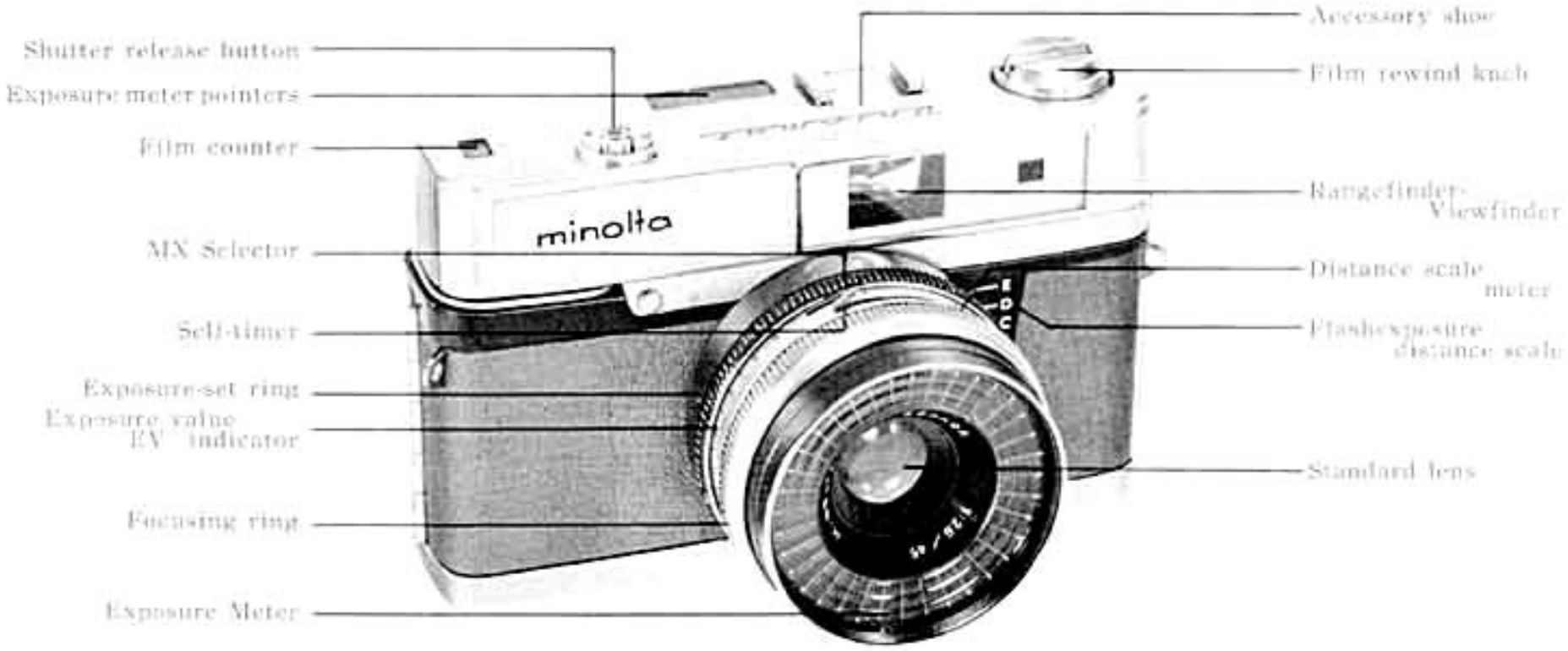
Film : Standard 35 mm film (No. 135 film) 24×36 mm picture size

