

how  
to use  
your

**Bell & Howell / Canon<sup>®</sup>**  
**DIAL 35 CAMERA**



welcome to

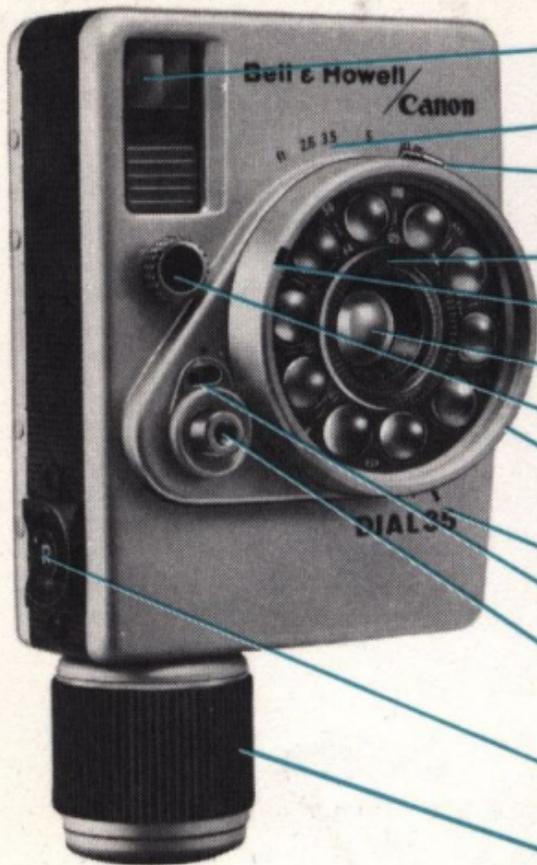
**Bell & Howell** OWNERSHIP . . .

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**OPEN THIS FLAP AND THE BACK FLAP  
OF YOUR INSTRUCTION BOOKLET**

Keep the flaps open as you read through the instructions that follow. They will give you a quick reference to all the working parts of your new Dial 35 Camera.

Familiarity with these names before operating your camera will assure complete success with your very first roll of film.



Viewfinder window

Footage scale

Focusing lever

Film sensitivity adjusting dial

Film sensitivity index mark

Lens

Manual aperture control knob

Shutter speed ring

Shutter speed index mark

Exposure counter

Shutter release button

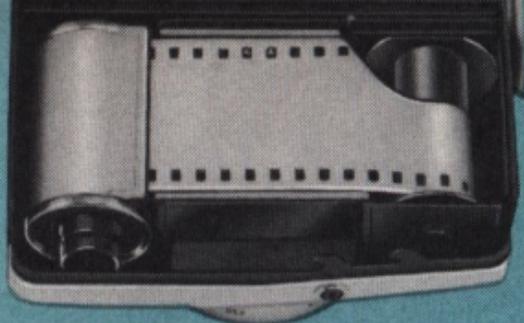
Film rewind button

Spring motor winding grip

**FOLLOW  
THESE  
EASY STEPS . . .**

once you have  
thoroughly read the  
instruction book.  
They provide a handy  
reference to easy,  
fun-filled photography.

1.



Load Film

2.



Wind  
Spring Motor

3.



Adjust  
Film Speed.

## IMPORTANT NOTE . . .

When examining  
your camera keep the  
following in mind.

- *Unless there is film in the camera, the Shutter Button cannot be released as turning the Spring Motor Winding Grip does not Wind the Spring Motor.*

4.



Set Shutter  
Speed

5.



Select a  
Zone Focus  
Mark

6.



Check the  
Meter Needle  
and press  
the Shutter  
Release  
Button

# THE DIAL 35 CAMERA

Uses standard 35mm film in either 20 or 36 exposure cartridges. A 20 exposure roll will produce 40 pictures, and a 36 exposure roll will give you 72 pictures.

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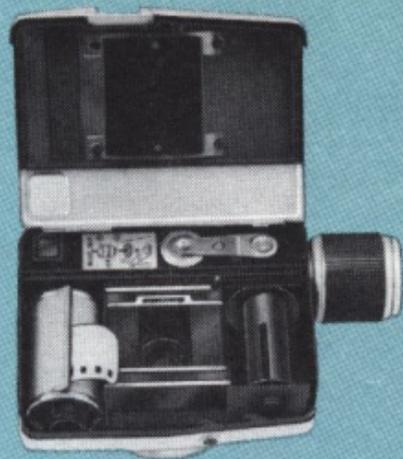
## LOADING FILM open back cover

Open the back cover by pushing up on the Cover Lock. Swing the cover open.



