



how to use your Anso

KAROMAT

Your Karomat takes standard 35mm double frame pictures (see lower right). These pictures may be enlarged to give prints of album size or larger for your enjoyment.

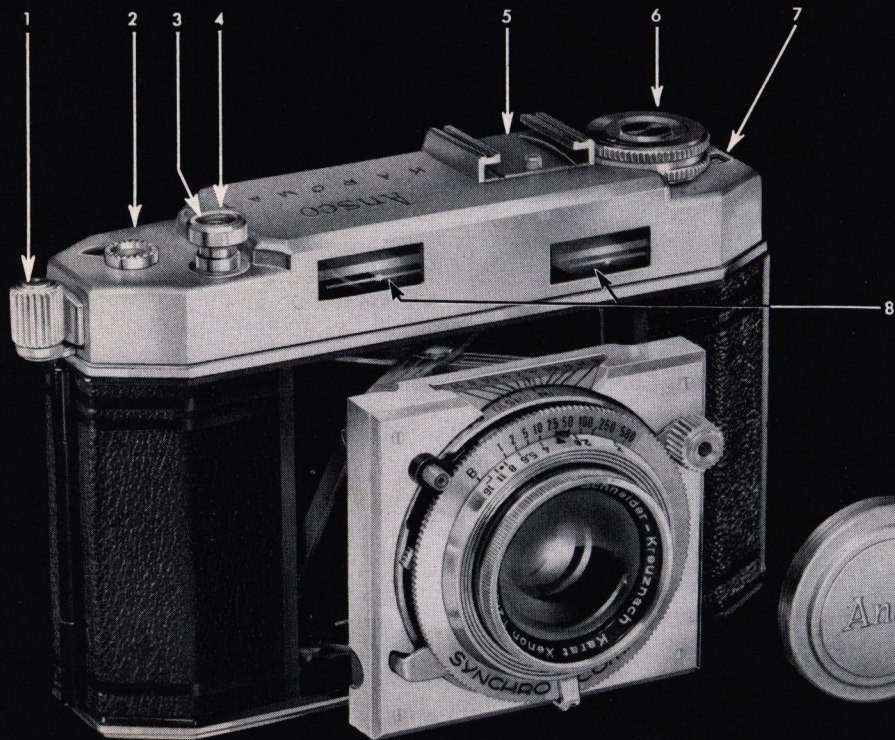


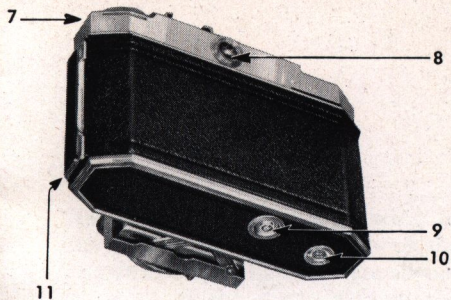
your ansco **KAROMAT**

Your Ansco Karomat is a miniature camera that combines a fine camera mechanism and lens with ease and simplicity of operation. This precision camera is designed to use standard 35mm magazines in black-and-white and color film. For best results, use Ansco 35mm film available in 20 and 36 exposure magazines and bulk loads.

The Ansco Karomat cameras are now equipped with one of two top quality lenses — either the $f/2$ Schneider Xenon or the $f/2.8$ Schneider Xenar. Each lens is color corrected and hard coated for greater light transmission assuring crisp, sharp pictures in black-and-white or color. The Synchro-Compur shutter is equipped with speeds to $1/500$ th of a second and synchronized for popular flash lamps as well as for high speed electronic flash at all shutter speeds.

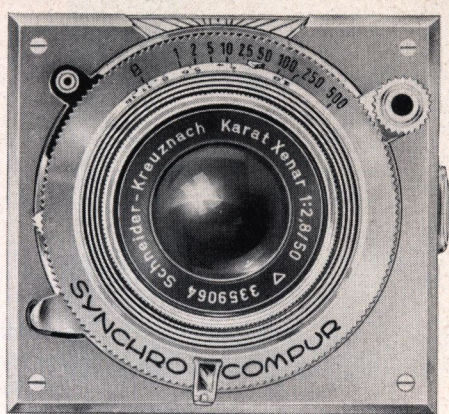
Before loading your Ansco Karomat, read over these instructions and try working the operating parts of the camera until you have become thoroughly familiar with them. The operation of both the Karomat $f/2$ and Karomat $f/2.8$ is identical, only the exposure tables differ. When using the Karomat $f/2.8$, disregard the " $f/2$ " columns in the tables.



