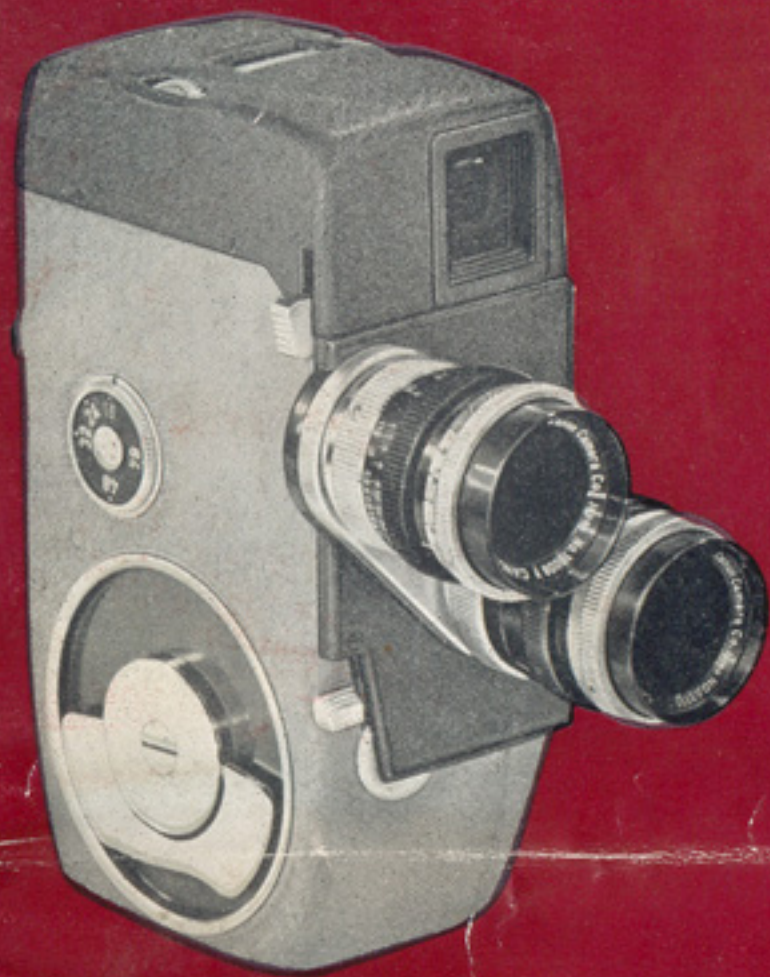


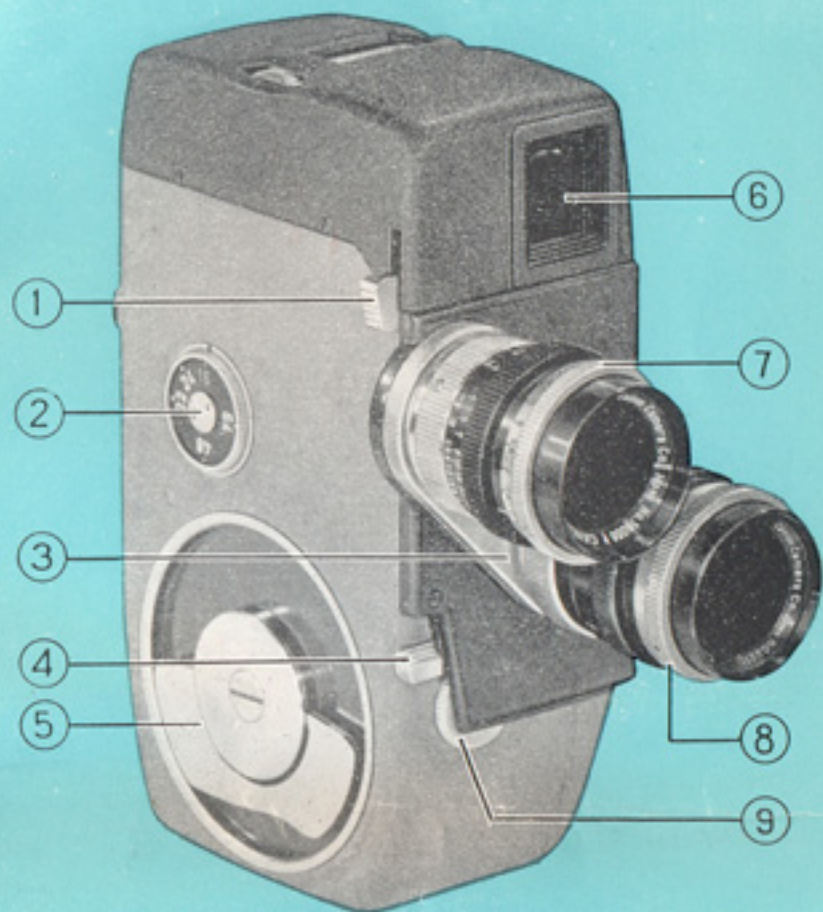
CANON CAMERA CO., INC.