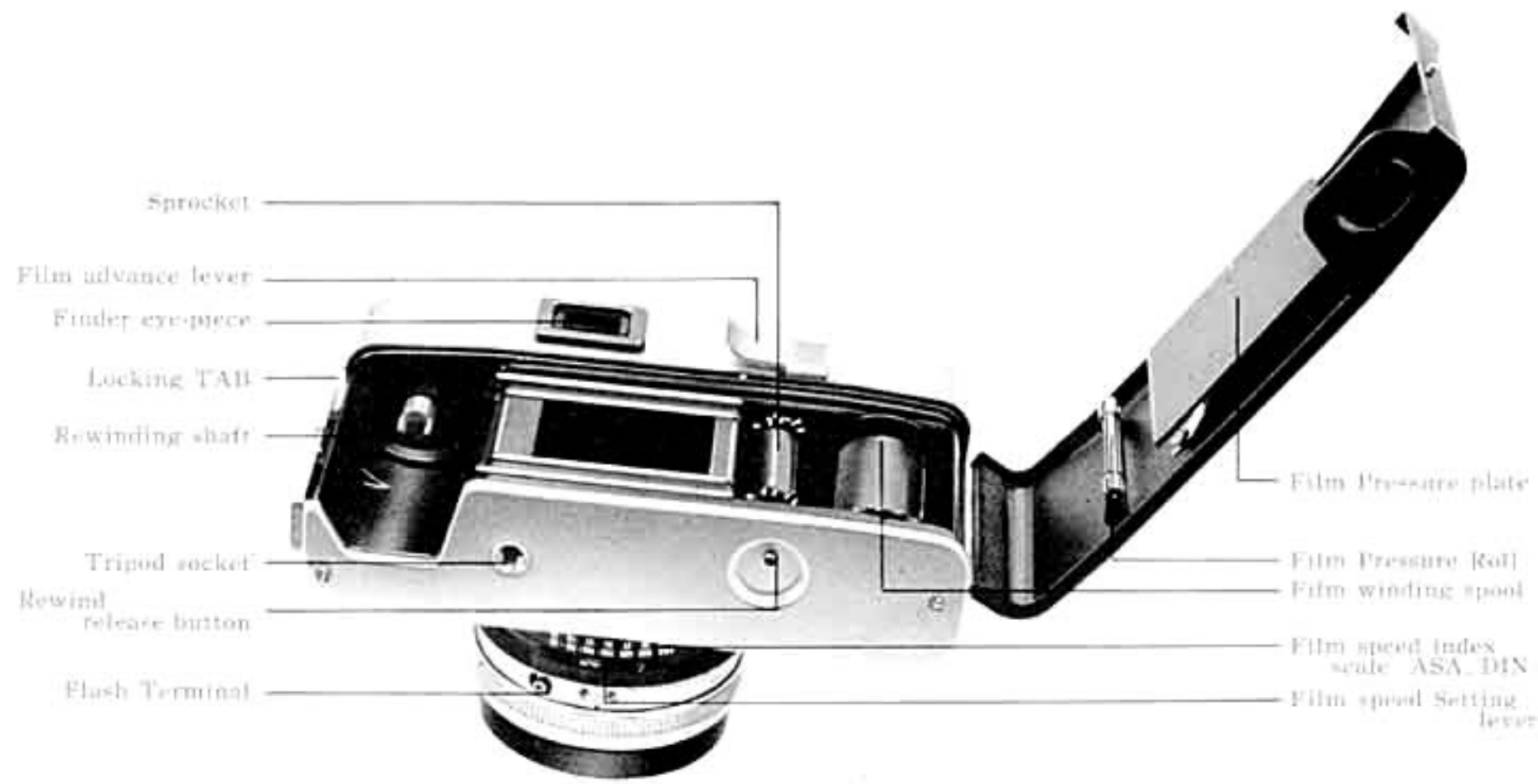
Lens : Rokkor f 2.8 45 mm

Shutter : Optiper-Uni-Citizen [redacted] (EV6~17)
M-X Flash synchronization, Built in self-timer

Finder : Bright framed range-view finder

III Camera Parts





3 simple steps for perfect pictures

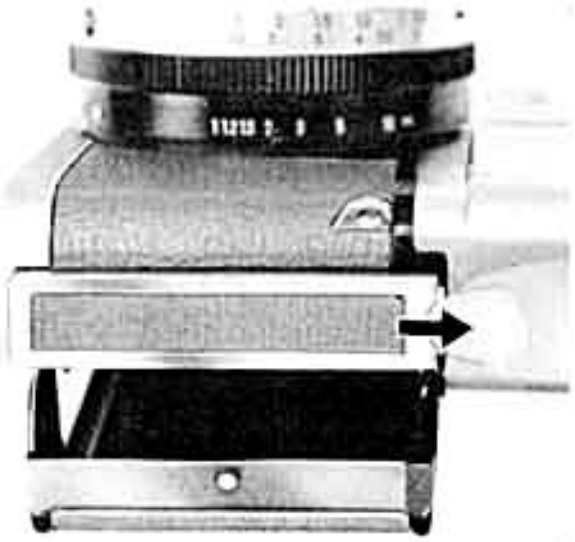
Each step is explained in detail on the following pages

■ 1. Set the film exposure index

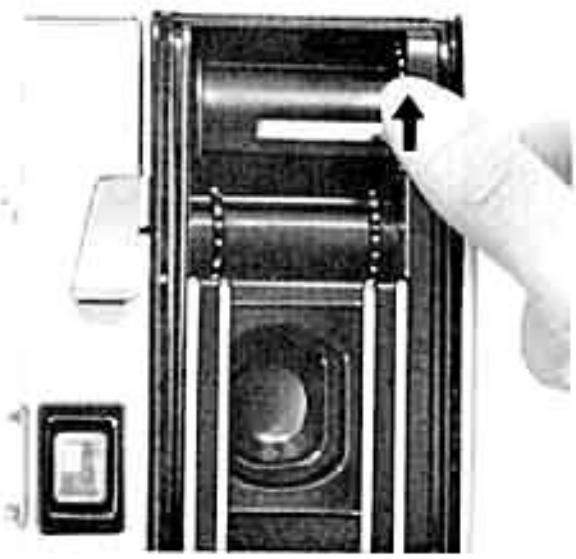
■ 2. Line up the exposure meter indicators