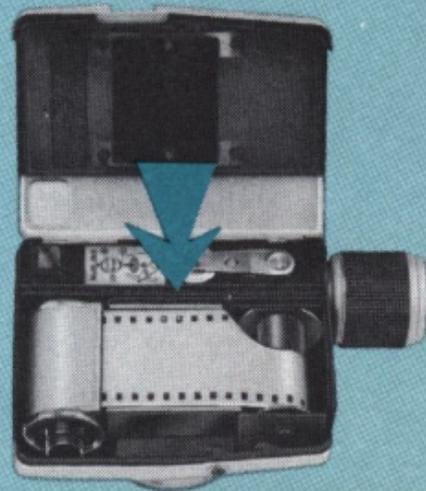
## insert cartridge

Rotate the Spring Motor Winding Grip until the slot in the take up spool is straight up. Fit the cartridge in place in the camera by aligning the inner slot in the cartridge spindle with the pronged key of the camera.



## engage film and close cover

Insert the film leader securely into the film slot. Engage the film sprocket hole on the tooth of take up spool. Also make certain film sprocket holes engage teeth directly above shutter opening. (Arrow) Remove any slack in the film by rotating the Spring Motor Winding Grip Clockwise until the film is taut. Close the back cover by simply snapping shut.



## PREPARING FOR THE FIRST EXPOSURE

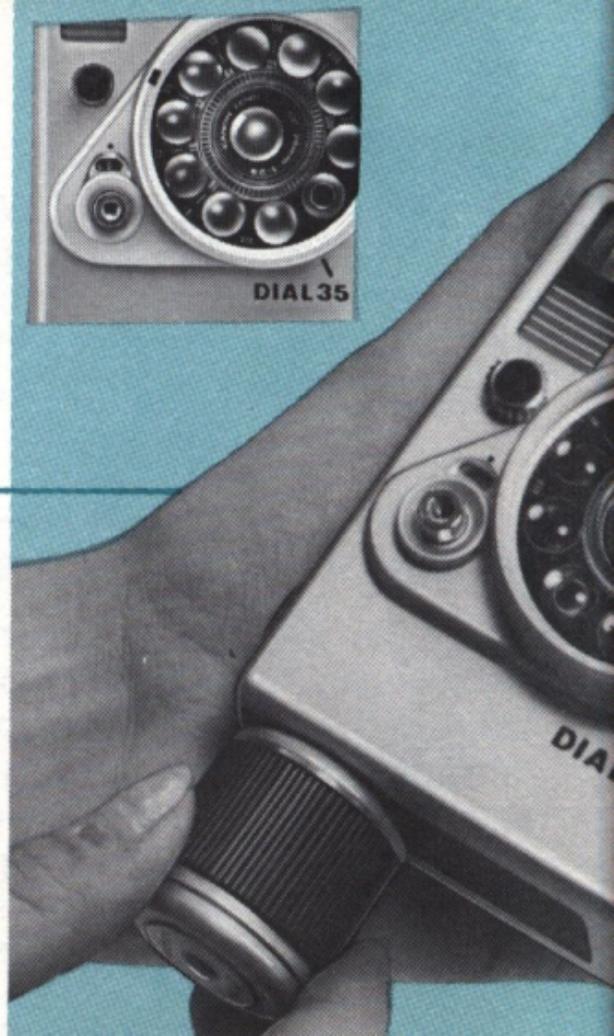
### set exposure counter

When the back cover is closed, the Exposure Counter Indicator will be on "S". Turning the Spring Motor Winding Grip clockwise will advance the Indicator from "S" to "O" placing the film in position for the first exposure.

### wind spring motor

Continue turning the Spring Motor Winding Grip until the motor is fully wound. A slip clutch prevents over winding and indicates when the motor is fully wound.

A fully wound spring motor has enough power to transport 20 exposures. For a 20 exposure roll of film which takes 40 half frame exposures, only two windings are necessary to complete the full roll.