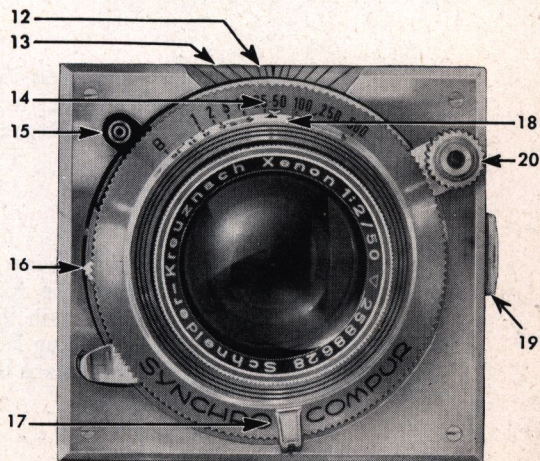


parts index

1. Rapid Feed Lever
2. Exposure Counter
3. Shutter Release Button
4. Cable Release Socket
5. Accessory Clip
6. Film Rewind Knob
7. Film Indicator Dial
8. Combination Split Image Range and View Finder
9. Rewind Release
10. Tripod Screw Socket
11. Locking Slide



f/2.8 Schneider Xenar lens.



f/2 Schneider Xenon lens

opening the camera

To open the Ansco Karomat press the lens mount release button (Figure 1, No. 19) and the lens mount will spring forward into operating position. Be sure to remove the lens cap before taking any pictures.

IMPORTANT: Rapid feed lever will only operate when lens mount is in the forward position.

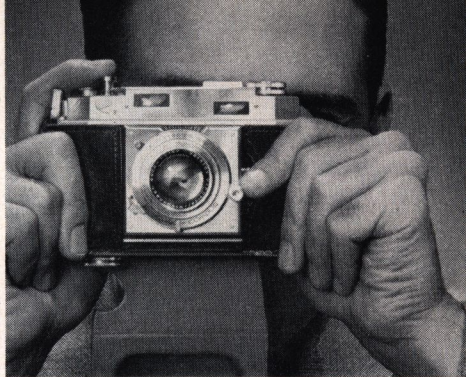
closing the camera

Replace the lens cap and press the lens mount release button. Push down on the lens board until a "click" is heard, this indicates that the mount is locked in the closed position. Repeat these operations until you have become familiar with them.

focusing

The Ansco Karomat has a view finder with a built-in split-image range finder coupled to the lens. To focus, bring the view finder close to the eye and center the object you wish to photograph. If the image appears divided (see right) move the focusing lever (Figure 1, No. 20) up or down until the image is matched. This means that the object is in focus. To check

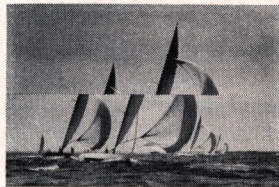
this, look at the distance setting in the small window in the top of the lens mount. The figures there should be equal to the distance from the camera to the subject.

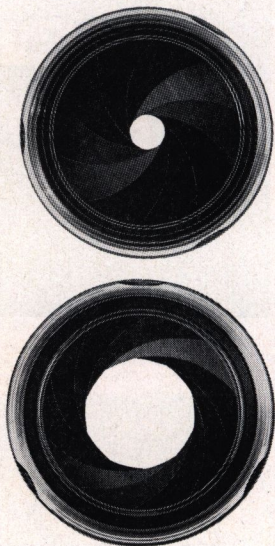


zone focusing

To use as a fixed focus, non-adjustable camera, set the focusing scale at 10' or 30' (numbers in red), the lens diaphragm at the orange dot on the F stop scale, and the shutter at 1/50 of a second. With the camera set at 10', everything from 8' to 15' will be in focus. At 30' everything from 15 to ∞ (infinity) will be in focus.

Sharper pictures of any particular subject will result, of course, if the lens is focused at the exact distance from the camera to the subject.