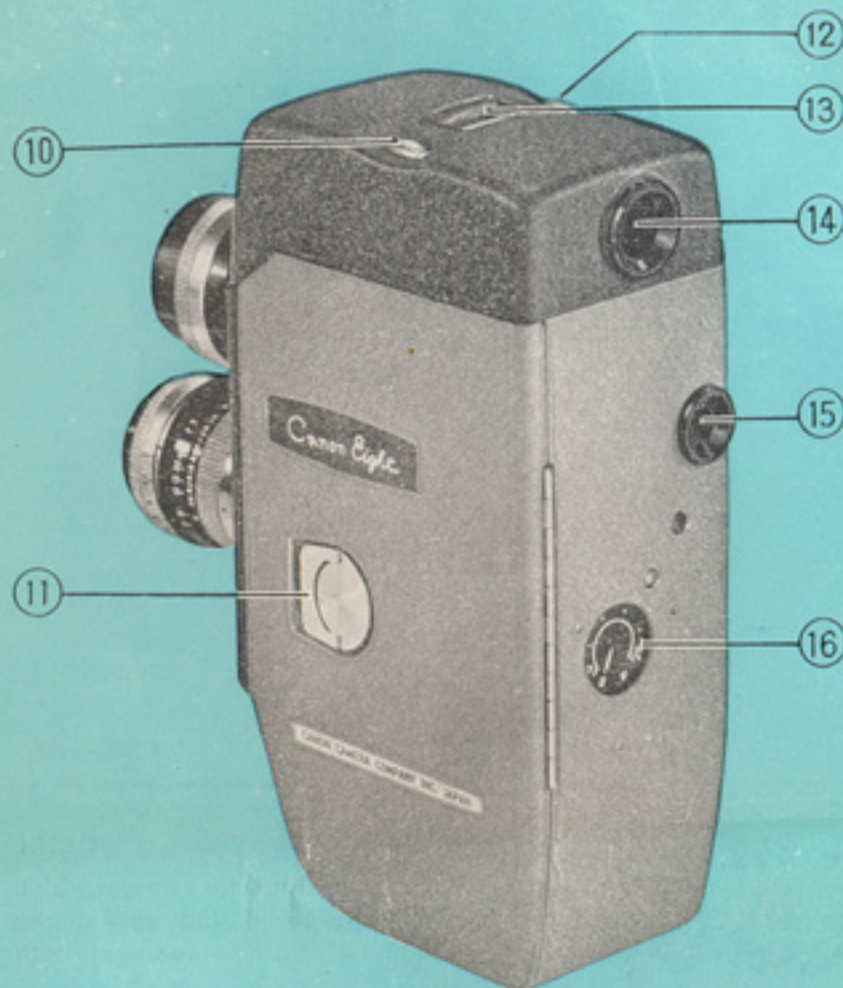
Canon

CINE

8



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SOME OF CANON CINE EIGHT'S FEATURES

Some people believe that the 8mm movie camera is an instrument for home movie making but your Canon Cine 8-T is designed to enable you to use all the advanced techniques you need to make scientific, educational and public relations films of good quality. It's **SELECT-A-VIEWFINDER** always assures you of getting what you aim at. This is some of its features:

- (1) **SELECT-A-VIEWFINDER BRILLIANCE**— A sharp, erect (Real) image is seen with maximum brilliance for all fields-of-view through the viewfinder as clearly as with unaided, normal vision.

PARALLAX COMPENSATION— As each lens is focused, a built-in device automatically compensates for parallax error at all distances between 18 inches and infinity.

FIELD-OF-SELECTION— Only Canon offers a built-in multifield viewfinder for all lenses from 6.5mm to 75 mm and Canonscope wide Screen Adapter. Eight positions provide complete versatility and lens interchangeability without the need for any auxiliary viewfinder or masking devices.

LIFE-SIZE IMAGE— At the settings which provide 1 X Magnification (or a real LIFE-SIZE 1:1 IMAGE), with 13mm, 25mm and 38mm lenses, viewing is made easier by permitting the use of both eyes while viewing. Thus one sees the entire normal view, with a superimposed bright frame of the portion of the scene the camera actually "sees".

CRITICAL VIEWING— With the popular longer focal length lenses (25mm, 50mm and 75mm), an image magnification of 2 X is provided, thus assuring most critical viewing with these lenses which have less depth-of-field latitude.

CANONSCOPE—Select-A-Viewfinder also provides a sighting frame for Canon's 2.66:1 wide screen adapter.

- (2) **FOCUSING FINDER** that enables you to focus through the lens on a special circular ground glass and gives a preview of the Depth-of-Field as well as composition.
- (3) **TWIN-TURRET LENS FLANGE** that allows rapid lens changes to enable you to make full use of a variety of interchangeable Canon Cine Lenses.
- (4) **SPRING-DRIVEN MOTOR** that is ratchet-wound back and forth as you would a wrist watch. No change of grip is needed.
- (5) **AUTOMATIC FOOTAGE COUNTER** which is conveniently placed and aided by audible signals at every 6" run of film. It resets itself to starting point when the side cover of the camera is opened.
- (6) **ACCURATE SHUTTERS** operating at 16, 24, 32, 48 and 64 frames per second. The exposure lever moves down for continuous run; up for single frame exposures.
- (7) **TRIM, HANDSOME CAMERA BODY** that sits cozily in your palm and allows easy loading.

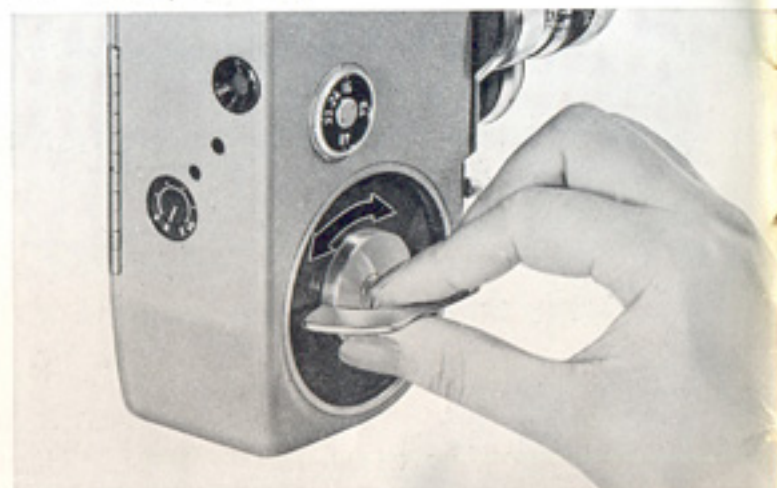
CANON CINE EIGHT "S" is identical with EIGHT "T" except that it has only a single lens mount and has no built-in Universal Sports Finder Screen or through-the-lens focusing. All Canon Cine Lenses are interchangeable.

The **CANON CINE EIGHT "T"** and **"S"** are guaranteed against all defects in material or faulty workmanship for a period of 5 years!

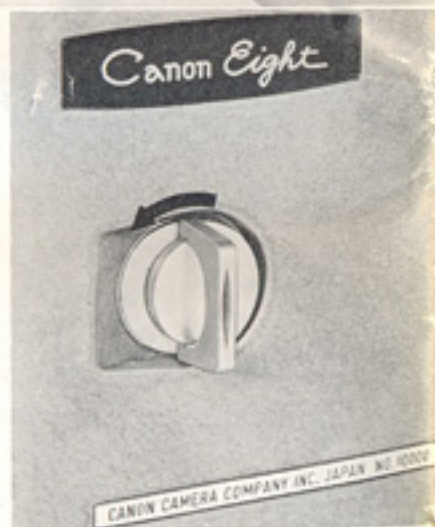
LOADING FILM

Be sure to load the camera in the shade and as quickly as possible to avoid fogging the edge of the film.