■ 3. Press shutter release

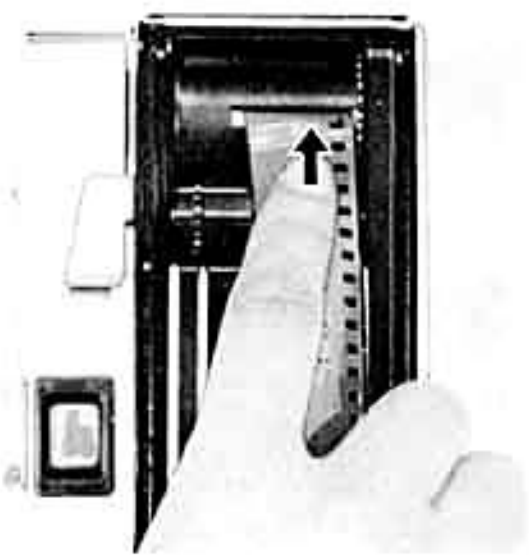
Film loading



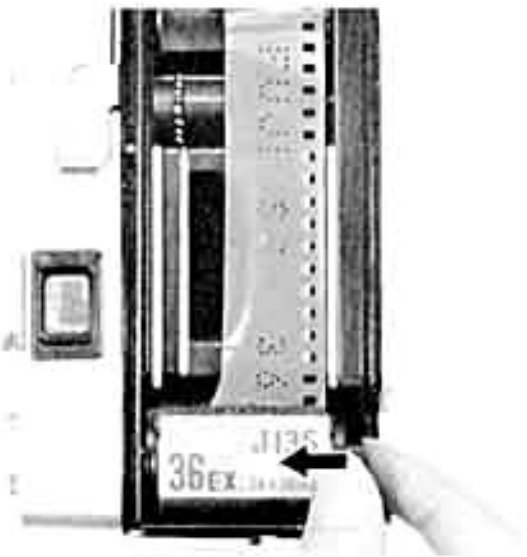
1) To open the camera, pull out the latch at the bottom of the left side of camera and open the hinged back.



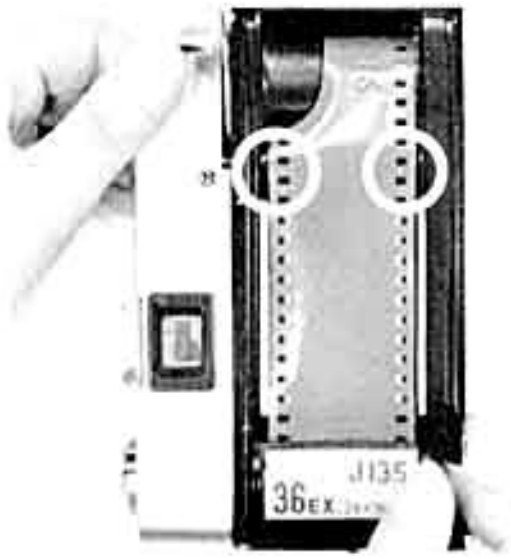
2) Turn the take-up spool with your thumb until the slot is on top.



3) Insert the end of the film into the slot of the take-up spool with the emulsion side (light side) of the film toward the lens.



(4)Insert the film magazine in to the magazine chamber.



(5)Holding the magazine down, turn the take-up spool with the thumb until both sides of the film perforations engage the tooth of the sprocket.

(6)Close the back of the camera firmly and it will be locked automatically.

20 or 36 exposures 35mm film can be used.

III Advancing the film

Press the shutter release button and wind the film. Repeat until the exposure counter points to 1. Now the first picture can be made. You can wind the film by advancing the lever in one complete motion, or by pumping the lever in a series of short strokes.

III Exposure

The exposure-set ring on your Uniomat is a unique, built in computer that eliminates guesswork, charts and calculations, yet assures you of consistently good pictures. It permits you to make instant, correct settings for almost every combination of light, film speed and subject. You will find it very simple to use once you recognize the functions of the exposure set ring.

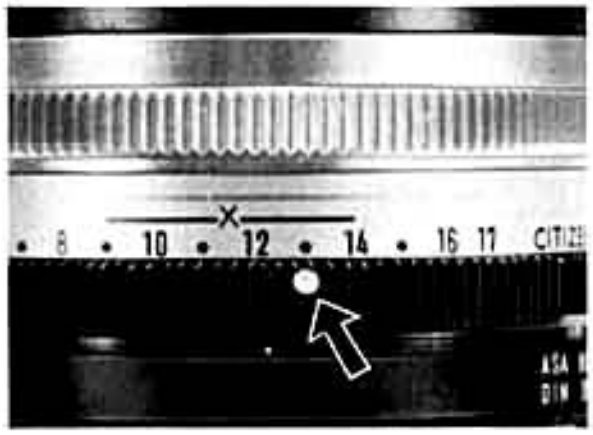
III Set the film exposure index

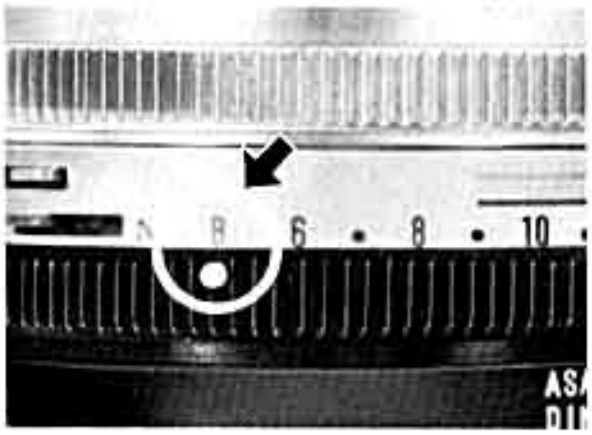
The film exposure index indicator makes the basic setting for the type of film you are using. The only information you need for setting the exposure-set ring is the ASA or DIN film exposure index found on the instruction sheet of the film you use. Pull the exposure-set ring out slightly and turn until the white dot on the exposure-set is opposite the exposure index of the film you are using (Remember, films have both daylight and tungsten exposure indexes, so change the setting when the type of illumination changes.)