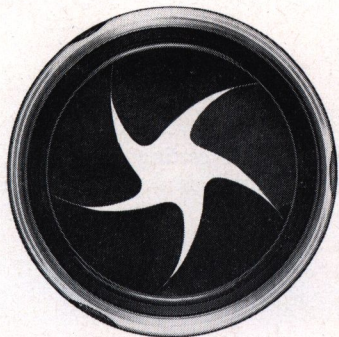


To observe the operation of the diaphragm, open the camera back and set shutter on B and hold down the shutter release button. Now move the diaphragm lever back and forth and notice the way the diaphragm leaves open and close.

the diaphragm

The diaphragm or lens opening, as it is sometimes called, governs the amount of light that passes through the lens while the shutter is open. A system of f numbers or "stops" has been devised that measure the same relative light gathering power regardless of the size of the lens.

The diaphragm is regulated by the diaphragm lever. As it moves from the lower to the higher number, the size of the aperture decreases and is said to be "stopped down". Remember, the lower the number, the larger the aperture.



the shutter

The shutter on the camera is the device that determines the length of the exposure. The shutter can be set at mechanically regulated speeds from 1 second to 1/500th of a second.

The shutter is automatically cocked and the film wound when the rapid feed lever is moved. The shutter is released by pressing the shutter release button on the right hand side of the view finder.

The shutter of the Ansco Karomat is regulated by setting the speed desired on the shutter setting ring opposite the exposure setting mark on the face of the lens mount. When using the 1/500 of a second speed, the shutter must be set *before* the film is wound and the shutter cocked, or damage to the shutter will result.

time exposures

Time exposures are made by setting the exposure setting ring on B; the shutter is then cocked and the shutter release button is depressed. The shutter will remain open until the button is released.

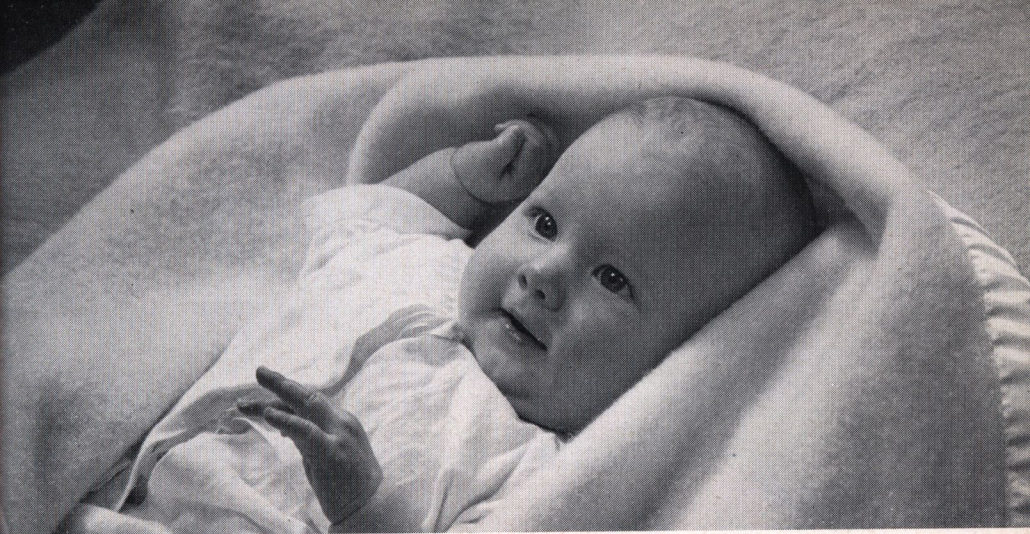
accessory clip

This handy clip may be used for attaching many standard camera accessories.

tripod socket

In addition to being used to attach the camera to a tripod, it is also used to secure the camera to the Ansco Flash Unit and to fasten the carrying case to the camera.



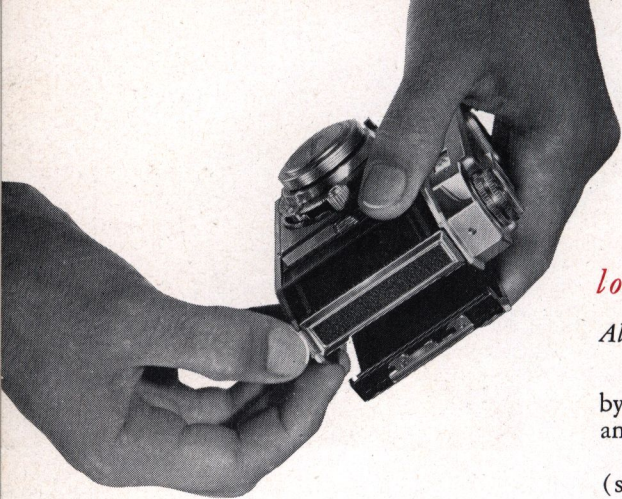


there is an Ansco Film for every picture

SUPREME—A high speed panchromatic film for indoor or outdoor photography under natural or artificial light. Available in 20 and 36 exposure standard 35mm magazines.

