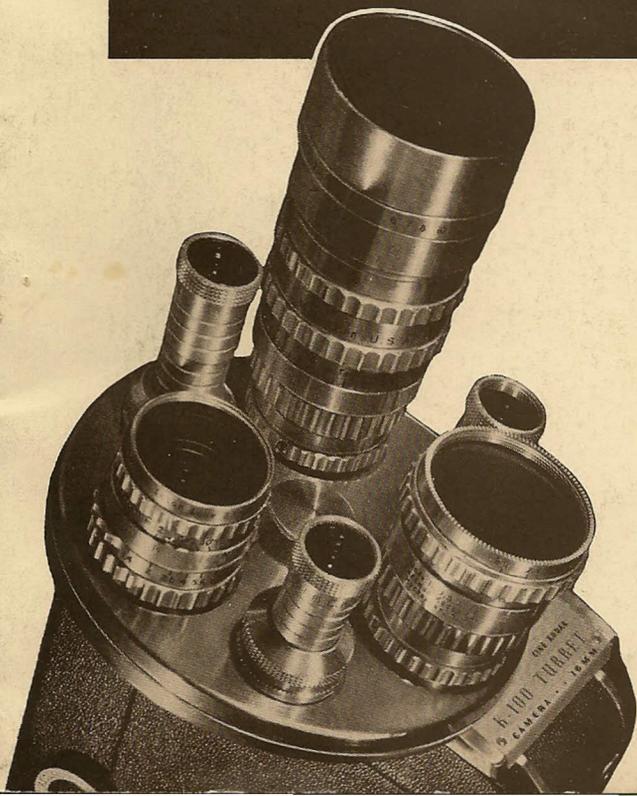


Cine-Kodak

K-100

Cameras



CINE-KODAK K-100 CAMERAS

• This instruction manual is for the Cine-Kodak K-100 Camera and the Turret Model. On the turret model you can mount three picture-taking lenses with matching viewfinder lenses – thus allowing you to change quickly from wide-angle to medium to telephoto shots. The Cine-Kodak K-100 Camera has a single taking lens and viewfinder lens. Any of the lenses, 15mm to 152mm with C mounts, can be used. The cameras use either single- or double-perforated 16mm film.

Movies are more than just pictures. Merely following the rules for proper camera operation will produce technically acceptable pictures. Add to this imagination and artistic effort and your pictures become good movies – movies that you will be proud to show and that your friends will really enjoy seeing.

Simple instructions are given on the next 6 pages. For more detailed information, read further in the manual.

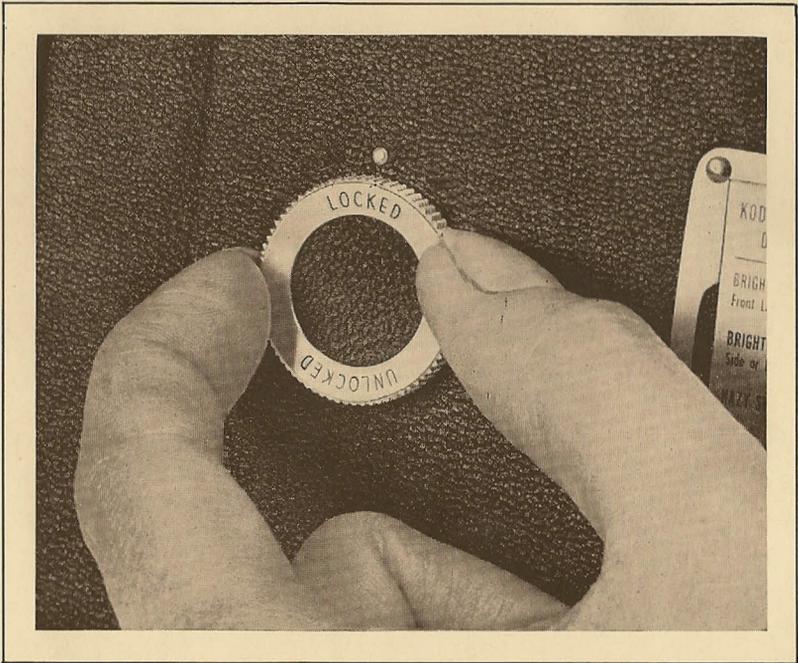
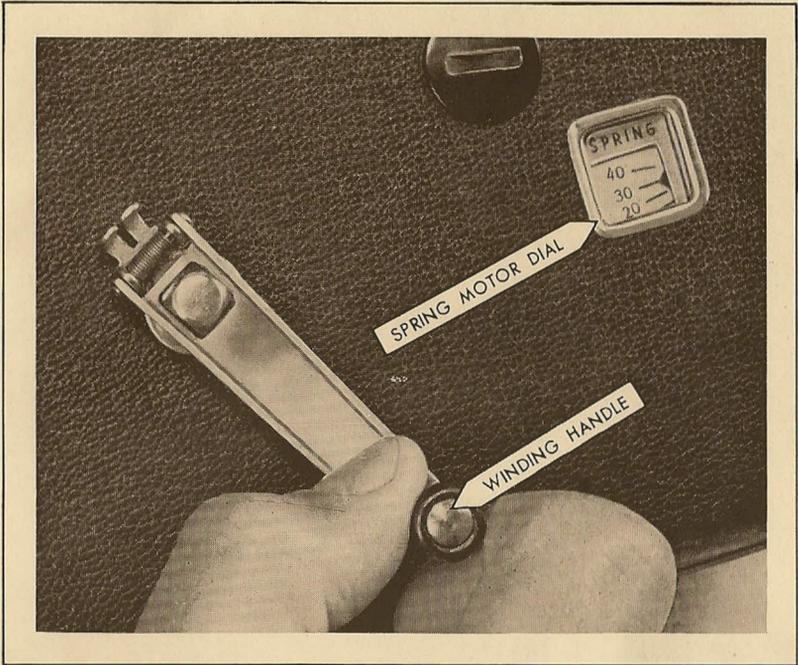
wind the motor

Turn the WINDING HANDLE clockwise until the SPRING MOTOR DIAL is at about 40 feet.

remove the cover

Turn the locking knob counterclockwise and lift off the cover.

Before making any important pictures, it is always well to shoot a roll of film. This will give you practice in camera operation and provide a check on your results. If you have any questions, your dealer will be glad to help.

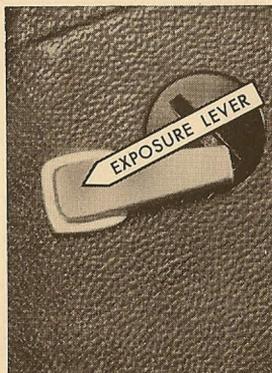


load the camera

Remove the empty take-up spool. Unroll about two feet of film from the new spool and place the spool of film on the SUPPLY SPINDLE, square hole down.

Follow the film path as shown by the red lines and arrows on the plate. Push the film down and, at the same time, pull it forward to engage the FILM SPROCKET teeth in the film perforations. The take-up spool turns in the direction of the arrow shown on the camera.