## ELECTRIC EYE PHOTOGRAPHY

### setting the film sensitivity dial

Hold the Shutter Speed Ring with the left hand and rotate the Film Sensitivity Adjusting Dial with the right hand as illustrated. Turn the Film Sensitivity Adjusting Dial until the Correct ASA number is opposite the black Index Mark on the Shutter Speed Ring. The recommended ASA Speed is indicated on the literature packaged with the film. An ASA-DIN Conversion table is located on the back of the camera.

Click Stops are provided at each ASA setting, and each setting covers a limited range of ASA Speeds. For ASA Speeds that do not fall within the available ranges, set the Film Sensitivity Adjusting Dial to the range speeds that are closest to the speed of the film you are using. Do not attempt to



set the dial between any of the click stops. A Neutral Density Filter (ND.2) is available to convert the ASA 200-250 setting to ASA 160 for High Speed Ektachrome. Ask for B&H part No. 112752

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## HOLDING THE CAMERA

The Dial 35 Camera is specially designed so that when holding the camera in a vertical position (Figure 1) you will take horizontal format pictures, the same as you would with any full frame 35mm camera.



Figure 1 shows the correct way to hold the camera for horizontal pictures, and Figure 2 illustrates the manner to take vertical pictures. Both methods allow the camera to rest against your forehead for added steadiness.



## TAKING THE PICTURE

The Data-Center Viewfinder on the Dial 35 enables you to see at a glance, all the information you need to know to get beautiful, sharp, correctly exposed pictures.

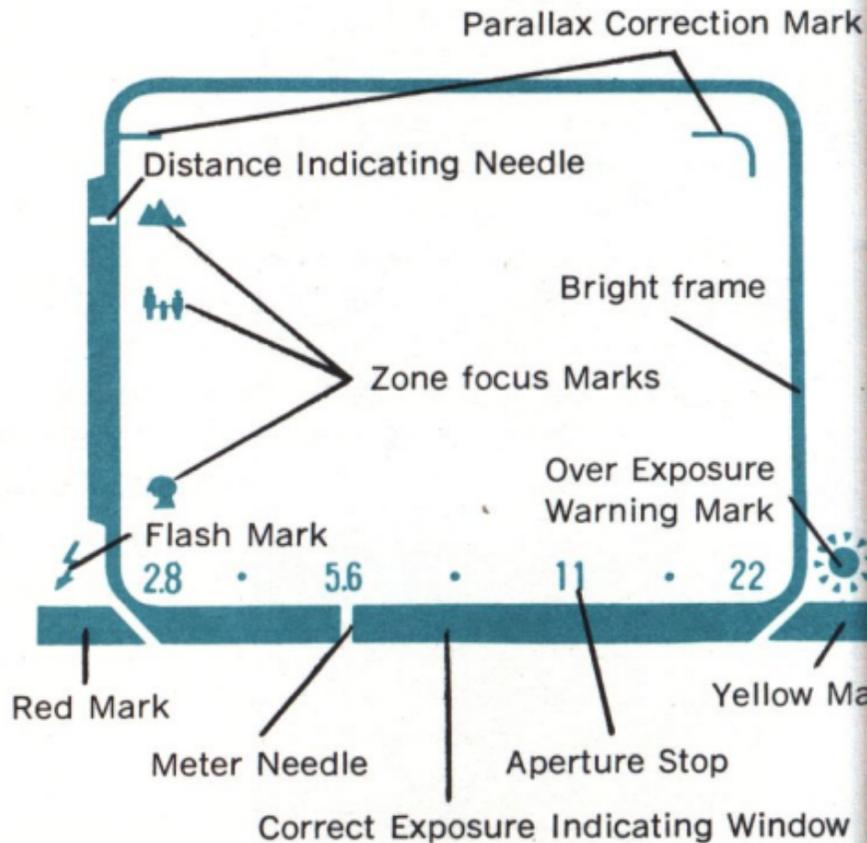
The Data-Center Viewfinder provides you with information on:

1. Correct Exposure
2. Focusing
3. Parallax Correction
4. Picture Composition.

### 1. correct exposure

Direct the camera toward the subject and look through the viewfinder eyepiece. If the meter needle points to any one of the aperture stops on the scale (2.8 • 5.6 • 11 • 22) you will be sure of correct exposure.