ULTRA SPEED—A very high speed panchromatic film designed for use under adverse light conditions as well as for normal photography. Available in 20 and 36 exposure standard 35mm magazines.

ANSCO COLOR FILM—A natural color film that captures colors as you see them in the original scene. Available in daylight and tungsten types in 20 exposure magazines.



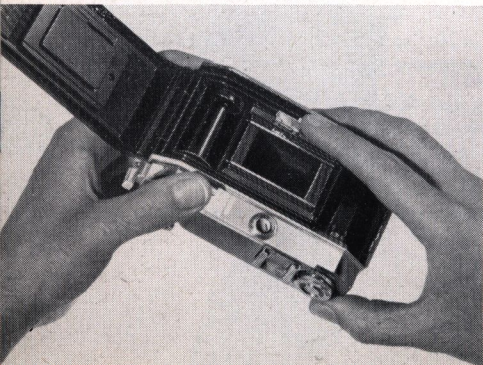
loading the camera

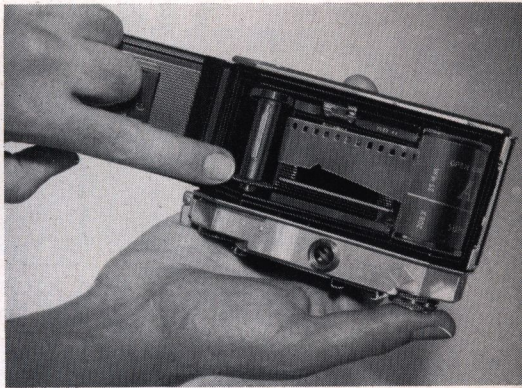
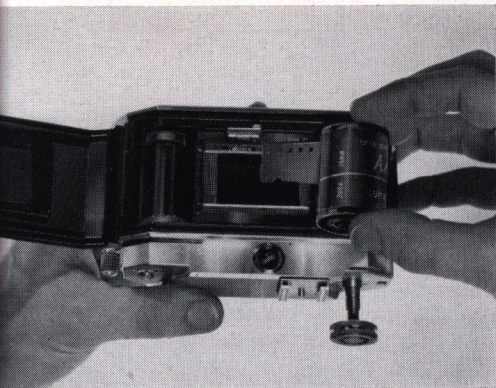
Always load in subdued light

Open the back of the camera by pulling down the locking slide and swinging the back open.

Raise the hinged film guide (see lower left) and turn the winding spool until the notched carrying slot is on top. Pull out the rewinding knob as far as it will go and insert the magazine so that the emulsion side (light colored side) of the film is towards the camera lens. Push in the rewinding knob and turn it until the magazine spool is engaged.

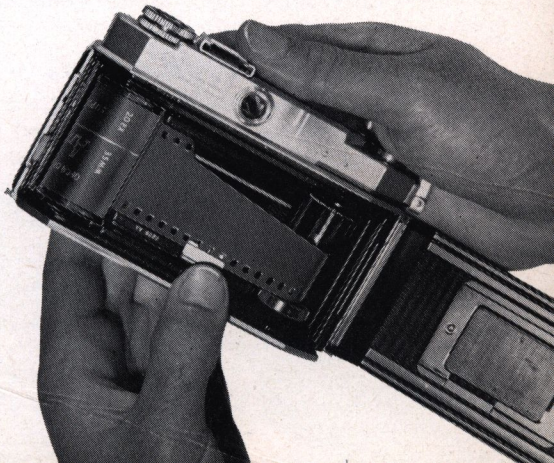
Insert the tongue of the film in the winding spool and engage the second perforation in the notch





of the carrying slot of the winding spool.

Turn the winding spool with your fingers until the film is tight and about $\frac{1}{2}$ " of the full width of the film has advanced between the film channels (see lower right). Be sure the film guide sprocket is properly engaged in the perforations, then close the film guide cover. Close the back of the camera firmly but without forcing.