Press down the EXPOSURE LEVER for a moment and check the following:

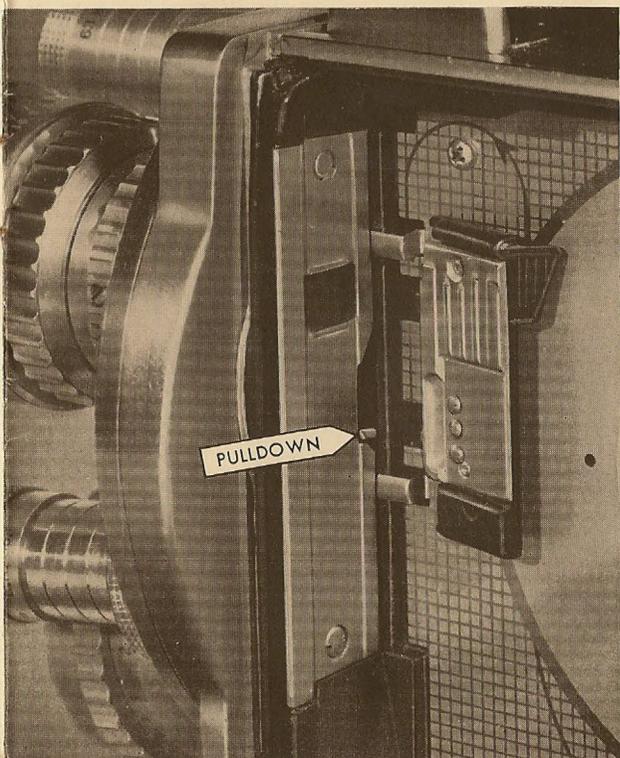
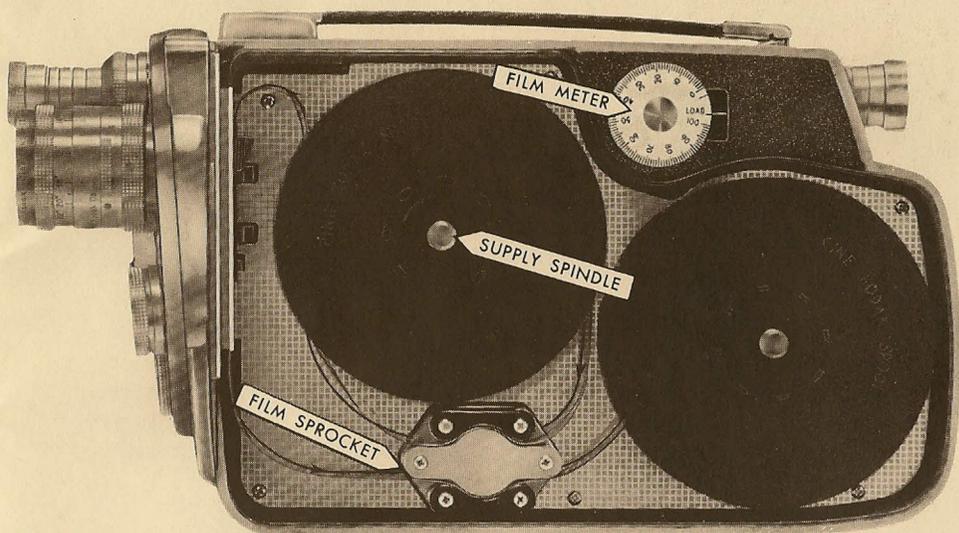


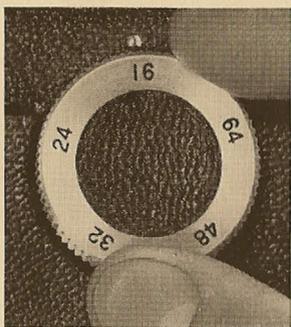
1 The spools must be seated all the way down on the spindles.

2 Check to see that the film moves evenly and follows the film-guide lines.

CAUTION: *It is possible to run film through the camera without taking satisfactory pictures, if the film perforations are not engaged by the PULLDOWN. This is because the driving force then comes from the sprocket only.*

Set the FILM METER at LOAD. Then replace the cover and turn the locking knob clockwise to secure the cover. Run the camera until the film meter is at 100.





set the speed dial

The speed dial can be turned until any one of five speeds (16, 24, 32, 48, or 64 frames per second) is opposite the index mark.

For normal screen action, when using a silent projector, use the 16 frames per second speed. Film to be run at sound speed should be exposed at 24 frames per second.

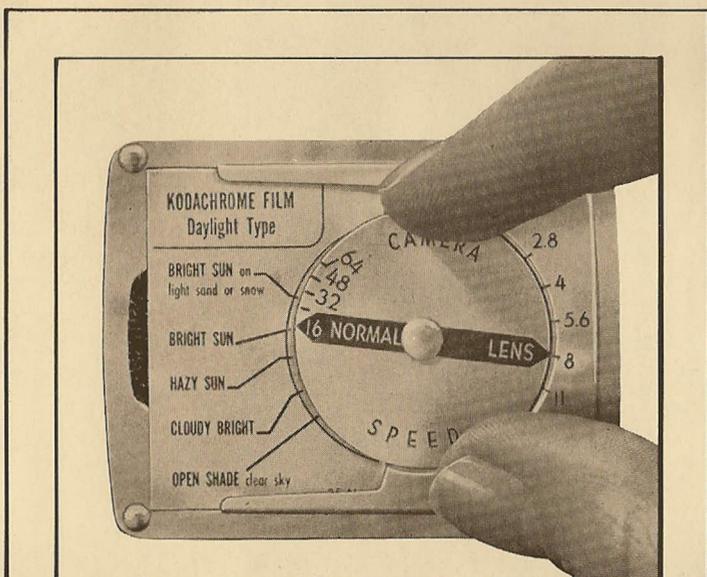
select the lens

Select the desired taking lens and corresponding viewfinder lens. Rotate the turret until these lenses are in the proper picture-taking position.

select the lens opening

Slide the card supplied with each roll of Kodak film into the Cine-Kodak Universal Guide on the side of the camera. One side of the card is for movie making outdoors—the other side is for use indoors with photographic flood lamps.

Turn the dial on the guide so that the selected camera speed is opposite the proper light condition; then use the lens opening indicated.