Films	ASA
ILFORD HPS	400
Ansco Super Hypan	500
AGFA ISOPAN RECORD	650
AGFA ISOPAN ISS	200
AGFA ISOPAN IF	100
Kodak Panatomic X	50
Kodak Plus X	125
Kodak Tri X	400
Kodacolor X	64
Ektachrome X (daylight type)	64
Kodachrome II (daylight type)	25
Ektachrome High Speed (daylight type)	160
Anscochrome	32
Kodachrome X	64

The EV ring is mechanically linked to the exposure meter. Point the meter directly at your subject. The small red pointer will move across the scale according to the amount of available light. Turn the exposure-set ring until the "V" of the large green pointer straddles the smaller pointer. Under most conditions, you now have the correct setting of lens opening and shutter speed and you are ready to focus and shoot.

With poor light, an exposure may not be possible because of the existing light conditions. You will notice that the pointer is stationary or moves only slightly, not permitting an exposure value to be set. In this instance, auxiliary lighting-flashlamp, floodlamp or electronic flash will be necessary.





■ the Exposure Value

The lens barrel carries EV indexes from B,6 to 17 on the left-hand side as the camera is viewed from front. When the green pointer is lined up with the exposure meter pointer, the red dot on the left-hand side of the EV ring indicates the proper EV (exposure value).

■ Bulb Exposure

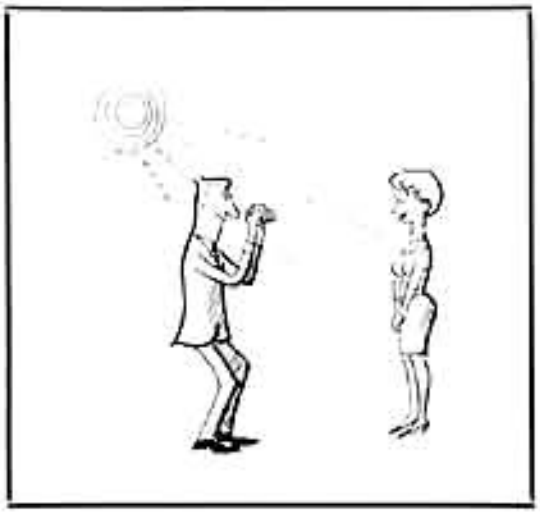
"B" denotes "bulb" and, in this setting, the shutter remains open as long as the shutter button is pressed; it closes when the button is released. The "B" position gives you exposures of any desired duration. The camera emits a warning click when the EV ring is rotated from EV 6 to B.

■ Warning against slow shutter speeds

When the red dot lies somewhere between EV 6 and EV 8, which are engraved in red, the shutter speed is too slow for handheld shooting. A tripod should be used.

At EV 8, however, handheld exposure is permissible if sufficient care is taken.

III How to use the Exposure Meter



Minolta Uniomat's synchro exposure meter is of the reflection type. That is the aperture setting is determined by measuring the intensity of the light reflected by the subject. In ordinary cases, the exposure meter is set with the camera aimed at the subject from where you stand.

However, in certain circumstances, e. g. when the contrast between the subject and background is great, the following procedure will help obtain a proper exposure.

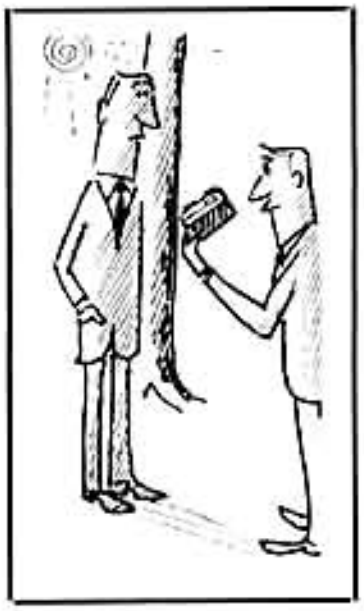
■ (1) To shoot persons, get as close to them as possible.

In case there is a particularly important subject, e. g. a person who is to be emphasized, get as close to him as possible and measure the light taking care not to allow counter light to enter the light-receiving window of the meter. In case the contrast of the subject itself is great, e. g. when the subject wears a white shirt and black trousers, or the subject is partially in the sun and partially in the shade, go near to the subject and measure the exposure values for both areas and use the average value.

* To take a picture of a person in artificial illumination at night, measure with the camera held close to his face.

■ (2) Shooting landscapes

When shooting landscapes, read the meter, aiming the camera at the center of the scene. (Even when the sky is included in the scene, the camera need not be tilted down, for this exposure meter has been designed to keep out the intense light coming from the sky.



■ (3) It depends on purposes when shooting in counter light.

When you want to get a bright picture of a counter-lighted subject, get close to the subject and measure the shaded area. This procedure is necessary to keep out strong sunlight from the background.

If you like to shoot both the subject and background in proper contrast, take a picture at the mean average of the exposure values for the shaded area of the subject and the background.