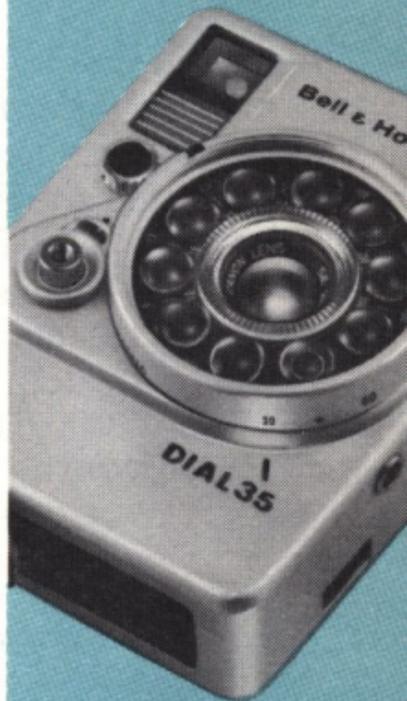
## look through the viewfinder



**INSUFFICIENT LIGHT**—If the needle stays in the Red Mark (Flash Mark), turn the Shutter Speed Ring to a slower shutter speed, (i.e. if on 250, turn the Shutter Speed Ring to 125, 60, or 30). Continue to use slower shutter speeds until the exposure needle moves out of the Red Mark that indicates insufficient light.

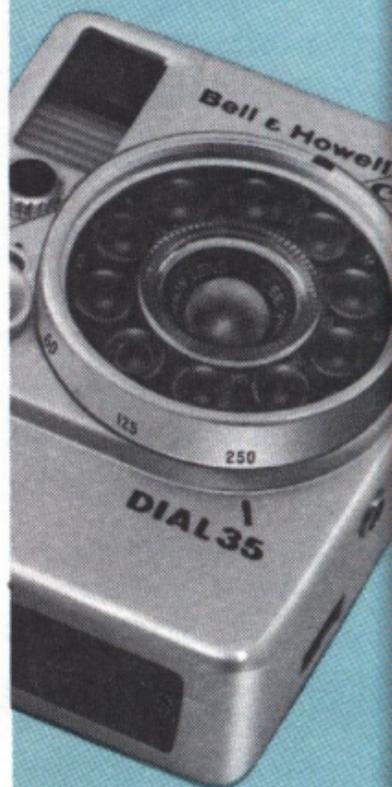
If, when the Shutter Speed Ring is turned to 30, the Meter Needle still will not move out of the Red Mark, there is not sufficient light for Electric Eye Photography. Additional light, such as flash (see Page 15) is needed.

**TOO MUCH LIGHT**—If the Exposure Needle stays in the Yellow Mark (Over Exposure Warning Mark) turn the Shutter Speed Ring to a faster shutter speed, (i.e. if on 30, turn the Shutter Speed Ring to 60, 125, or 250). Continue to increase the shutter speeds until the



exposure needle moves out of the yellow end of the scale. If, when the Shutter Speed Ring is turned to 250, the Exposure Needle still will not move off the Yellow Mark, there is too much light and one of the Neutral Density Filters (ND4 or ND8) available for the Dial 35 are necessary. These filters merely screw over the entire lens area and reduce by 4 or 8 times the amount of light allowed through the lens. No special adjustments are necessary since the filter screws over the lens and electric eye, thereby permitting normal electric eye photography.

**IMPORTANT NOTE:** *Since the Shutter Release Button does not lock to prevent you from taking pictures when the exposure is not correct, it is important that the Exposure Needle is in the Correct exposure area before you press the Shutter Release Button.*



## 2. focusing

Once the proper exposure has been determined, focus the lens and you're ready to take pictures. With the Dial 35 Camera, either one of two methods may be used to focus the lens.

- a. Measure or estimate the distance from the camera to the subject and set the Focusing Lever to the corresponding distance on the Footage Scale.
- b. Look through the viewfinder. On the left side of the viewfinder are the following three symbols:



for scenic or long distance photography.  
(beyond 15 feet)



for group photography or full length pictures of one person (8-15 feet).