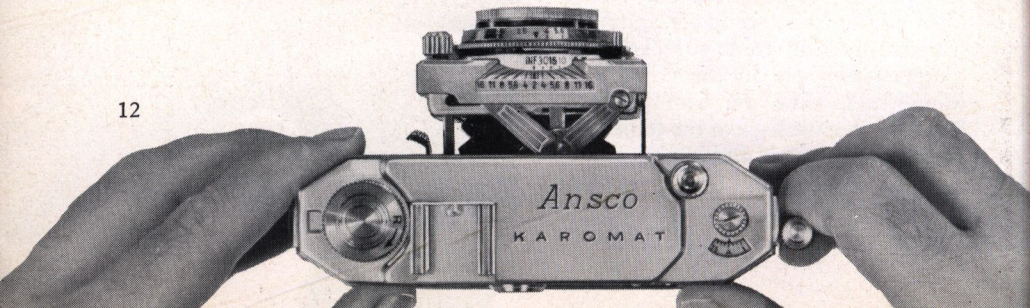




Set the counter disc on top of the camera to "A" by pressing and turning the milled knob. Open the camera front as previously instructed so that the lens mount is in the operating position. Now move the rapid feeding lever; this will advance the film and cock the shutter. Press the shutter release button down firmly and move the rapid feed lever again. Continue doing this until the counting device points to 1. You are now ready to take pictures. *The counter disc will tell you how many exposures have been made. DO NOT advance the film past the last exposure as it may become detached from the magazine and cannot be rewound.*

The milled indicator dial (at the left) carries recommended exposure indexes and settings for Color D and Color T. Set the dial to remind you of the speed of the film in the camera.

12



outdoor exposures

The proper exposure for any given picture varies considerably according to the light conditions and speed of the film being used. Light conditions vary with seasons, time of day and even geographical location. The Karomat is equipped with a sufficiently versatile lens and shutter to allow pictures to be made under almost any type of lighting condition. Average exposures for outdoor photography are given in the tables below:

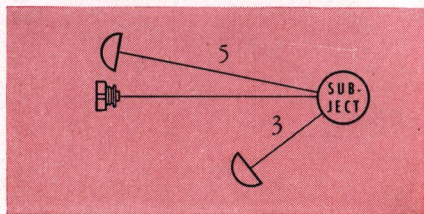
EXPOSURE TABLE

Lighting Conditions	Lens Openings for Supreme						
	f/16	f/11	f/8	f/5.6	f/4	f/2.8	f/2
Bright Sun	1/50	1/100	1/250	1/500	—	—	—
Hazy Sun	1/25	1/50	1/100	1/250	1/500	—	—
Bright Overcast	1/10	1/25	1/50	1/100	1/250	1/500	—
Dull Overcast	1/5	1/10	1/25	1/50	1/100	1/250	1/500
	—	f/16	f/11	f/8	f/5.6	f/4	f/2

Lens openings for Ultra-Speed

floodlamp exposures

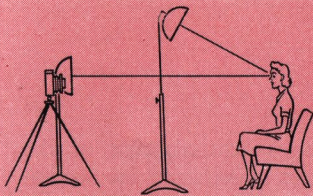
For pictures at night or indoors, floodlamps are usually used to provide the necessary light. A tripod or similar firm support must be used for exposures of longer than $1/25$ of a second to prevent movement of the camera. It is also desirable to use a cable release for these longer exposures since it helps



FLOOD EXPOSURE TABLE

Main Light Fill in Light <i>Lens Opening for Supreme</i>	3 5	5 7	6 9	10 14
f/16	1/10	1/5	1/2	1
f/11	1/25	1/10	1/5	1/2
f/8	1/50	1/25	1/10	1/5
f/5.6	1/100	1/50	1/25	1/10
f/4	1/250	1/100	1/50	1/25
f/2.8	1/500	1/250	1/100	1/50
f/2	—	1/500	1/250	1/100

For Ultra-Speed Pan use next smaller lens opening (higher number).

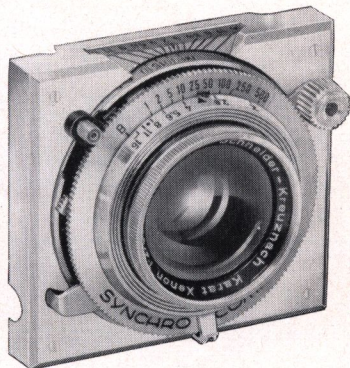


to prevent camera movement when the shutter is tripped. The cable release screws into the socket on the top of the shutter release button.