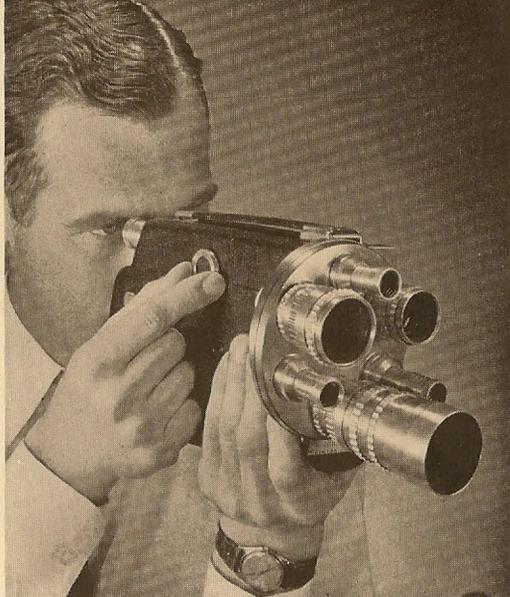
set the focus

Turn the front collar of the lens barrel until the figure corresponding to the distance from the camera to the subject is at the index.

set the lens opening

Turn the collar of the lens barrel until the proper lens opening is at the index. The lens in the illustration is set for $f/8$ and 15 feet.





focus the viewfinder

Hold the camera as shown and focus the subject in the finder by turning the finder focus knob back and forth until the image is sharp.

frame and shoot

Frame the picture within the finder rectangular mask and push the exposure lever downward to start taking pictures.





complete operating instructions

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complete instructions

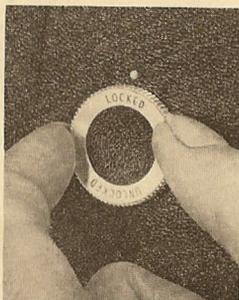
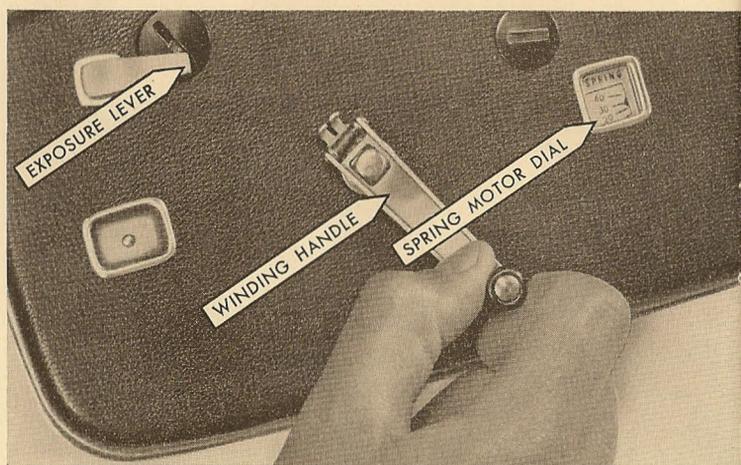
winding motor

Be sure the EXPOSURE LEVER is in the off or horizontal position. Raise the WINDING HANDLE on the side of the camera and fit the opening in the handle over the square end of the shaft. Turn the winding handle clockwise until the SPRING MOTOR DIAL is at about 40 feet.

loading

Turn the locking knob counterclockwise to the UNLOCKED position and lift off the cover.

Take the empty take-up spool out of the camera. Remove a spool of Cine-Kodak film from its carton

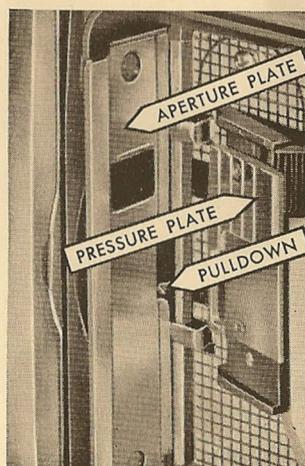
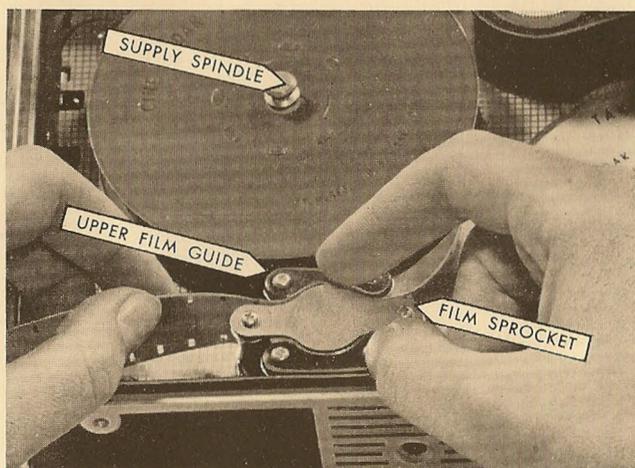


and metal can. Remove the paper band around the film. Save the paper band, carton and metal can to send the film to your dealer for processing.

Pull out about two feet of film. Be especially careful not to let too much film unwind or the film on the spool will be fogged. Place the spool of film on the SUPPLY SPINDLE with the square hole down. Make sure that the spool is properly seated—the end of the supply spindle should project through the round hole in the spool.

Following the red film-guide lines and arrows, insert the film between the UPPER FILM GUIDE and the FILM SPROCKET. Push the film down and at the same time pull it forward to engage the sprocket teeth in the film perforations. Open the PRESSURE PLATE only enough to make it stay open. Do not push it beyond this open position. (The illustration below shows the pressure plate fully opened in order to show the pull-down.) Following the film-guide lines, pass the film between the pressure plate and the APERTURE PLATE. Be sure the film is placed all the way into the film channel.

Close the pressure plate and move the film back and forth until the PULLDOWN engages a film perforation



NOTE: *It is extremely important that the film perforations be engaged by the pulldown. Check again to see if the film is properly located in the film channel and follows the red lines so that correct loops, which are also important to the functioning of the camera, are formed. Then inspect the pressure plate to be sure it is seated correctly with respect to the film and the film channel.*

Follow the red film-guide lines and pass the film between the LOWER FILM GUIDE and the film sprocket. Engage the sprocket teeth in the film perforations.

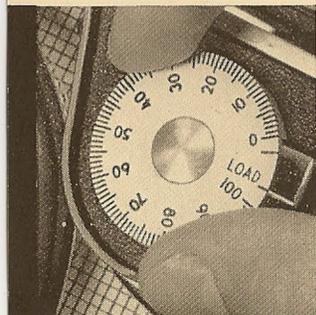
Insert the end of the film in the slot in an empty take-up spool. Turn the spool one turn to securely attach the film to the spool. Place the spool, square hole down, on the take-up spindle. Turn the take-up spool clockwise with your finger until the film appears snug on the spool.