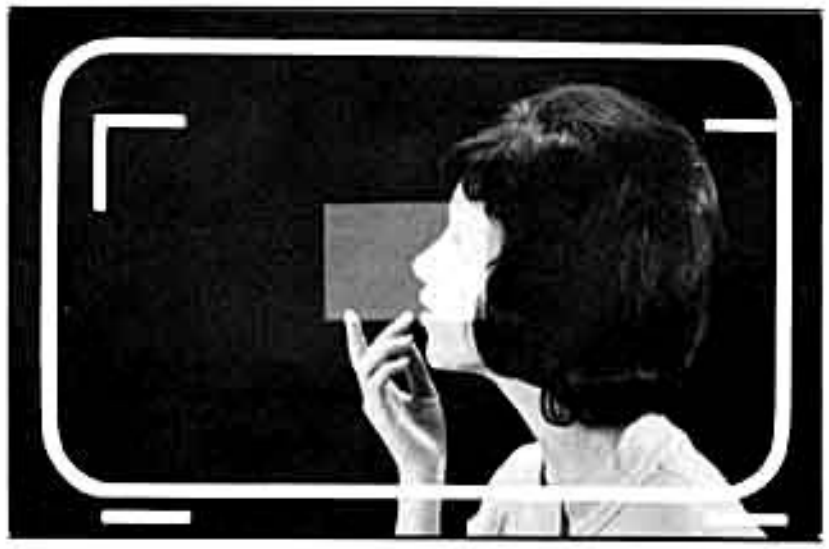
To make a silhouetted picture, you can either shoot at the EV for the bright background or measure the EV for the subject itself from where you stand.

More or less the same procedure as above applies when shooting a person against the sky, the sea, or the bright scene through a window behind him.

■ (4) When a filter is used.

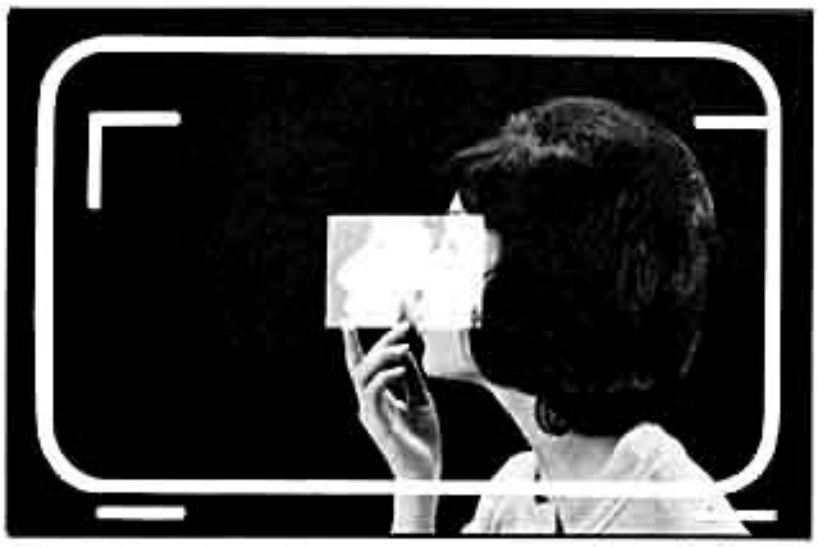
Since the meter is of the circle-eye type, filters require no special adjustment. Just attach the filter in front of the lens.

III Focusing and Composing



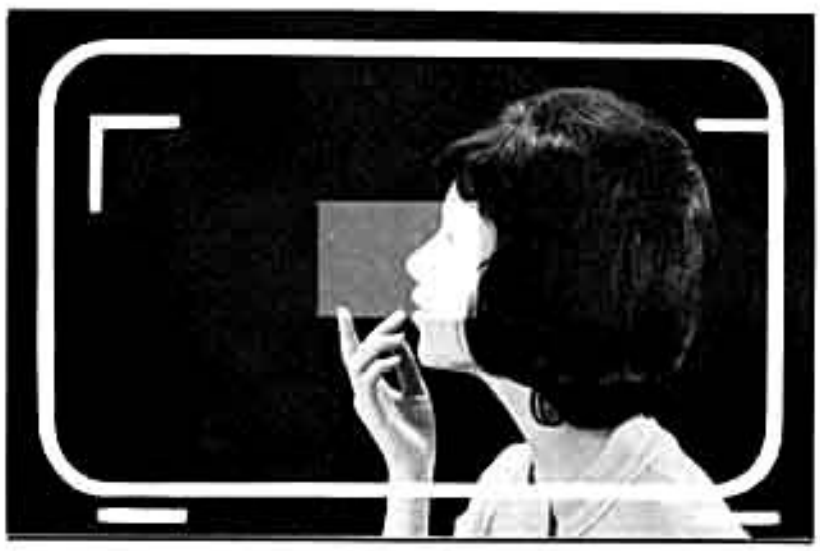
As you look through the single window rangeview finder you will note a white bright frame near the outer edge. The actual picture you take will be inside this frame. Make sure your picture is composed inside the bright frame.
When taking a close-up picture because of parallax (the difference between what the viewfinder 'sees' and what the lens sees,') you have to compose your picture inside the short lines located at the corners of the rectangular frame.

III Focusing and Composing



Out of focus

In the center of the frame is a square color area. You will notice the part of your subject which appears in this color area is a double image. As you turn the focusing ring you will note the double image will become one.



In focus

When your subject becomes one in this color area, you are properly focused.
(Note) There are distance scales marked in meters and in feet on the lens barrel.