The recommended light sources are two No. 2 flood-lamps in good quality reflectors. Lights should be placed according to the diagram: Main light source should be directed downward at 45° . Fill-in lamps should be close to the camera. Values shown are based on light colored walls or surroundings. Darker colors require an increase of one or two lens stops.

flash exposures

Your Ansco Karomat has built-in flash synchronization and therefore does not require flash synchronizing attachments. All you need is the Ansco Flash Unit which should be attached to the flash connector. Do not force, as rough treatment can damage the connector.



FLASH EXPOSURE TABLE

Lamp	Shutter Speed	Setting	Supreme	Ultra-Speed
SM, SF	B-1/50	X	65	90
5, 25	B-1/50	M	120	170
	1/100	M	95	130
	1/250	M	70	100
	1/500	M	50	75
11, 40	B-1/50	M	170	240
	1/100	M	130	185
	1/250	M	100	140
	1/500	M	75	100
2, 22	B-1/50	M	200	285
	1/100	M	155	220
	1/250	M	120	165
	1/500	M	85	125

The synchronization of the Karomat is adjusted for instantaneous (X) or M (20 milli-second) delay operation through the use of the flash synchronizing lever. Popular flash lamps may be used at the settings and guide numbers shown in the flash exposure table. High speed electronic flash may be used at all shutter speeds at the X settings.

USING THE GUIDE NUMBERS — *To find the exposure, divide the distance in feet from the flashlamp to the subject into the guide number to find the lens opening required. Example: The guide number for a number 5 lamp with Supreme Film at speeds up to and including 1/50 second is 120. The subject is 15 feet away, therefore $120 \div 15 = 8$, use $f/8$. More complete information will be found on the instruction sheet packed with your Ansco Film.*

color photography

Color photography with Ansco Color Film is as simple as black-and-white photography and the results are natural color transparencies that capture true colors as you see them. Ansco Color Film is available in Daylight or Tungsten type for daylight and artificial illumination. Ansco Color transparencies may be viewed by projection and full color contact prints or enlargements can be made on Ansco Color Printon.

DAYLIGHT EXPOSURE TABLE

Ansco Color Film, Daylight Type

	Bright Sunlight, Front Lighted	Bright Sunlight, Side Lighted	Bright Sunlight, Back Lighted	Hazy Sunlight, Soft Shadows	Bright Overcast No Shadows	Dull Overcast
1/100 sec.	f4.5	f4	f3.5	f3.5	f2.8	—
1/50 sec.	f6.3	f5.6	f4.5	f4.5	f3.5	f2.8
1/25 sec.	f9	f8	f6.3	f6.3	f4.5	f3.5

FLOOD EXPOSURES • (Tungsten Type Film)

Two #2 Photoflood (3400K) Lamps (in Studio Type Reflectors)
For Average Colored Subjects in Light-Colored Rooms

Main Light		4	6	8	12
Fill-in Light		6	8½	12	18
Shutter	1	f16	f12.5	f9	f6.3
Speed	1/5	f8	f5.6	f4.0	f2.8
	1/25	f3.5	f2.5	f2	—

See Page 14 for lighting arrangement.

FLASH EXPOSURE TABLE

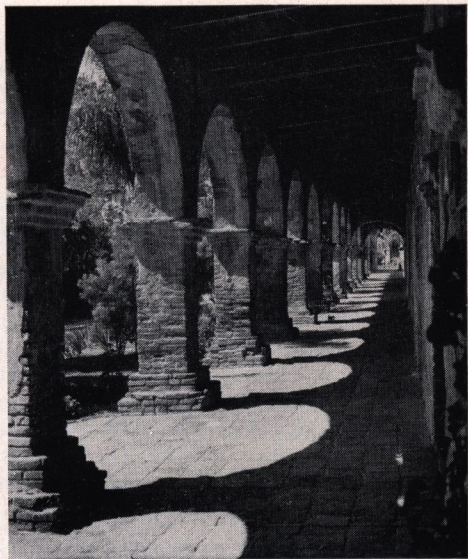
DAYLIGHT TYPE FILM			TUNGSTEN TYPE FILM		
Bulb	Shutter Speed	Guide No.	Bulb	Shutter Speed	Guide No.
5B, 25B	B-1/50	45	5, 25*	B-1/50	75
(M Setting)	1/100	35	(M Setting)	1/100	59
	1/250	25		1/250	45
	1/500	20		1/500	30
2B, 22B	B-1/50	75	2, 22*	B-1/50	125
(M Setting)	1/100	60	(M Setting)	1/100	100
	1/250	45		1/250	75
	1/500	30		1/500	55

For use of the guide numbers see Page 16.