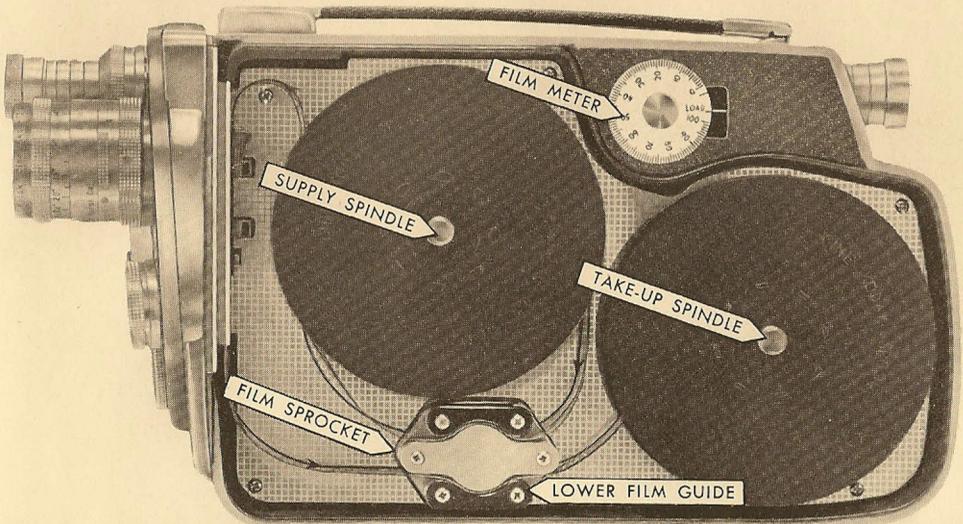
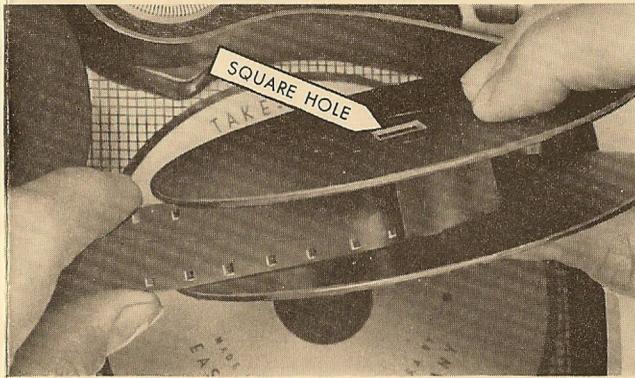
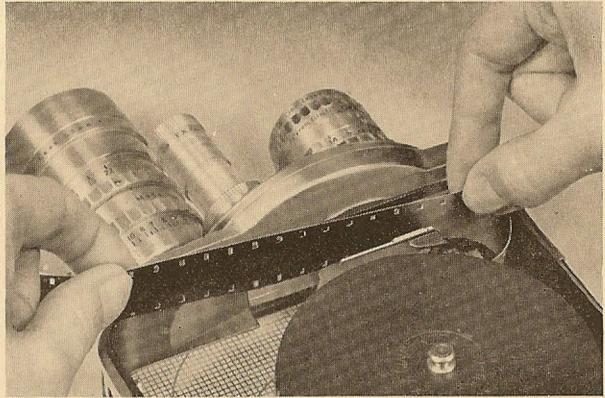
Press down the exposure lever for a moment and check the following conditions:

- 1** The spools must be seated all the way down on the spindles.
- 2** The film must move evenly and must follow the film-guide lines.

film meter

Set the film meter at **LOAD**. Then replace the cover and turn the locking knob clockwise to **LOCKED**, to secure the cover. Run the camera until the film meter is at 100.



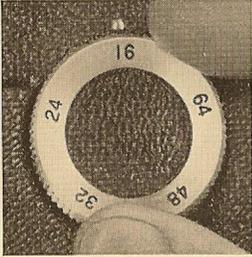


camera speed

For normal screen action with silent pictures, set the camera speed at 16 frames per second.

If sound is to be dubbed in, or if you expect to run the film at sound speed, the camera should be operated at 24 frames per second. When setting the camera speed, remember that any camera speed *faster* than projection speed will produce slower-than-normal action in the projected picture.

The speed dial can be turned until any one of five speeds (16, 24, 32, 48, or 64 frames per second) is opposite the index mark. Intermediate speeds can be obtained by turning the dial until the index mark is between any two numbers.



using the turret

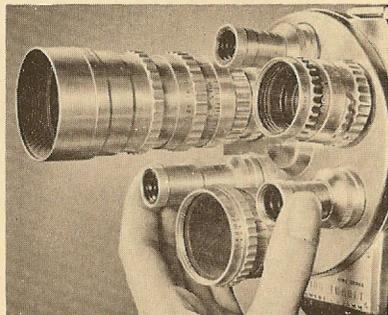
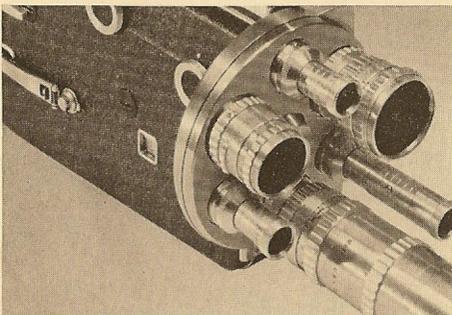
The turret rotates on a central axis, and, when turned, brings each lens successively into picture-taking position. To make certain that each lens is correctly positioned, the turret snaps into place for each lens.

With the turret snapped in place, the taking lens is at the upper right and lined up with the film plane mark on the camera cover. The viewfinder lens for that particular taking lens is at the top of the turret.

If a 15mm lens and 152mm lens are used on the turret, the 152mm lens must be in the lower position when the 15mm lens is in the picture-taking position.

To avoid disturbing the lens settings when rotating the turret, grasp the two adjacent viewfinder lenses.

12



lenses

Kodak Cine Ektar Lenses, 15mm $f/2.5$, 25mm $f/1.4$, 25mm $f/1.9$, 102mm $f/2.7$, and 152mm $f/4.0$ in type C mounts fit directly on this camera. A Kodak Ektar $f/1.4$ Converter, 25mm to 15mm, used with a converter adapter, is available to fit the 25mm $f/1.4$ lens with a type C mount. The Kodak Cine Ektar Lens, 25mm $f/1.4$, with the converter in place, becomes a fast, wide-angle lens which covers a field approximately 60% larger than a 25mm lens. This reduction in focal length is accomplished without loss of lens speed or of image quality.

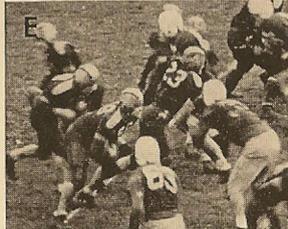
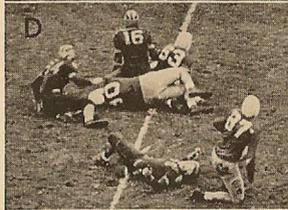
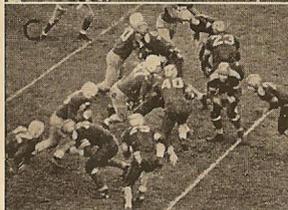
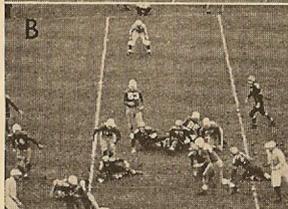
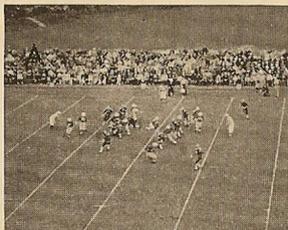
By using a Kodak Cine Lens Adapter Type C the following interchangeable Kodak Cine Ektar Lenses can be used: a 15mm $f/2.5$ wide-angle lens, a 40mm $f/1.6$, a 63mm $f/2.0$, a 102mm $f/2.7$, and a 152mm $f/4.0$. Viewfinder lenses are available for use with 15, 40, 50, 63, 75, 102, and 152mm focal length lenses.