1. Lift up the hinged WINDING KEY and wind up the motor fully by turning the key back and forth.

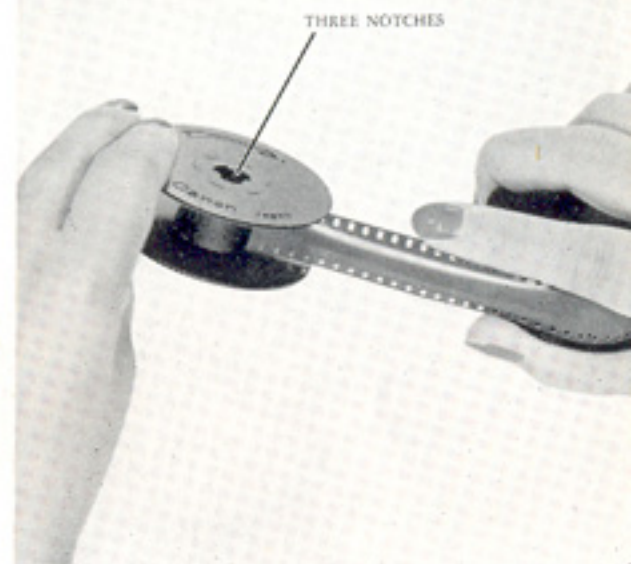


2. To open the SIDE COVER, lift up the OPENING KEY and turn it to the left. The moment the SIDE COVER is opened, the PRESSURE PAD of the FILM GATE will automatically be released and the FOOTAGE COUNTER reset to "S" (starting position).



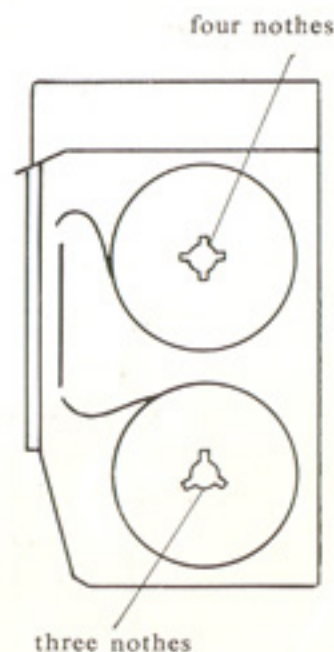
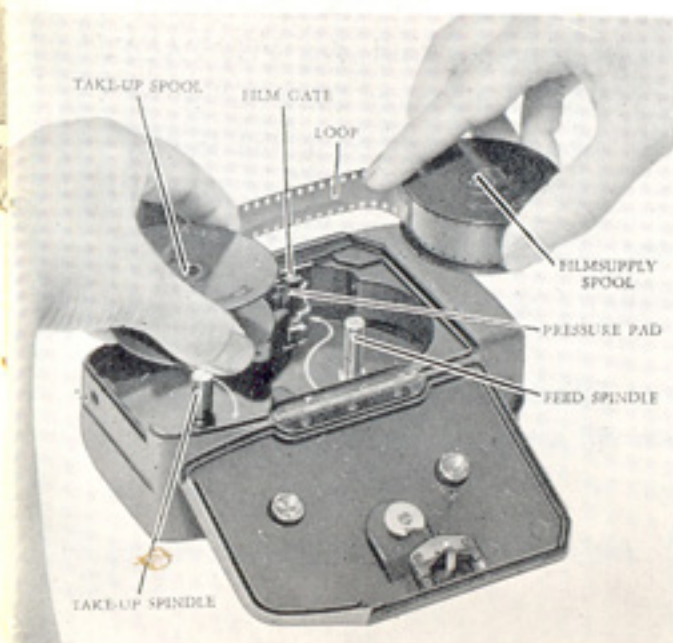
3. Take out the empty TAKE-UP SPOOL and lay it down with its side which has three notches in the spindle hole faced towards you. (The spindle hole of the other side has four notches).
4. Unpack a new roll of film and unwind 25cm or 10" of film, taking care to keep the roll from coming loose and unwinding.

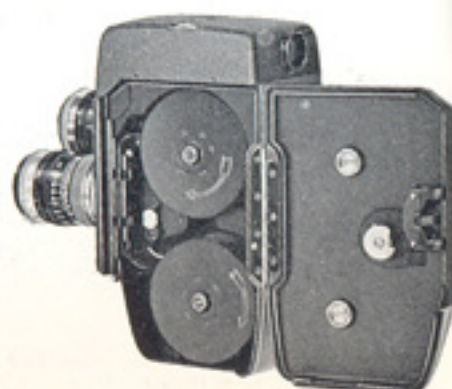
5. Slip the end of film into one of the slits in the core of the TAKE-UP SPOOL securely as far as it goes, facing the dull (emulsion) side towards the core, as illustrated.



Then, wind at least two or three turns of film onto the spool.

6. Take the TAKE-UP SPOOL by the left hand and the full FILM SUPPLY SPOOL by the right hand and form a loop of film with the index fingers as illustrated. Insert the film into the gate, while slipping both the TAKE-UP SPOOL and the FILM SUPPLY SPOOL on to the camera's TAKE-UP and FEED SPINDLES, respectively. The TAKE-UP SPOOL then should show its spindle hole with three notches and the FILM SUPPLY SPOOL, its hole with four notches. Otherwise, the spools will not fit into place.





7. While pressing the **PRESSURE PAD** against the **FILM GATE**, start the motor running for a fraction of a second in order to check that the film is advanced correctly.
8. Close the **SIDE COVER** of the camera again and fasten it by turning the **OPENING KEY** clockwise. Then the **PRESSURE PAD** will be put in the operating position.
9. Start the motor again running until the **FOOTAGE COUNTER DIAL NEEDLE** advances from "S" to "0" position. This is to wind up the exposed film leader.
10. Wind up the motor fully by turning the **WINDING KEY** back and forth.

Be sure to run the film as indicated by arrow and don't loop the film too small. Or the film will not be run smoothly.

NOW, YOU ARE READY TO SHOOT.

INVERTING THE SPOOL

When the double 8mm film has been run through the camera once, you have to turn the spool over in order to enable the other half width to be exposed. In this connection, be sure to stop shooting the moment the **FOOTAGE COUNTER** points to "25."

1. Keep the motor running till the **FOOTAGE COUNTER DIAL NEEDLE** advances to "F".
2. Open the **CAMERA SIDE COVER**, take out the two spools and reload the camera—inverting the two spools—just as you loaded the camera the first time.

UNLOADING

As soon as the film has passed the camera for the second time, with the **FOOTAGE COUNTER** again pointing to "25", open the camera and take out the now full **FILM SUPPLY SPOOL**. Be sure to open the camera after the **FILM COUNTER DIAL NEEDLE** has been advanced to "F".

Be sure to unload the camera in the shade and as quickly as possible to avoid fogging the edges of the film.

The **SPEED DIAL** gives the available filming speeds in terms of frames per second. By turning it in either direction



you can select any of these speeds: 16, 24, 32, 48 and 64 f.p.s. Then, depress the **EXPOSURE LEVER** and the film will be run continuously at the speed you selected.

16 FRAMES PER SECOND The normal operation speed for the silent 8mm movie, most widely used.

It corresponds to the rate the 8mm silent projector is normally run.