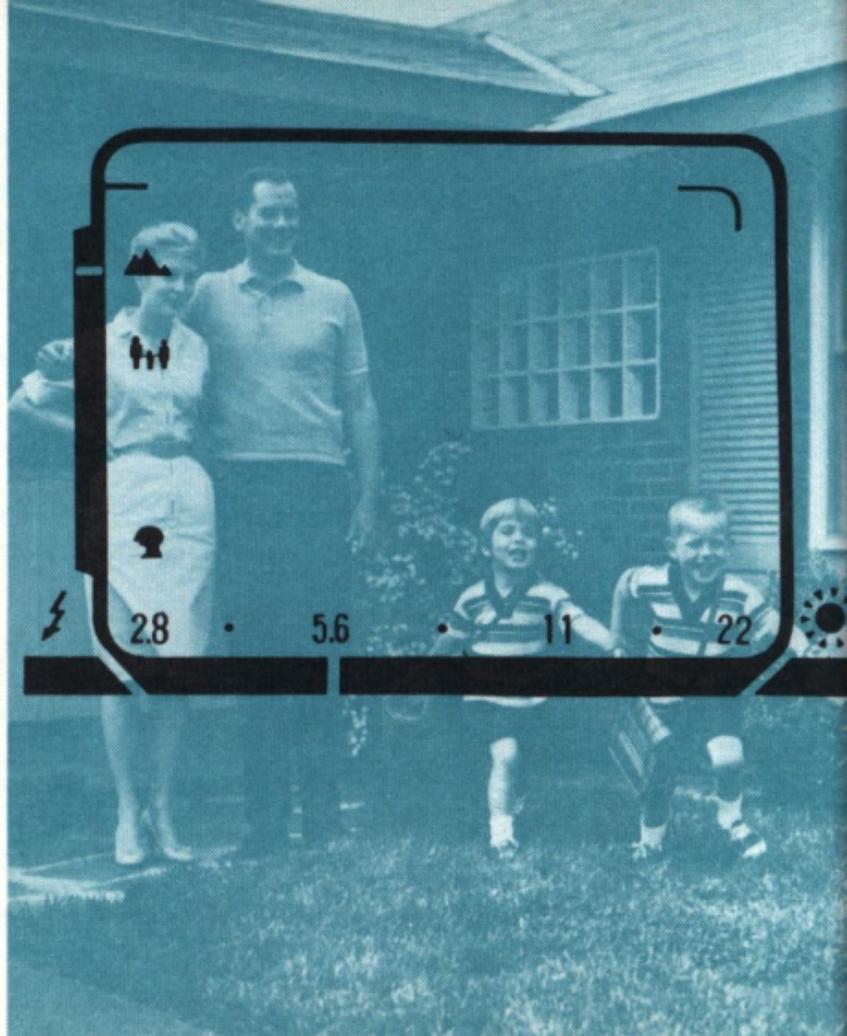
for close-ups and portraiture (2.6 to 5 feet).



Since the SE 28mm f/2.8 lens has a relatively deep depth of field, you can be quite sure of getting sharp pictures by employing the Zone, Focus System (Method B).

### 3. composition and parallax correction

When composing a picture, keep the following in mind . . . The area in the bright frame finder is the area covered and recorded on the film. When shooting at a close distance, parallax error is unavoidable. Make certain that your entire subject is within the parallax Correction Mark to avoid cutting off part of the picture you wish to take.



## pressing the shutter button

To take the picture, press the Shutter Release Button gently to avoid moving the camera and causing a blurred picture.

Releasing the Shutter Button activates the Spring Motor and automatically winds the film to the next frame, advances the Exposure Indicator Counter, and cocks the shutter for the next picture.

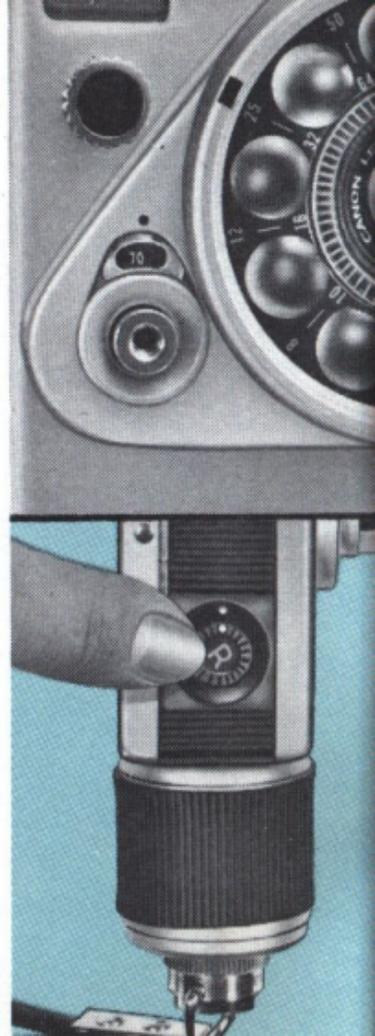
- Do not press the Shutter Release Button While Winding.
- Avoid taking more than 2 exposures per second. Very rapid sequence shooting can damage the sensitive electric eye.