For wider coverage than can be obtained with the standard 25mm lens, use a 15mm wide-angle lens. The wide-angle lens covers a larger field, about 60% more than the 25mm lens. For large, clear pictures at long range—close-ups of sports, wild life, children at play—use a telephoto or long-focus lens.

Taking the image produced by a 25mm lens as normal, the other lenses produce images magnified in direct ratio to their focal lengths. Thus the 63mm lens produces an image $2\frac{1}{2}$ times larger than a 25mm lens; with the 152mm lens the image will be 6 times larger.

IMPORTANT: *For best results when using a long-focus or telephoto lens, brace the camera against a firm support. Use a tripod whenever possible.*

These pictures are actual enlargements from a Cine-Kodak film of the same subject photographed from the same distance with five different Cine-Kodak lenses: A is 25mm; B is 40mm; C is 63mm; D is 102mm; and E is 152mm.





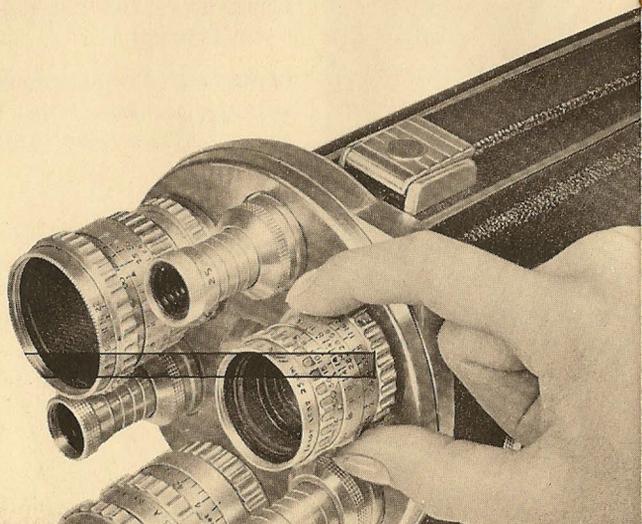
focus

Check the focusing scale before each scene is photographed. The scale setting must correspond to the camera-to-subject distance. Accurate focusing is particularly important when making close-ups. When the subject is four feet or less from the camera, measure the distance carefully to the small metal boss with the ϕ on the camera cover. This marks the position of the film plane. To focus, turn the *front* lens collar so that the subject distance is at the index.

setting the lens opening

The lens opening must be set to accommodate changes in the light conditions. For example, on dull days or in the shade, a larger lens opening is used, while in bright sunlight a smaller lens opening is used. Lens opening $f/22$ is the smallest opening; $f/16$ is larger and admits about twice as much light. Each succeeding marked opening doubles the light passing through the lens. *The larger the number, the smaller the lens opening.* Set the lens opening by turning the lens collar until the proper number is at the index.

LENS OPENING	
1.4	
1.9	
2.8	
4	
5.6	
8	
11	
16	
22	

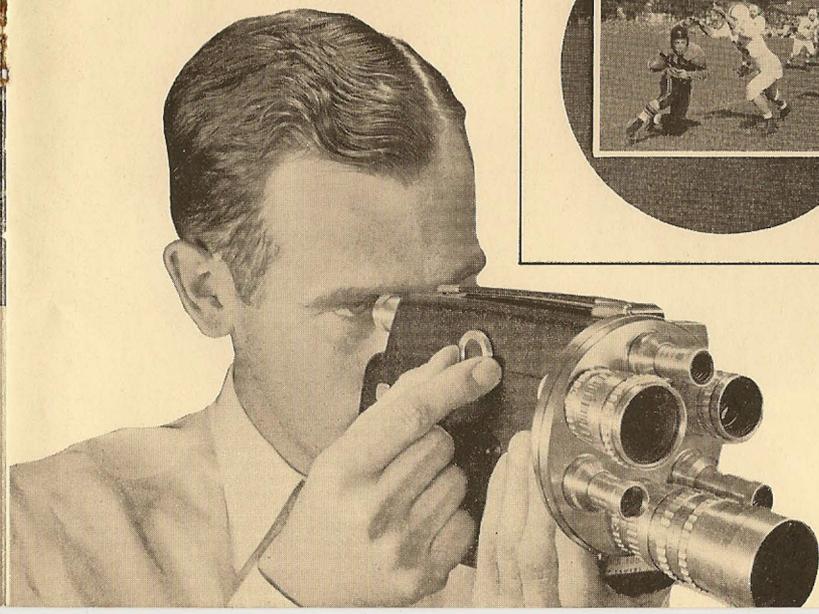
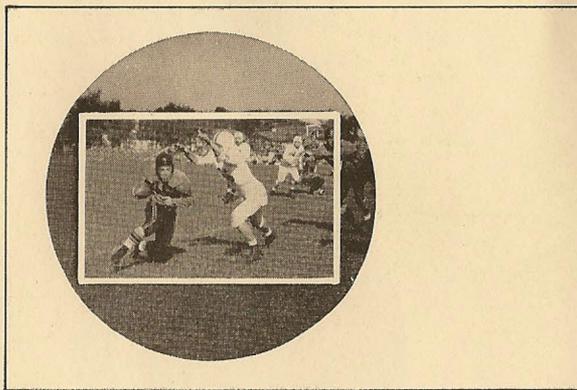


the viewfinder

The finder is a telescopic type finder. It is designed so that with the 25mm viewfinder lens, the subject appears full size. Adjust the finder focus by turning the finder focus knob back and forth until the image is sharp. For most people, proper adjustment of the finder focus will allow you to change from one turret position to another without further adjustment of the finder focus. The rectangular mask which appears in the finder is in focus at the same time as the subject so that a sharp definition of the field that is being photographed can be seen.

The field outside the mask is also visible, so that action outside the field being photographed can be observed and the camera moved to include it, if desirable.

When other lenses are used, a viewfinder lens which matches the focal length of the taking lens must be used. The table on page 17 shows the finder lenses which are available. To remove the finder lens, unscrew the retaining collar and lift out the lens.



When replacing a finder lens, insert the lens into the lens retaining mount so that the stud on the lens mount fits in the slot in the lens tube; then tighten the retaining collar.

correction for close-ups

Because the finder and the taking lens are separated, they do not always cover the same area and slight compensations are necessary when filming subjects very near the camera. To simplify framing for close-ups, three crosses have been placed within the finder



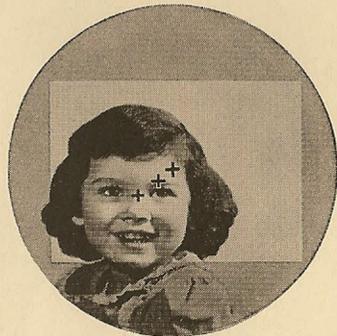
REFERENCE CROSS



2 1/2 FT. TO 7 FT.



REFERENCE CROSS



1 1/2 FT. TO 2 1/2 FT.

field of view. *The heavy, upper right cross is the reference cross.*

For correction when filming a subject $2\frac{1}{2}$ to 7 feet from the camera, with the 25mm lens, note the position of the reference cross with respect to some point on the subject. Then move the camera so that the middle cross is at the position previously occupied by the reference cross. The camera is now in position to photograph the field previously outlined by the mask. For correction at $1\frac{1}{2}$ to $2\frac{1}{2}$ feet, with the 25mm lens, use the lower cross instead of the middle cross.