24 FRAMES PER SECOND This speed produces a slow motion effect when projected at 16 f.p.s. It is recommended for panning as well as for the production of sound movies.

32 OR 48 FRAMES PER SECOND This speed is recommended for shooting faster action or shooting the landscape, etc. from a moving train or car.

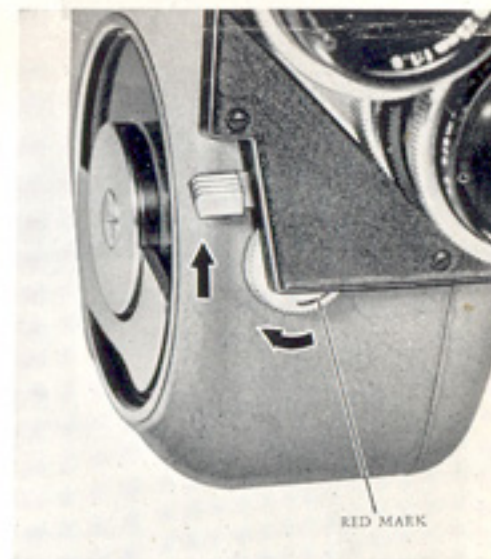
64 FRAMES PER SECOND This is a usual speed for making the slow motion picture. It will be used when the very fast action is to be slowed for motion analysis.

FILMING SPEED	SHUTTER SPEED
16 f.p.s.	1/35 sec.
24	1/52
32	1/70
48	1/104
64	1/140
SINGLE FRAME EXPOSURE	1/25

As the filming speed varies, so does the shutter speed as shown in the table.

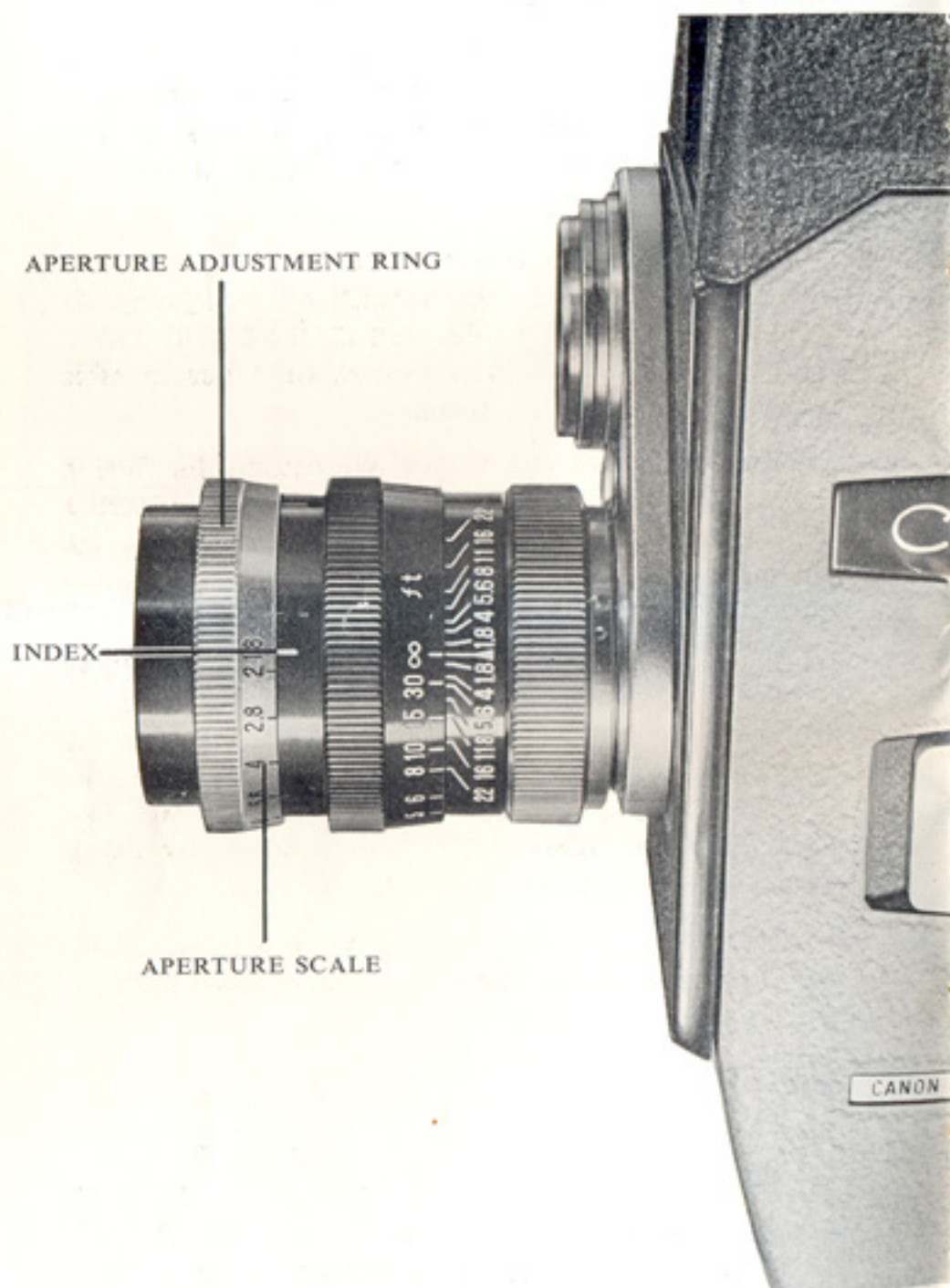
SINGLE FRAME EXPOSURE On your Canon Cine Eight Camera you can make single frame exposure by moving the **EXPOSURE LEVER** up instead of down. This technique is mainly used for animation work. Be sure to set the **SPEED DIAL** to 16 f.p.s. when making single frame exposures. The shutter speed at that time will be about 1/25 of a second.

SAFETY LOCK Turn the wheel immediately beneath the **EXPOSURE LEVER** to show the red mark. Then, the exposure lever will be locked and prevented from being accidentally tripped.



Don't run the motor at a high filming speed without loading the film unless necessary.

Doing that at 64 f.p.s. should be avoided under any circumstances.



The diaphragm of the lens is designed to control the amount of light which passes it and reaches the film. The **APERTURE ADJUSTMENT RING** of your Canon Cine Lens enables you to alter the aperture of the diaphragm and control the light amount.

The figures on the scale are known as "f" stops. When the diaphragm is closed by one "f" stop the amount of light reaching the film is halved. The smallest number on the scale corresponds to the widest aperture of diaphragms.

In determining the correct "f" stop to use, you have to take into account (1) the intensity of the lighting, (2) the exposure index of the film and (3) the filming speed. An exposure meter for cine camera or exposure table will help you in this connection.