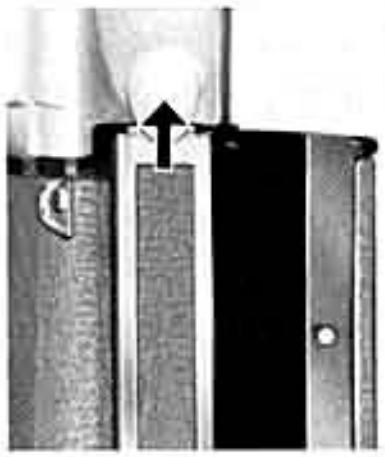
III Using the self-timer

Your Uniomat has a built-in self-timer which enables you to get into the picture yourself.
With the exposure-set ring already adjusted, put the self-timer lever to the V position. Release the shutter in the normal manner and after about 10 seconds, the exposure will be made.
The self-timer can also be used with the cable release or with flash equipment.

Unloading the film

(1)

(2)



(3)

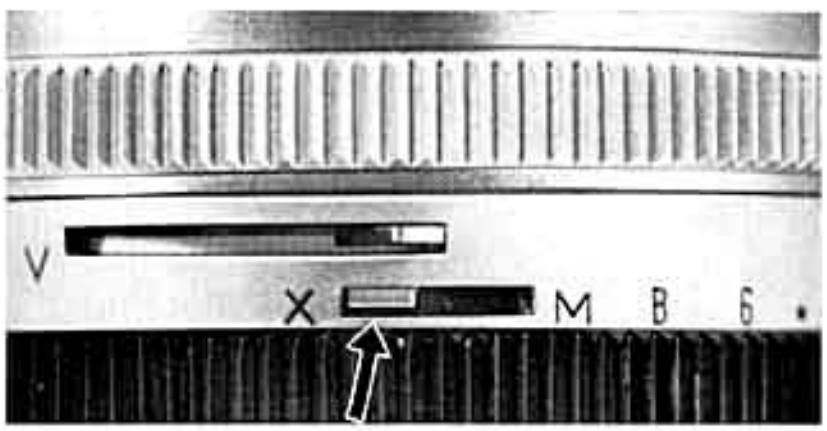
(4)

After you have taken your last picture, the film counter shows 20 or 36 depending whether you are using a 20 or 36 exposure roll. The film must be rewound into the magazine before the camera is opened and the film removed.

Do not attempt to advance the film beyond the last exposure, since the film might become detached from the magazine and cannot be rewound.

To rewind the film, raise up the crank on the rewind knob. Holding down the rewind release button on the bottom of the camera, turn the crank clockwise until you feel the release of tension. This indicates the film has been released from the take up spool. Pull out the back latch and open the camera, removing the film magazine from the camera.

Flash photography

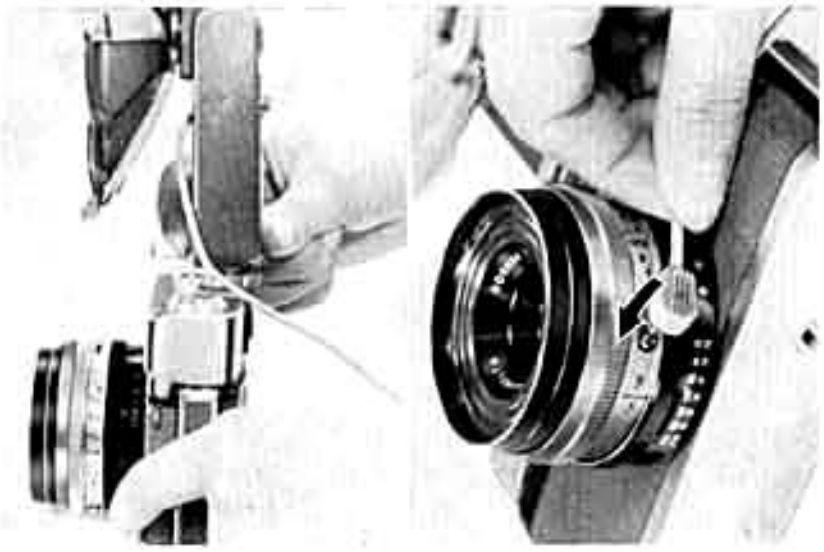


Your Uniomat has built-in flash synchronization. New simplified automatic flashlamp exposure calculator eliminates all your guesswork and calculation.

By changing the M-X selector, it synchronizes both with the flashlamp or electronic flash.

For optimum results with flashlamp, a B-C type flash unit is required.

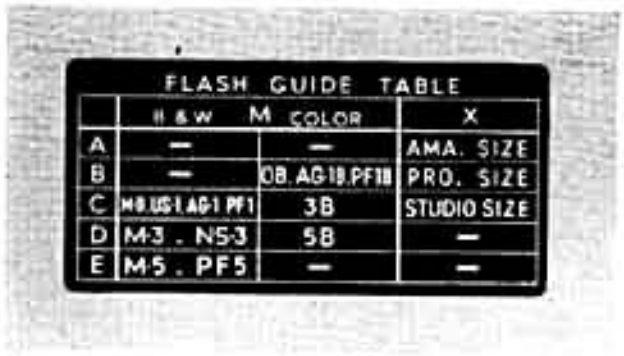
The Minolta B-C flash gun or any B-C flash gun with the "shoe" may be used.