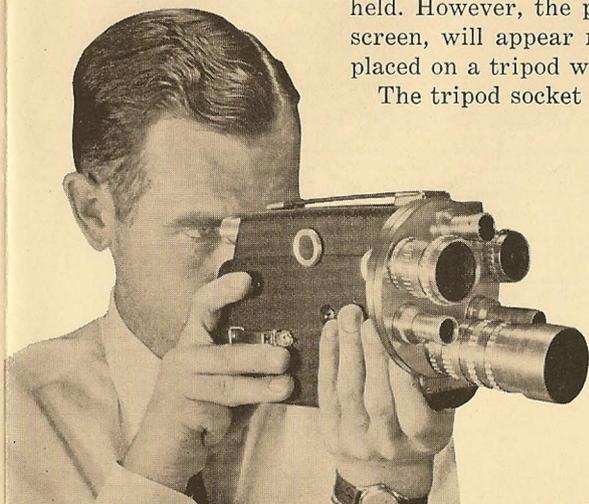
For other lenses the crosses are to be used for different subject distances. See the table below.

Viewfinder Lenses	15mm	25-40-50mm	63-75mm	102-152mm
<i>When Film-to-Subject Distance is</i>				
Use Lower Cross	1 Foot to $1\frac{1}{2}$ Feet	$1\frac{1}{2}$ Feet to $2\frac{1}{2}$ Feet	$2\frac{1}{2}$ Feet to 4 Feet	$3\frac{1}{2}$ Feet to 6 Feet
Use Middle Cross	$1\frac{1}{2}$ Feet to $4\frac{1}{2}$ Feet	$2\frac{1}{2}$ Feet to 7 Feet	4 Feet to 9 Feet	6 Feet to $12\frac{1}{2}$ Feet

sighting

Hold the camera as shown in the illustration. Brace the elbows against the side of the body to steady the camera. The Cine-Kodak K-100 Cameras can be handheld. However, the pictures, when projected on the screen, will appear much steadier if the camera is placed on a tripod while pictures are being taken.

The tripod socket is on the bottom of the camera.



making exposures

With the spring motor fully wound, about 40 feet of film can be exposed. If several consecutive scenes must be photographed, be sure to wind the spring when the spring motor dial indicates that the motor will run about 5 to 10 feet of film. However, it is best to wind the spring after each scene. In this way the camera is always ready for use.

To start the motor, push the exposure lever downward. To stop, release the lever. Pressing the lever all the way down locks it in the running position.

scene length

About 6 feet of film (15 seconds at 16 frames per second) is sufficient for average scenes in which the action is continuous. However, the length of a scene should be governed by the nature of the subject. Landscape shots, for example, can be of greater duration than scenes with brief, fast-moving action.

shutter speeds

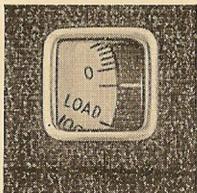
The exposure data is given on the basis of 16 frames per second. The use of any faster speed requires a larger lens opening (stop); for example, at 32 frames per second, the lens opening should be 1 stop larger; at 64 frames per second, the lens opening should be 2 stops larger. The Cine-Kodak Universal Guide shows the proper lens opening for each camera speed.

EXPOSURE TIME PER FRAME

Angle of Opening
in Shutter 165°

Exposure Time in Seconds	
Single Frame	1/20
16 Frames per Second	1/35
24 Frames per Second	1/50
32 Frames per Second	1/70
48 Frames per Second	1/100
64 Frames per Second	1/140

unloading and care of exposed film



The usable length of film has been exposed when the film meter shows 0. Before removing the camera cover, run off the trailer as follows:

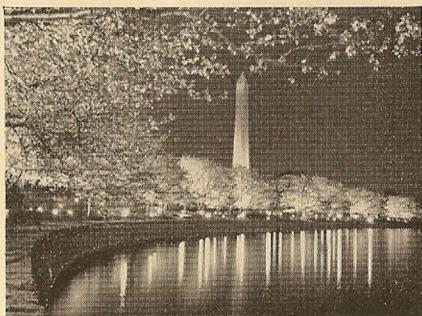
Run the camera until the line below 0 on the film meter is opposite the pointer. The end of the film can usually be heard as it leaves the film channel. Remove the cover; then remove the full spool of exposed film from the take-up spindle. For best results have the film processed as soon as possible after it is exposed. See the directions that accompany your film.

Before rethreading, make sure the gate is free of dirt, pieces of film, or foreign particles.

pictures outdoors at night

Unusual and artistic effects in color or black-and-white can be obtained at night with your camera. Brilliantly lighted streets or the theater districts of large cities make interesting shots. Lighted streets and squares photographed on wet nights or after a heavy snow are especially attractive. Animated electric signs are always good subjects. For best results, photograph only brightly illuminated scenes.

Use Cine-Kodak Tri-X Reversal or Cine-Kodak Tri-X Negative Film for sporting events on dull days, indoor-lighted events, and night-lighted outdoor events.



animation by single-frame exposures

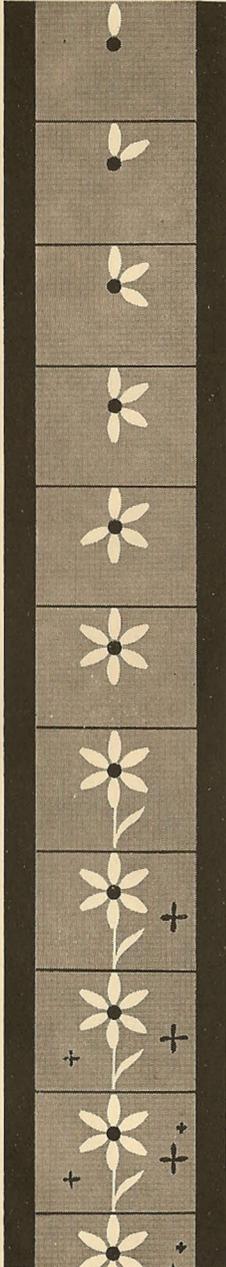
One of the most absorbing fields made possible by your camera is animation—the movie method of breathing life into inanimate objects. You may wish to try the simpler type where chessmen play their own game, and books, ash trays, etc., roam around over a table top. Or you may be sufficiently fascinated by the almost limitless possibilities of animation to try your hand at the more complicated types.

To animate a subject, expose a single frame, move the subject slightly, expose another frame, move the subject again, and so on. If a certain movement is to take place in one second on the screen with the projector operated at normal (16) speed, 16 single-frame exposures will be required.

Applications of animation include: animated titles, graphs that draw themselves, machines, and other manufactured products that assemble themselves.

The Cine-Kodak K-100 Cameras are also excellent for time-lapse photography—a method of greatly accelerating a period of time. The growth of a flower to full bloom, rapid movement of street traffic, cloud formations for an entire day, can all be depicted in a few seconds' time with time-lapse photography. Expose one frame at a time at intervals which will produce the desired effects. The interval between exposures will vary according to subject matter.