The reason you have to take into account the filming speed in determining the correct aperture to use is because the amount of light reaching the film is decreased as the film speed becomes faster, provided that the other factors remain unchanged.

Suppose you have obtained the best result shooting at 16 f.p.s. and using the f:8 stop of your lens. Then, to get the same best result at 32 f.p.s. you have to open the aperture by one "f" stop or use f:5.6. At 64 f.p.s., the aperture has to be f:4. You can also set the **APERTURE SCALE** between calibrated "f" stops when required, such as when shooting at 24 f.p.s. or 48 f.p.s..

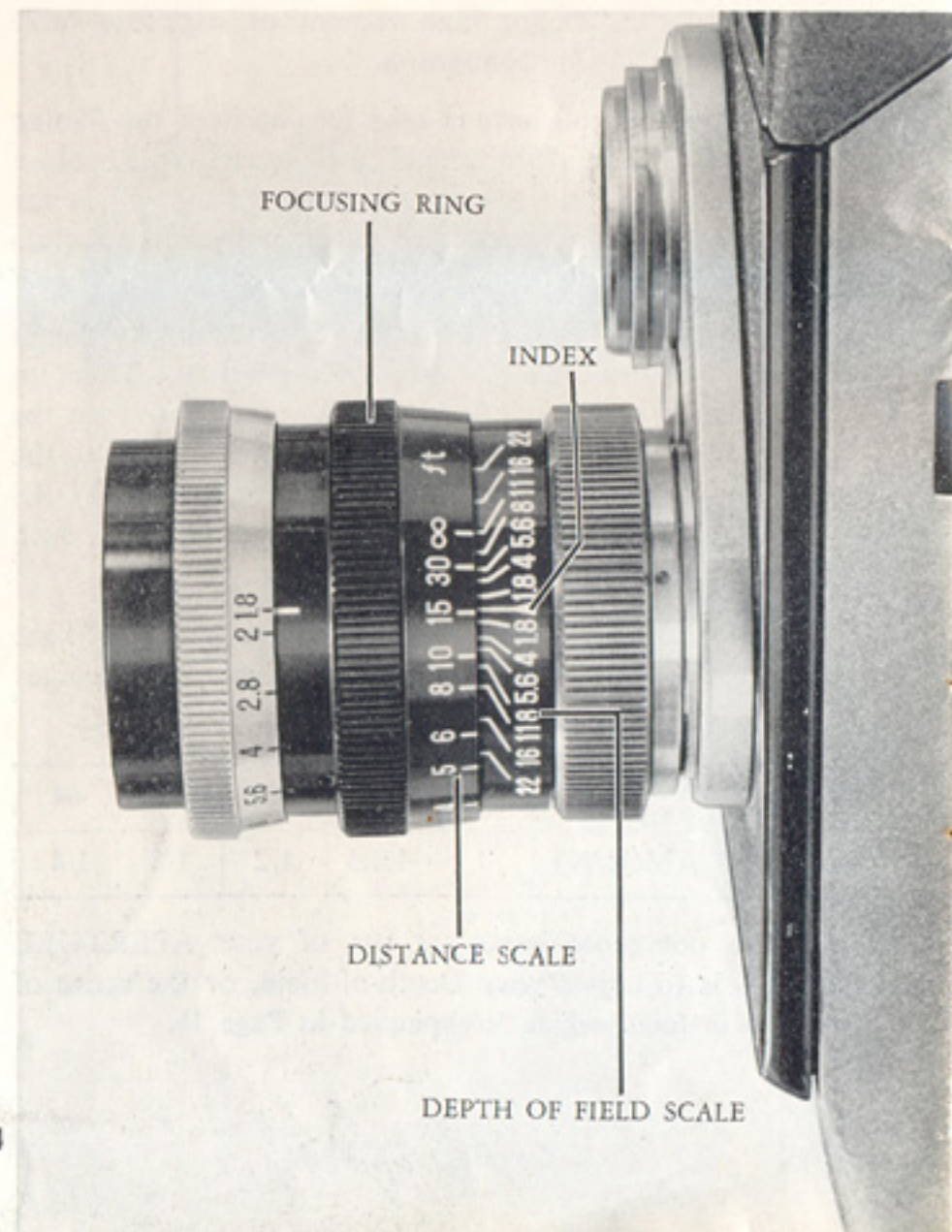
The below-given table shows how the amount of light reaching the film is decreased as the filming speed becomes faster.

FILMING SPEED (f.p.s.)	16	24	32	48	64
LIGHT AMOUNT	1	1/1.5	1/2	1/3	1/4

The one more important use of your **APERTURE SCALE** is to adjust your Depth-of-Field, or the range of objects in focus which is explained in Page 16.

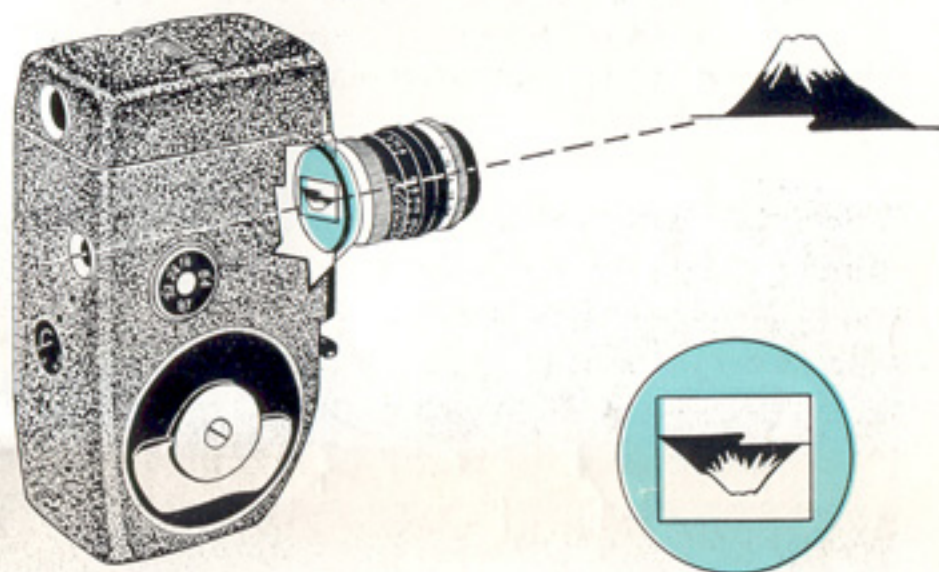
DISTANCE SCALE In order to focus, first determine how far the subject you are shooting is from the camera. Then set the **DISTANCE SCALE** of your lens to the distance determined by rotating the **FOCUSING RING**. In determining the distance, you had better take into account the Depth-of-Field of your lens. (See Page 16)

THROUGH-THE-LENS FOCUSING Your Canon Cine Eight "T" has also a **FOCUSING FINDER** which enables you to make accurate focusing easily either through the taking lens or the idle lens.