* Use with a UV16 Filter

depth of field

Depth of field is the range of distance in front of the camera that is in sharp focus. Greater depth of field will result when smaller diaphragm openings are used. For example, with the camera focused at infinity (∞) and the diaphragm set at $f/5.6$, everything from 44 feet to infinity will be sharp and in focus. When the camera is focused at infinity and the diaphragm set at $f/16$, everything from 15' 4" to infinity will be in focus. In other words, the depth of field, or the range of distance over which the picture is sharp and in focus has been increased by reducing the opening of the diaphragm.



DEPTH OF FIELD TABLE LENS SETTINGS

FOCUS SETTING	f/2	f/2.8	f/4	f/5.6	f/8
Inf.	95'-Inf.	68'-Inf.	47'-Inf.	34'-Inf.	24'-Inf.
30	23'-45'	20' 6"-54'	18' 6"-83'	16' 1"-250'	13' 4"-Inf.
15	13'-17' 10"	12' 3"-19' 4"	11' 5"-22'	10' 5"-27'	9' 4"-39'
10	9' 1"-11' 3"	8' 11"-11' 10"	8' 4"-12' 9"	7' 9"-14' 4"	7' 1"-17' 6"
6	5' 8"-6' 5"	5' 6"-6' 7"	5' 4"-6' 11"	5' 1"-7' 3"	4' 9"-8' 1"
5	4' 9"-5' 3"	4' 8"-5' 4"	4' 6"-5' 7"	4' 5"-5' 11"	4' 2"-6' 4"
4	3' 10"-4' 3"	3' 9"-4' 4"	3' 8"-4' 5"	3' 7"-4' 7"	3' 6"-4' 10"
3.5	3' 5"-3' 8"	3' 4"-3' 8"	3' 3"-3' 9"	3' 2"-3' 11"	3' 1"-4' 1"
3	2' 11"-3' 1"	2' 10"-3' 2"	2' 10"-3' 3"	2' 9"-3' 3"	2' 8"-3' 5"

the depth of field scale

f/11	f/16
17' 3"-Inf.	11' 10"-Inf.
11'-Inf.	8' 5"-Inf.
8'-135'	6' 8"-Inf.
6' 4"-24'	5' 4"-75'
4' 10"-11' 2"	3' 11"-12' 6"
3' 11"-7'	3' 6"-8' 9"
3' 4"-5' 2"	3' -6'
2' 11"-4' 4"	2' 9"-5'
2' 7"-3' 7"	2' 5"-4'

The depth of field scale is located on the top of the lens panel just over the footage indicator ring. You can determine easily the depth of field for any of your pictures. The depth of field for any particular footage setting is shown by the numbers appearing opposite the two lines representing the diaphragm setting being used.

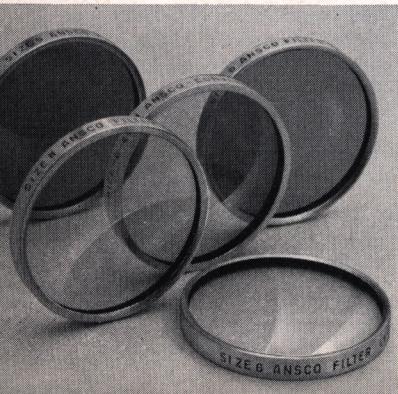
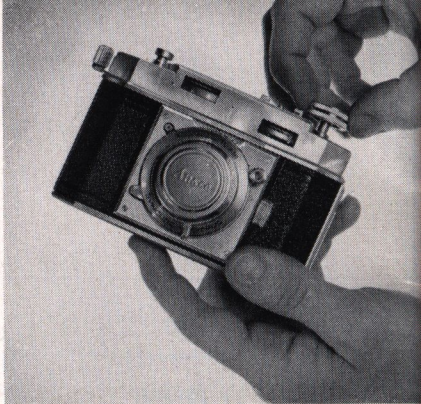
For example, if the footage indicator shows that the camera is focused at 15 feet, and the diaphragm is set at $f5.6$, you can expect everything from 11 feet to $22\frac{1}{2}$ feet to be in focus. If you find that this depth of field will not cover your proposed subject, "stop down" your diaphragm to a smaller opening, but be sure to compensate for the smaller opening by increasing the length of the exposure.