To make single-frame exposures, set the speed dial at 16 frames per second and push *up* the exposure lever once for each exposure. Each single frame is exposed for $1/20$ of a second. If the Universal Guide is used for determining the exposure, one stop smaller than the exposure indicated for 16 frames per second should be used; for example, if the exposure guide reading is $f/5.6$ for 16 frames per second, the lens opening should be set at $f/8$.

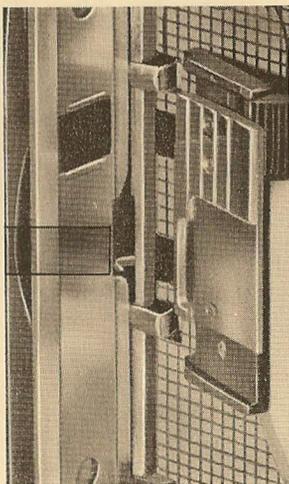


cleaning the lenses

The glass-air surfaces of the lens on your camera have been Lumenized to reduce internal reflections, flare, and scattered light. This increases the brilliance of black-and-white pictures and the color purity of Kodachrome pictures. All Lumenized lenses appear tinted by reflected light but this color has no effect on the image.

To clean the lens, carefully brush off any dust or grit with wadded Kodak Lens Cleaning Paper or a fine camel's-hair brush. If necessary, wipe the surfaces gently with a wad of lens cleaning paper or a clean, soft, lint-free cloth. Always wipe with a circular motion. Fingerprints, oil spots, or other scum deposits can be removed with a drop of Kodak Lens Cleaner on the cloth. **DO NOT USE ALCOHOL.**

cleaning the film channel



Open the pressure plate as far as it will go. With the ball of the thumb, rub off any accumulation of dirt on the polished tracks of the plate. With a match covered with a clean cloth that has been dipped in Stoddard's Solvent, such as Sovasol No. 5 (Socony-Vacuum Oil Company) or Sunoco Spirits (Sun Oil Company), remove any accumulation on the tracks of the aperture plate. (Do not use alcohol as a cleaning agent.) Remove any dust or lint on the edges of the rectangular aperture. Be extremely careful not to scratch the polished surfaces over which the film travels. Never scrape the tracks with a metallic tool.

Cine-Kodak Films

All 16mm films perforated one or two edges can be used.

Kodachrome Film

Kodachrome Film, Daylight Type reproduces colors with startling realism when exposed under daylight conditions.

Kodachrome Film, Type A is color-balanced for photographic flood lamps and requires no filter when so used. The film can also be used for taking pictures in daylight with a filter such as the Kodak Daylight Filter for Kodak Type A Color Films (see page 25).

Processing—Exposed Kodachrome Film may be taken to a dealer who will arrange for processing at a laboratory of your choice. If you prefer, you may mail it to a Kodak Laboratory using a Kodak Processing Mailing Label or to any other laboratory processing Kodachrome Film. The mailing labels may be obtained from your dealer, and film sent in with these labels will be returned to the same dealer. Payment will be made to your dealer who can also order full-color duplicates of your Kodachrome Films.

Cine-Kodak Black-and-White Reversal Films

These films are sold at a price which does not include processing by the Eastman Kodak Company. They are intended for processing by independent commercial laboratories or by the user. Conventional reversal processing provides a positive image for projection. Duplicate prints can also be obtained from many commercial laboratories.

Plus-X Reversal is a very fine-grain film used in general black-and-white picture making. It can be used with natural or artificial illumination.

Tri-X Reversal is a very fast black-and-white film particularly suitable for commercial, television, industrial, and athletic photography where adverse lighting conditions are frequently encountered.

Cine-Kodak Negative Films

Plus-X

Tri-X

The use of these black-and-white films results in a negative from which positive projection prints can be obtained. They are intended for processing by independent commercial laboratories or by the user.

magnetic sound track for 16mm film

Kodak Sonotrack Coating—a magnetic sound track coating service—is now available for processed, single- or double-perforated Kodachrome or black-and-white 16mm Cine-Kodak film.

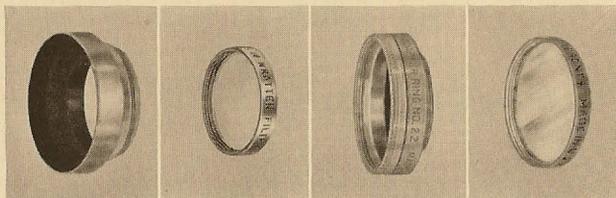
Sonotrack Coating can be applied to film taken at either sound or silent speed. It is placed on the side of the film that faces the projection lamp.

Kodak Sonotrack Coating is available in three widths. Single-perforated 16mm film having no sound track will be Sonotrack coated the full width of the track area. When an optical sound track is on the film, it will be Sonotrack coated half the width of the optical track, unless you specify that the full width of the optical track be coated. It is available in edge-coating for double-perforated 16mm film.

Sonotrack Coating must be ordered through your Kodak dealer. This coating can be ordered by your dealer after your 16mm Cine-Kodak film has been processed. Unexposed film will not be coated.

cine aids

combination lens attachments



Kodak
Lens Hood

Kodak
Wratten Filter

Kodak
Adapter Ring

Kodak
Portra Lens

The Kodak Combination Lens Attachments permit the use of any desired combination of Kodak Portra Lens, Kodak Pola-Screen, and Kodak Wratten Filter. See table below for attachment series number and adapter ring number for the various lenses.

Kodak Adapter Rings screw into the lens barrel. The Kodak Retaining Ring is unscrewed from the Adapter Ring to admit a filter or Portra Lens. The retaining ring is then screwed back into place.

To use a filter and a Portra Lens at the same time, obtain another Kodak Retaining Ring. The Portra Lens must always be nearer the camera lens.

	Lens	Attachment Series Number	Adapter Ring Number
Kodak Cine Ektar Lenses ("C" Mount)	15mm, <i>f</i> /2.5 (WIDE-ANGLE)	6	28 (SCREW-IN)
	25mm, <i>f</i> /1.9	5	22 (SCREW-IN)
	25mm, <i>f</i> /1.4	6	26 (SCREW-IN)
	102mm, <i>f</i> /2.7	6	NONE REQUIRED
	152mm, <i>f</i> /4.0	6	NONE REQUIRED
Kodak Cine Ektar Interchangeable Lenses ("S" Mount)	15mm, <i>f</i> /2.5 (WIDE-ANGLE)	6	28 (SCREW-IN)
	25mm, <i>f</i> /1.9	6	27 (SCREW-IN)
	25mm, <i>f</i> /1.4	6	27 (SCREW-IN)
	40mm, <i>f</i> /1.6	6	27 (SCREW-IN)
	63mm, <i>f</i> /2.0	6	NONE REQUIRED
	102mm, <i>f</i> /2.7	6	NONE REQUIRED
	152mm, <i>f</i> /4.0	6	NONE REQUIRED

Cine-Kodak Filters

Filters are used in black-and-white photography to obtain correct tone rendering, to create special sky and moonlight effects, to cut haze, and to obtain contrast between areas differing in color. The wise use of a filter will often make the difference between excellent photography and mere record.