(1) **Through the idle lens:** Rotate the **FOCUSING RING** of the idle lens to see that the object you are shooting is brought into sharp focus on the **FOCUSING FINDER GROUND GLASS**. Read off its distance. Set the **DISTANCE SCALE** of the **TAKING LENS** accordingly.

(2) **Through the taking lens:** Switch over the **TURRET HEAD** and change the positions of the taking and



idle lenses. Focus as described above. Return the taking lens to the original position.

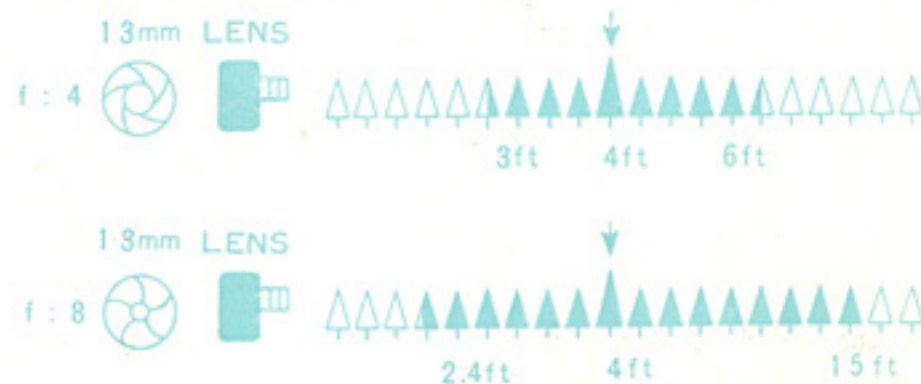
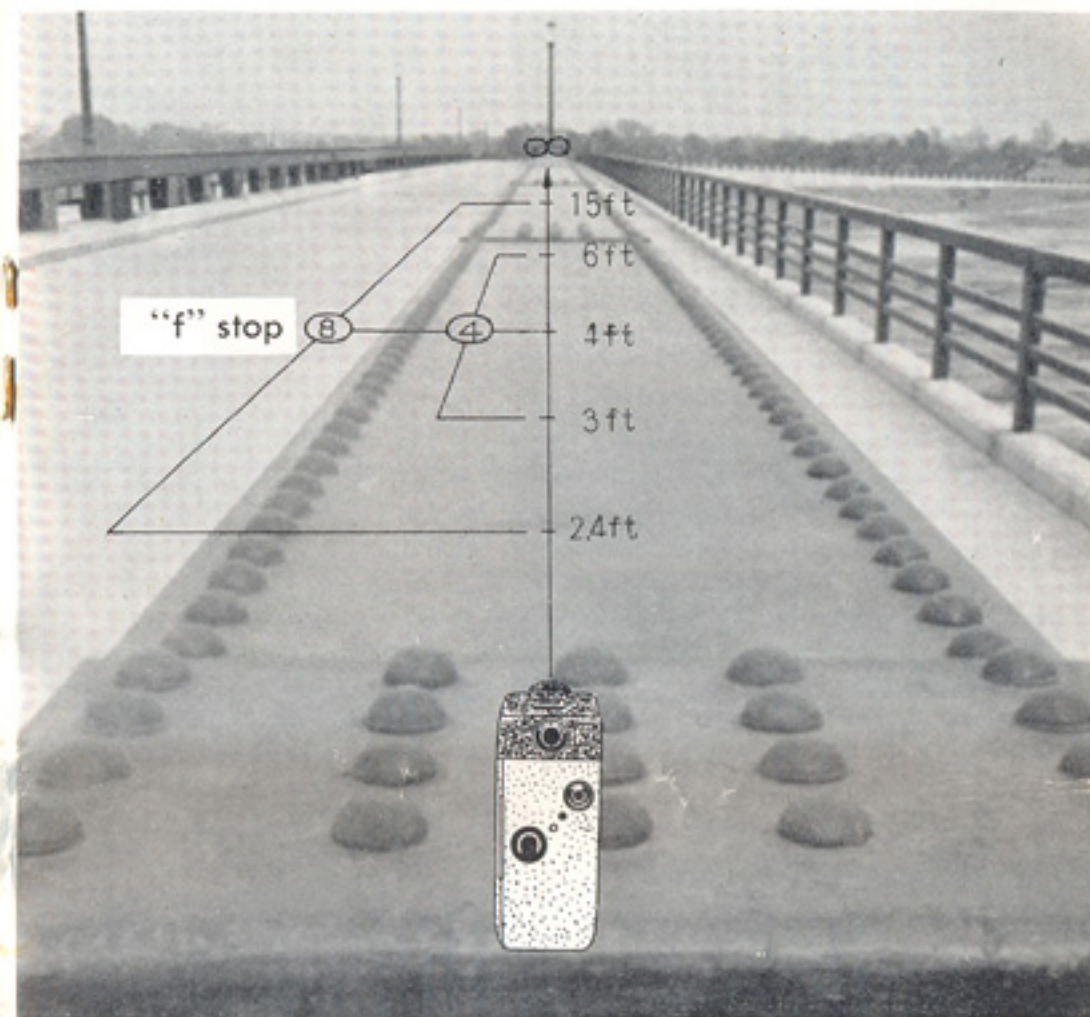
SWITCHING THE TURRET HEAD Lift up the **TURRET LOCK** sufficiently and turn the **TURRET HEAD** along until you hear a click. You may release the **TURRET LOCK** after initial, slight turn of the **TURRET HEAD**.



When your camera is in focus for a certain object, it is also in focus for a range of objects in front and behind that object. This range is called the Depth-of-Field and shown on your lens—the DEPTH-OF-FIELD SCALE. You can also know it sighting through the FOCUSING FINDER (in case of Canon Eight "T").

The Depth-of-Field will vary with the "f" stop you have chosen. The larger the lens aperture, the smaller will be your Depth-of-Field. Suppose, for instance, you have focused on a certain object at 4 feet with your 13mm lens stopped down to f:8. Then everything from approximately 2.4 feet away from the camera to 15 feet will be in sharp focus. This you can know by reading off the DISTANCE SCALE values opposite the two "8" figures on both sides of the DEPTH-OF-FIELD SCALE Index.

One practical method of using the DEPTH-OF-FIELD SCALE to your advantage is to have the DISTANCE SCALE and APERTURE SCALE of your lens preset so that its Depth-of-Field will extend as far as infinity. Then, just by memorizing the near end of the Field, you can always shoot sharp focus picture without focusing each time you shoot. For instance, if you use your 13mm lens with an "f" stop of 8, then you will see the Depth-of-Field extend from approximately 2.8 feet away from camera to infinity. This method is frequently used when the standard 13mm lens or lens with a relatively short focal length is in use.