The table at the left is a very complete guide to keep handy for ready reference.

unloading the film

When the last exposure has been made the film must be rewound into the magazine before it is unloaded. First, pull the winding knob half way out, then rewind the film while depressing the film locking button on the bottom of the camera. When the film is completely rewound the winding knob can be turned with the film locking button released.

Open the back of the camera by pulling the catch down and disengage the magazine by pulling out the rewinding knob. The magazine may then be removed and the film is ready for processing.

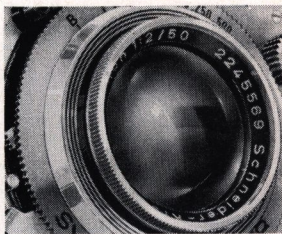


lens filters

Various Ansco filters are available for your Karomat. These filters enable you to get special effects in both black-and-white and color photography. Ask your Ansco dealer for Ansco lens filters, size 6.

guarantee

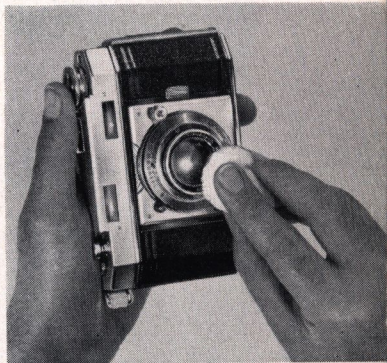
Your Ansco Karomat is guaranteed against manufacturing defects for a period of 12 months from the date of purchase. Fill out the guarantee packed with your camera and mail it to Ansco, Binghamton, New York. Include the serial number for lens and camera body.

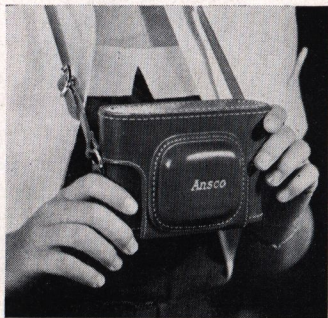


camera care

Your new Karomat, like a fine watch, is a precision instrument and should be treated with care. Do not allow it to lie in the sun for extended periods of time. Do not leave it in the glove compartment of your car.

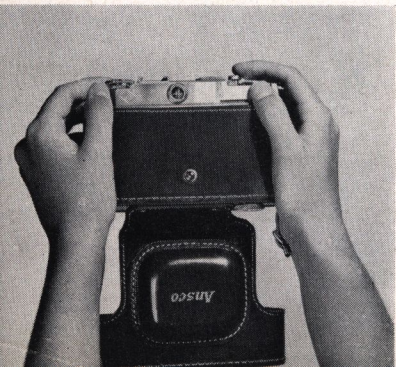
The front and rear elements of your Karomat lens can be carefully cleaned when necessary with a soft lens tissue or fine linen handkerchief. If small particles of dust or dirt accumulate inside your Karomat, blow them out carefully. Protect your camera from sand, snow and rain.

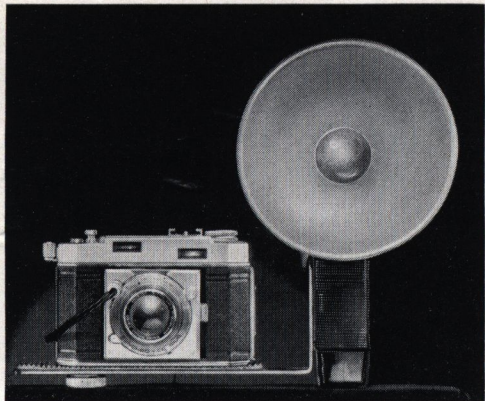




the karomat eveready case

The use of a carrying case will help to protect your Anso Karomat from hard knocks, dust, rain and dampness. With the Karomat Eveready Case, your camera is ready for instant use; just unsnap the button and front cover swings away from the lens. Ask your Anso dealer for the Anso Karomat Case JN452 — it is genuine top-grain cowhide.





the ansco flash unit

The Ansco Flash Unit is an important accessory for your Karomat. Enjoy your camera day and night, indoors and out. The unit accepts all bayonet base flashlamps — Type M, such as the G.E. and Dura-Flash #5 and Sylvania #25; and also Type F lamps, such as the SM and SF lamps. It takes either two Size C batteries or a battery capacitor cartridge. The battery case outlet accepts extension cords for multiple flash.

Ask your dealer for the Ansco Flash Unit JN206.

how to use your Ansco Karomat

Ansco *Binghamton, New York*