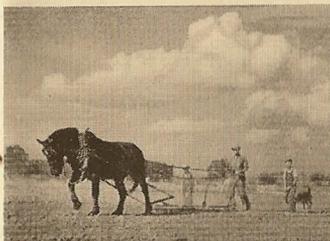
Correction filters aid in reproducing colors as grays in the relative brightness that the eye sees them. Oftentimes blue reproduces too light without a filter, and there is no contrast between sky and clouds. Filters also cut bluish atmospheric haze on distant scenes.

A filter such as the Kodak ND-3 Filter is needed when Cine-Kodak Tri-X Film is used in sunlight.

Filters such as the K2, G, A, and X1 are recommended for black-and-white photography. All are supplied as Kodak Combination Lens Attachments in series sizes. Additional information on filters comes with your film.



WITHOUT FILTER



WITH FILTER

Kodachrome Filters

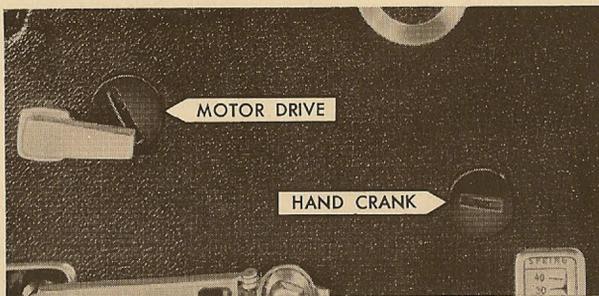
A filter such as the **Kodak Skylight Filter** is recommended for Kodachrome Film Daylight Type, for pictures in open shade under a clear blue sky, pictures made on overcast or hazy days, distant scenes (mountain or marine views), sunlit snow scenes, and aerial photographs.

A filter such as the **Kodak Photoflood Filter No. 80B (for Kodak Daylight Type Color Films)** can be used if regular daylight Kodachrome is to be exposed indoors with photographic flood lamp illumination. Type A film is preferred for photographic flood lamp illumination.

A filter such as the **Kodak Daylight Filter for Kodak Type A Color Films** is recommended if Kodachrome Film Type A is to be exposed outdoors in daylight. Exposures with this filter are the same as those for Kodachrome Film Daylight Type.

hand crank

The Cine-Kodak K-100 Camera can be hand-cranked either forward or reverse for special effects. *No more than two feet of film should be reverse wound at a time.* This is accomplished by use of the Cine-Kodak K-100 Hand Crank. See your Cine-Kodak dealer.



electric motor drive

The camera is adaptable to electric motor drive by using the Cine-Kodak K-100 Motor Drive Shaft available from your Cine-Kodak dealer.

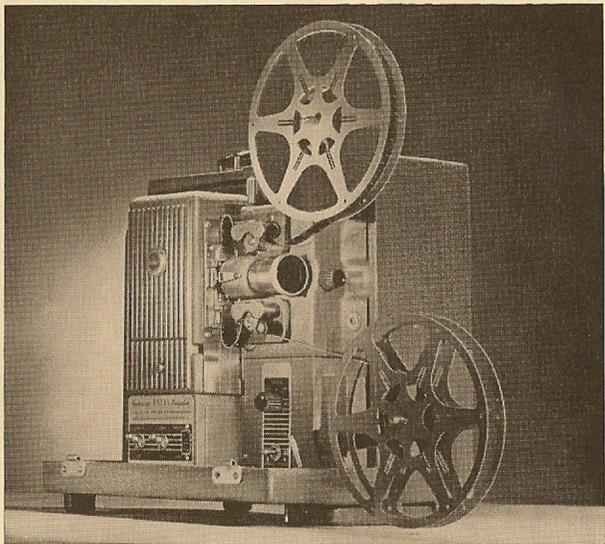
field case

A fine instrument deserves good care, and there is no better way of caring for your camera than to keep it in a suitable case. Not only will its appearance be benefited, but the camera will actually take better pictures longer, if it is properly cared for. The field case not only protects the camera from scuff-marks and bangs, but permits it to be ready for picture taking at a moment's notice. The case will also help keep your camera clean; dust collecting on the lens surface requires frequent brushing off to maintain picture clarity, snap, and brilliance.

Kodascope Projectors

The Kodascope projectors answer all your needs for sound or silent motion pictures. The projectors come equipped with powerful 750-watt lamps amply bright for average projection. A 1000-watt lamp can be used for large audiences. The projectors are fitted with a 2-inch $f/1.6$ Lumenized Kodak Projection Ektanon Lens. The following Kodak Projection Ektanon Lenses are also available: a 1½-inch $f/2.0$, a 3-inch $f/2.0$, and a 4-inch $f/2.5$.

The Kodascope projectors are smartly styled, light, compact, and easy to operate. All are permanently lubricated.



The Kodascope Royal Projector, illustrated above, is designed to give the best in silent movie projection. It operates on ac or dc, 105 to 125 volts, both forward and in reverse, and has a speed control knob for rapid rewind.

The Kodascope Pageant Sound Projector, ac or dc, 105 to 125 volts, has a capacity of 2000 feet of film. It operates at both sound and silent speeds. An accessory microphone plugged into the amplifier enables you to narrate your silent movies and to use the Pageant as a public address system.

The Kodascope Analyst Projector, 60-cycle ac only, can project movies in normal fashion on a screen and also in natural light on its own built-in screen. It also operates by a remote control switch which provides *immediate* forward or reverse operation. It is ideally suited for such special applications as sports analysis, motion study, etc.

Kodak Cine Photoguide

Take the guesswork out of movie making with the Kodak Cine Photoguide. Here is a 32-page pocket-sized booklet with a durable leather-like cover. It contains on-the-spot movie-making information for both common and unusual lighting conditions. Among the subjects covered by convenient dial computers, tables, and brief text are: indoor and outdoor exposure, close-up photography, movie continuity, field size and depth-of-field tables for many Kodak Cine Lenses and supplementary lenses, and film and filter data. See your Kodak dealer.

Serial Numbers: *The serial number of your camera is stamped on the rear carry handle clip. The serial number of the lens is stamped on the front of the lens barrel. Record these numbers with your personal papers for positive identification of the camera and lens. In case of loss or theft, report the fact to your Kodak dealer and to the local police at once.*

Kodak

GUARANTEE

Within a year after purchase, any repairs necessary to your Cine-Kodak K-100 Camera due to a defect in materials or workmanship will be made or, at our option, the camera will be replaced without charge. No other warranty or guarantee, express or implied, shall be applicable to this equipment. Nor are we responsible for loss of film, for other expenses or inconveniences, or for any consequential

damages occasioned by the equipment.

In case of a defect, the camera should be sent directly or through a Kodak dealer to Eastman Kodak Company or a repair firm authorized by us to make such repairs. It should be accompanied by a description of the trouble encountered and other available information regarding the camera, including the date and place of purchase.