COMPOSING—VIEWFINDER

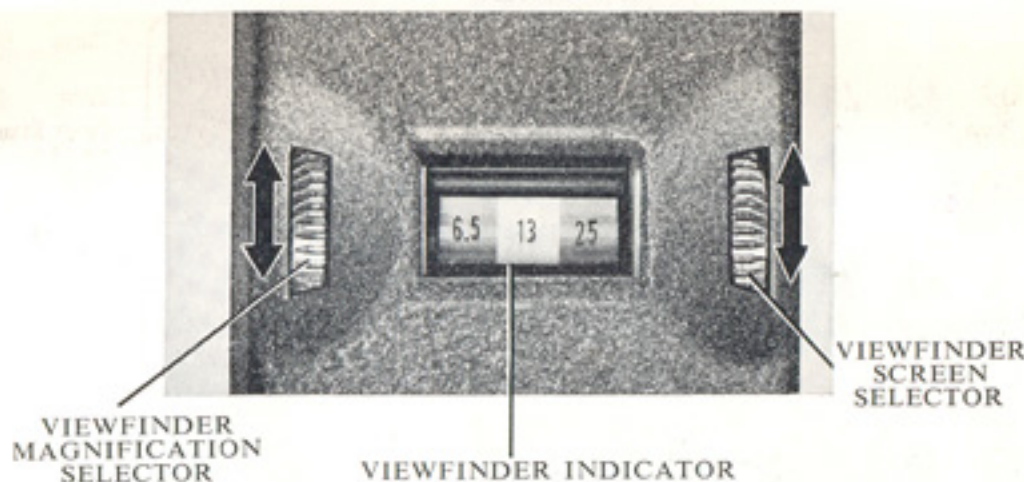
LENS BEING USED	SET THIS	VIEW THIS	MAGNIFICATION	ADDITIONAL LENS FIELDS YOU SEE
① 6.5mm	6.5 13 25		0.5X	6.5mm only
② 13mm	6.5 13 25		1 X	13mm only
③ 13mm	13 25 50 — 38 75		0.5X	6.5mm Canon Scope for 13mm LENS
④ 25mm	6.5 13 25		2 X	25mm only
⑤ 25mm	13 25 50 — 38 75		1 X	13mm 38mm Canon Scope for 25mm LENS
⑥ 38mm	13 25 50 — 38 75		1 X	13mm 25mm
⑦ 50mm	13 25 50 — 38 75		2 X	25mm 75mm Canon Scope for 50mm LENS
⑧ 75mm	13 25 50 — 38 75		2 X	25mm 50mm

Note: Both 13mm and 25mm lenses can be viewed in two positions, either full frame, or as a brightly framed sports type finder. Note also that each focal length is provided with a 1:1 life size image for two-eye focusing. When using 13, 25, 38, 50 and 75mm lenses, brightly framed sports type finder enables the easy composition and perfect timing as the object moves into the picture area.

Your Canon Cine Eight Camera has a unique viewfinder that makes composition immeasurably easier than it is on any 8mm cine cameras ever designed.

CANON CINE EIGHT "T"

The viewfinder mechanism of the CANON CINE EIGHT "T" consists of a brilliant three-position optical finder and a transparent variable Universal Screen that is super-imposed on it. The magnification of the optical finder is changed by means of the MAGNIFICATION SELECTOR and the frame of the Universal Screen converted by the SCREEN SELECTOR. Both the selectors are conveniently situated on top of the camera. Now look at the VIEWFINDER INDICATOR on top of your camera. You will see either three or five numbers in the two-color area inside the indicator window according to where the two Selectors are set. All you have to do is to turn and set the Selectors so that the number or one of the numbers appearing in the white section of the indicator will correspond to the focal length of the lens you are using.



Then, your CANON CINE EIGHT "T" will take exactly what you see in the whole viewfinder field in case the VIEWFINDER INDICATOR looks like ①, ② & ④ of the illustrations, showing only one figure. In case the indicator is like ③, ⑤, ⑥, ⑦ & ⑧, the transparent area in the center of the viewfinder shows the field of view of the lens indicated by the BIG, BLACK figure and the smaller area framed by the blue line at the four corners corresponds to that of the lens indicated by the SMALL, RED figure.

Note that there are two ways of getting the fields-of-view of the 13mm and 25mm lenses, which provide viewfinder images of different sizes.....for 13mm lens the LIFE-SIZE image in ② and half LIFE-SIZE image in ③; for 25mm lens the DOUBLE life-size image in ④ and LIFE-SIZE image in ⑤.

The area framed by the white line in blue background is the sighting frame for the Canon Scope lens (a wide screen lens with an image ratio of 1:2.66), which can be used on the 13mm, 25mm and 50mm lenses, as shown in ③, ⑤ & ⑦.

LENS BEING USED	SET THIS	VIEW THIS	MAGNIFICATION	ADDITIONAL LENS FIELDS YOU SEE
⑨ 6.5mm	6.5 13 25 — 38 75		0.5X	 6.5mm only Canon Scope for 13mm LENS
⑩ 13mm	6.5 13 25 — 38 75		1 X	 —38mm Canon Scope for 25mm LENS
⑪ 25mm	6.5 13 25 — 38 75		2 X	 —75mm Canon Scope for 50mm LENS
⑫ 38mm	6.5 13 25 — 38 75		1 X	 —13mm Canon Scope for 25mm LENS
⑬ 75mm	6.5 13 25 — 38 75		2 X	 —25mm Canon Scope for 50mm LENS

CANON CINE EIGHT "S"