■ **How to set the flash gun**

① Slide the flash gun or the electronic flash unit into the accessory shoe.
② Insert the plug of the flash gun's cord in the flash terminal.
③ For M class flash bulbs, slide the M–X selector to "M". For electronic flash, slide the selector to "X"

The red-dot synchronization indicator or the exposure-set ring should be referred to before taking flash pictures. It should be within the orange line (M range) for M class flash bulb, and within the red line (X range) for electronic flash unit. If the indicator is not within the range, it is not advisable to photograph at your planned distance with the film you are using.



Flash exposure guide table (This chart is attached on the back of camera)
On the right side of the body, there is flash exposure index scale.....A, B, C, D, E. Each letter represents the different type of flashbulb or electronic flash unit.
After you have selected the index letter based on the flashbulb or electronic flash which you usually use, the setting of exposure is very simple.

The following chart interprets the flash.

Index	Guide ✲ Number	Flash lamp and Electronic flash
A	18	Electronic Flash (Amateur size)
B	25	Electronic Flash AG-1B,
C	35	3B, US-1 AG-1
D	50	5B, 25B, M5B, M25B, 3,
E	70	5, 25, M5, M25

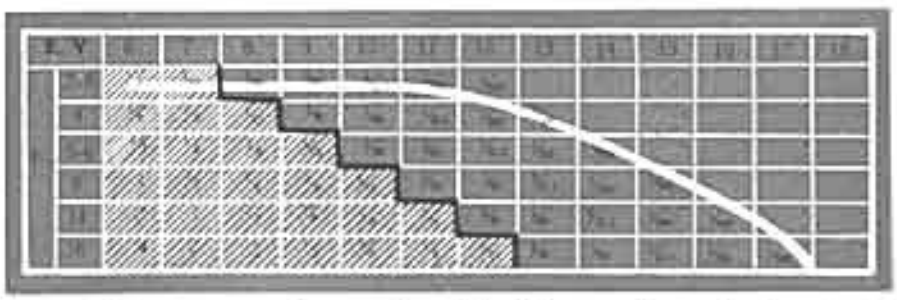
✲ Guide Number : Based on ASA 100, Shutter 1/50, meter (This number should be found on the box or the instruction sheet of flashbulb or electronic flash unit)

III Flashlamp exposure

To determine the correct exposure, first focus on the subject to find the distance. Move the flash exposure distance scale on the exposure-set ring until this subject distance is opposite the index letter for the lamp you are using. For example, if you are focused at 3 meters and using a ≠ 6 B flashlamp, turn the exposure-set ring until the 3 is opposite the letter C. You now are ready to take your picture.

III How the Uniomat Selects Shutter Speeds and Apertures

The following curve shows the relationship between the lens opening and shutter speed of your Uniomat.



This camera is equipped with a unique light-value shutter.

In this camera, the shutter blades serve also as a diaphragm so that the shutter speed and lens opening (aperture) change together to give an ideal combination of aperture and shutter speed in one operation.

This combination can be diagramatically represented as above.

The above table applies to this particular type of camera (F 2.8 1/500). The shaded area represents the combinations where handheld photography is not recomended. For normal photography, the combinations above the shaded area represent the range where handheld picture-taking is permitted.

Now, if the exposure range of a conventional camera is compared with the exposure range (curve) for your Uniomat, you will realize the following facts:

(1) The range in which handheld photography is permissible with a conventional camera is far smaller than might be expected.

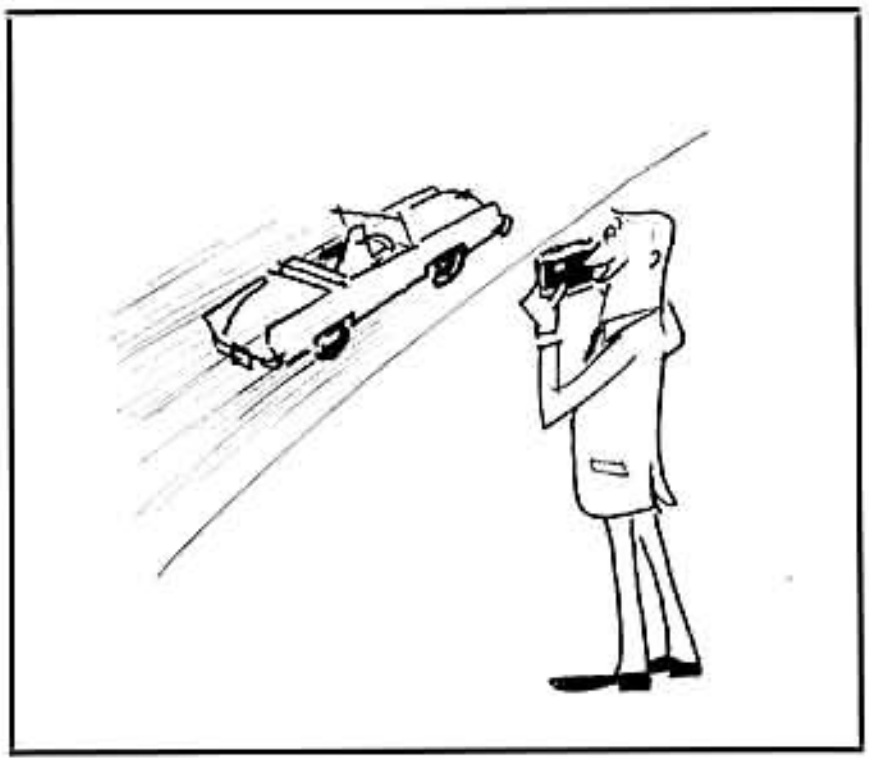
(2) Moreover, if the relationship between lens opening and shutter speed for each EV (light value) within the handheld range is considered, it will be apparent that in order to make film negatives that will withstand great enlargement, it is advisable to shoot at the fastest possible speeds. Uniomat gives you these speeds over a wide range of light.