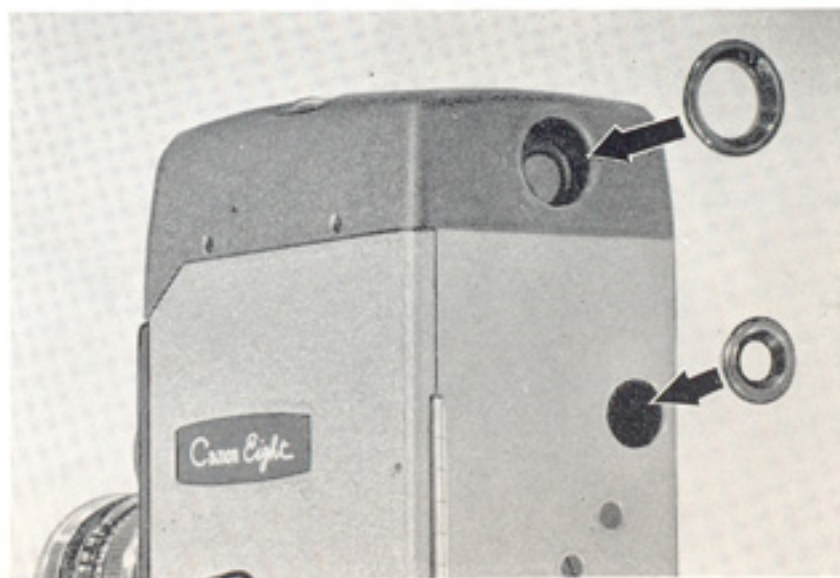
The viewfinder of the CANON CINE EIGHT "S" consists of a brilliant three-position optical finder and a fixed frame. To get the field-of-view of a Canon cine lens, set the VIEWFINDER MAGNIFICATION SELECTOR so that the number or one of the numbers appearing in the white portion of the VIEWFINDER INDICATOR WINDOW will correspond to the focal length of the lens. Then, the greater frame—which corresponds to the whole viewfinder area—will define the field-of-view of the 6.5, 13 or 25mm lens whichever is in use as in ⑨, ⑩ & ⑪. The smaller frame in the center will show that of either 38mm or 75mm lens whichever is in use as in ⑫ & ⑬. The sighting frame is also provided for the Canon Scope lens, as shown in ⑨ and ⑩. The Canon Scope lens can also be used on the 50mm lens by setting the viewfinder like ⑪.

AUTOMATIC PARALLAX COMPENSATION

Your CANON CINE EIGHT has a built-in device that automatically compensates for parallax error at all distances between 18 inches and infinity as each lens is focused.

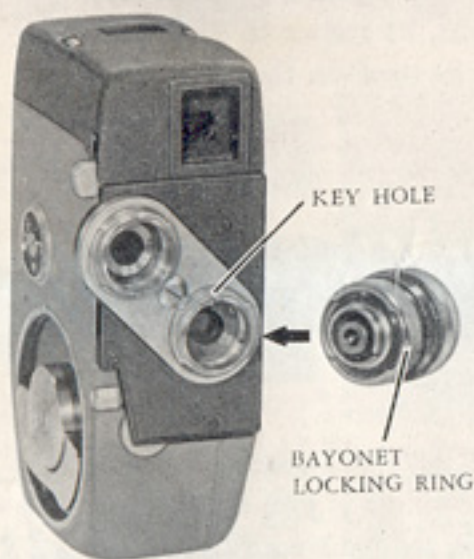
EYE-SIGHT COMPENSATION

The extra large EYEPIECE of the finder will suit a photographer with an average eye-sight. If you find it hard to sight through, you can have it changed with one better suited to your eye-sight.



CHANGING LENSES

In addition to the standard 13mm $f:1.8$ lens, Canon offers a variety of interchangeable lenses for your Canon Cine Eight Cameras. All these Canon Cine Lenses have a special BAYONET MOUNT with LOCKING RING. By less than a quarter turn the LOCKING RING can be released and the lens dismantled. To mount the lens, you only have to align the red dots on the lens base and camera's lens mount, push the lens on to the camera and turn the LOCKING RING clockwise until it stops.



CANON CINE EIGHT LENSES

6.5mm	$f:1.8$
13 mm	$f:1.8$
13 mm	$f:1.4$
25 mm	$f:1.8$
38 mm	$f:1.8$
50 mm	$f:2.2$
75 mm	$f:3.2$

Canon Scope Wide
Screen Lens

D-MOUNT COUPLER

If you have already a cine camera with "D" (screw-in) lens mount, use a suitable Canon "D" mount coupler, which enables the Canon cine lens to be used on your "D" mount camera just as well as on a Canon Cine Eight Camera.



HOLDING THE CAMERA

While shooting, you should take utmost care to hold your Canon Cine Eight Camera absolutely steady. Should you fail to do this, you will see the subject dance about on the screen when the film is projected. Particularly, when using a telephoto lens or long-focus lens, you can't be too careful.

The illustrations given below and in the next pages show four examples of how to hold your Canon Cine Eight Camera. In all the examples, the camera is held pressed fast against the forehead or cheek and one elbow or the elbows, against the body.

If you want to be absolutely sure about the stability of the camera, you had better use your Canon Cine Eight Camera on a sturdy tripod or some stable object.





PROCEDURE & TECHNICAL HINTS

This is what you have to do to shoot a good film with your Canon Cine Eight Camera.

- (1) Take off the LENS CAP
- (2) Check that the VIEWFINDER INDICATOR corresponds to the lens in use.
- (3) Wind up the MOTOR fully. Do this after every take no matter how short it is and before the motor is run down.
- (4) Set the SPEED DIAL.
- (5) Set the LENS APERTURE SCALE.
- (6) Focus the camera.
- (7) Make sure that the camera is being held absolutely steady and press on the EXPOSURE LEVER while looking through the viewfinder.

In composing and focusing, be sure not to mistake the lens in idle position for the taking lens.

FOOTAGE COUNTER

While shooting, you can always know the length of the film exposed just by a glance on the FOOTAGE COUNTER. Every time 6 inches of film is exposed, you will also hear a click. This will enable you to check on the length of a scene. Each full winding of the motor allows you to shoot 5 feet of film, at any speed.



SCENE LENGTH There is no fixed standard of scene length. It should vary according to what you are shooting. Too short a scene, however, is definitely not advisable. You should give a scene at least 18 inches of film.

PANNING Panning is a technique of swinging the camera uniformly. It is widely used to shoot a panoramic view such as broad landscapes, mountain chains or architectural views. In panning, take utmost care to hold your camera absolutely steady and to move your camera very slowly. It is best to set your camera on to a tripod. When shooting a motionless subject, it would be a wise measure to use a higher filming speed than usual, say 24 or 32 f.p.s. instead of 16 f.p.s. When shooting a moving object, be sure to keep it always in the center of the finder frame. Do not overuse panning unless you are a very skillful movie-maker.

CARE OF YOUR CANON CINE 8

DO

DO read this instruction book carefully and consult your dealer if you have any problem about using your Camera or Lenses.

DO keep the VIEWFINDER and EYEPIECE screens always absolutely clean. Clean them with special lens tissue moistened possibly with a little pure alcohol or ether, if available.

DO keep the FILM GATE always clean. Clean it with a fine soft brush.

DON'T

DON'T leave the SPRING wound up taut when not using your Camera. When the camera is not loaded, release the motor by running it at 16 f.p.s. When the camera is to be kept loaded, don't wind up the motor after shooting is finished.

DON'T keep your Camera in a damp or dusty place or where corrosive fumes exist.

DON'T tamper with your Camera. When new, your Canon Cine 8 contains a sufficient reserve of lubrication and rarely needs to be lubricated.