In a bright room, for instance, a more satisfactory picture, without blur could be obtained at F 2.8 and 1/60 than at F 4 and 1/30. In the case of the Uniomat, the optimum value would be about EV 9 or F 2.8 at 1/60.

If you will follow the white line on the chart above, you will see that Uniomat gives you the optimum shutter-aperture combination throughout the EV range.

(3) Fast moving subjects:

Generally, most fast moving subjects are in brightly lit places. You can easily stop the motion because Uniomat gives you a 1/500 shutter speed from EV 13 to 17.

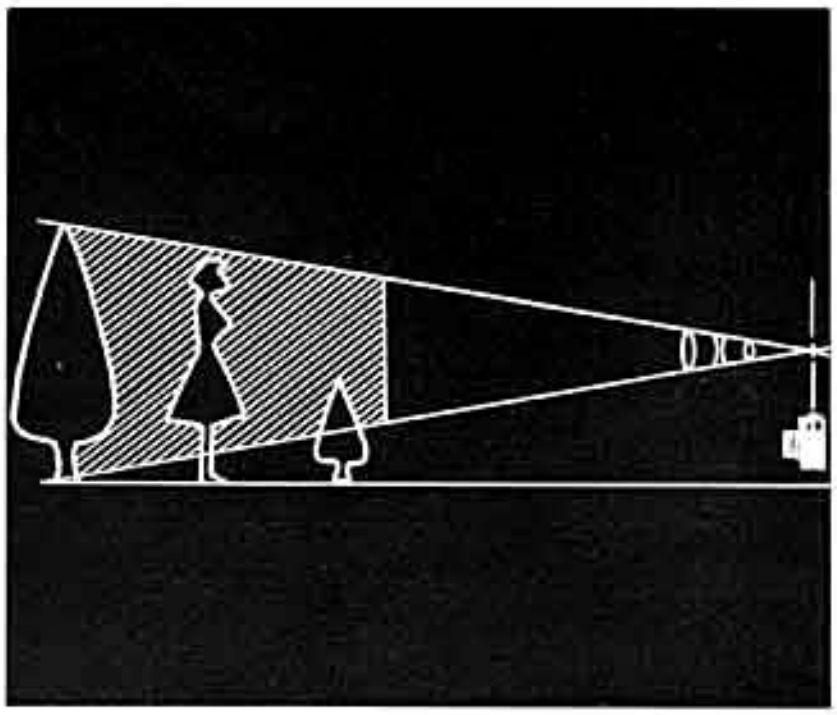


(4) The following rules apply to the depth of field.
a) The shorter the focal distance, the greater the depth of field.
b) The smaller the aperture, the greater the depth of field.
c) The depth of field increases as the lens-to-subject distance increases.

In the case of the Uniomat, the brightness of the lens is F 2.8, the focal distance 45 mm, and the lens-to-subject distance 0.9 m to infinity. In normal photography, Uniomat provides more than adequate depth of field. Information on common practices reveals that with a camera of this type, it is virtually not necessary to utilize a calculated depth of field. For this reason, your Uniomat is not provided with a depth-of-field scale.

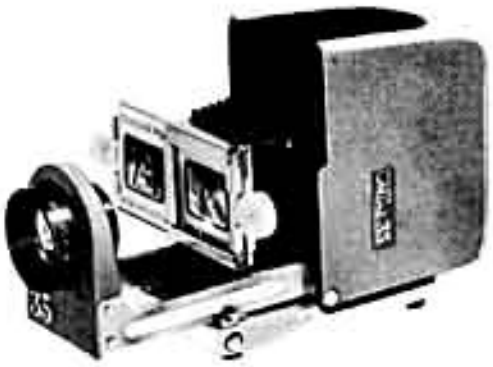
(5) It will be apparent from the foregoing that the exposure range of the Uniomat is the most useful range that has been selected in accordance with data on actual practices with respect to the combination of aperture, shutter speed and depth-of-field. Therefore, the Uniomat does not take out-of-focus pictures. Since it is synchronized with the exposure meter even at half-speeds, the Uniomat also gives a more precisely measured exposure than do other cameras.

Furthermore, the Uniomat automatically prevents jarring and other failures even when you depend only on the exposure meter. In other words, this camera always gives the most suitable combination of aperture and shutter speed.



III Accessories

The following exclusive accessories are available for the Uniomat and are recommended in order to obtain the best results with it.



Minolta Mini-35 Compact. Projector Portable Unit, with fast f 2.5 lens.

Minolta B-C Jr Flash Gun

Lens shade
(with leather case)

Minolta filter UV
(Haze) and Yellow

Minolta masters photography

Minolta
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