## REWINDING THE FILM

When the last frame of film has been exposed, the Shutter Release Button cannot be depressed even if the spring motor is fully wound. The Exposure Counter Indicator will show 40 or 70 depending on the film you are using. Do not attempt to force the Shutter Release Button. At this point the film must be rewound back into the cartridge so it may be sent in for processing.

Wind the Spring Motor Winding Grip fully. Then turn the Film Rewinding Button slightly clockwise so that the two white dots are aligned. Push in and hold. The Spring Motor will rewind the film until its power is depleted. After the spring motor stops rewinding the film, continue to hold the Film Rewinding Button in. Turn the grip until the exposure counter indicates "S". At this point, the film is completely rewound into the cartridge. Open the back cover by sliding the Cover Latch in the direction of the arrow. Take out the film cartridge. The film is now ready for processing.



## FLASH PHOTOGRAPHY

If when pointing the camera at the subject, the Meter Needle stays in the Red Mark, it is necessary to use flash to obtain proper exposure.

Slide the flash unit into the Accessory Shoe from the rear of the camera. Push the cord into the Flash Terminal Socket as illustrated. The Dial 35 Camera is synchronized for use with various types of flash bulbs at different shutter speeds as shown in the Flash Synchronization Table.



### FLASH SYNCHRONIZATION TABLE

Shutter Speed	Speedlight (Strobe)	F Class	M Class (Including AG-1 & AG-1B)
1/30	X	X	X
1/60	X	X	
1/125	X		
1/250	X		

X Indicates synchronization at that speed

## determine the aperture

Both the Canon Flash Quint and J-3 Flash Guns incorporate handy Flash Guide Scales calibrated for 1/30 shutter speed that enable you to quickly determine the correct aperture setting. When using other types of flash guns, the following formula will give you the correct setting.

$$\text{Aperture Stop} = \frac{\text{Bulb Guide Number}}{\text{Distance}} \quad (\text{from camera to subject})$$

The Bulb Guide Number will be indicated on the package of bulbs you buy. The correct Aperture Stop is equal to the Bulb Guide Number divided by the Distance from camera to subject.

## setting the camera

When taking flash pictures, first focus the camera as described earlier. Set the Shutter Speed Ring to a speed that synchronizes with the type of bulb you



are using. Then, pull out the Manual Aperture Control Knob. This disengages the Electric Eye and lets you set the Aperture manually.

As you look through the viewfinder you can set the Meter Needle to the correct Aperture (2.8 • 5.6 • 11 • 22) by rotating the Manual Aperture Control Knob to the left or right. Compose your subject in the Viewfinder and press the Shutter Release Button as described earlier.

## MANUAL EXPOSURE

Manual exposure is similar to Flash Photography. Pull out the Manual Aperture Control Knob and align the Meter Needle in the Viewfinder to the correct aperture, predetermined by use of a separate light meter or exposure guide. Focus the lens, compose your subject in the viewfinder and press the Shutter Release Button as described earlier.

## HOW TO CHANGE THE MERCURY BATTERY

Under normal use, a mercury battery will last about a year. When the power is exhausted, the Meter Needle will not move, even under the strongest light. Replace the Mercury Battery with any one of the following: Mallory RM-1, General RG-1 or Eveready E-1.

To replace the battery, open the back cover, lift up the spring clip and swing it out of the way to the left. Tip the camera and the battery will slip out.

Insert the new battery with the tip down. The flat side (+) should be up. Return the Spring Clip to its locked position.



## CARE OF YOUR CAMERA

### keep your camera clean

The most important maintenance for your new camera is to keep it clean. Both moisture and dust are harmful to the camera.

Use a soft brush or rubber ball type blower to clean the lens and film compartment. Avoid touching the lens or Electric Eye Dial Lenses with your fingers. To remove fingerprints from the lens, Viewfinder, eyepiece or the Electric Eye lenses, use a very soft, lint free cloth moistened with Bell & Howell Opti-Kleen. Never use sharp tools on any part of the camera.

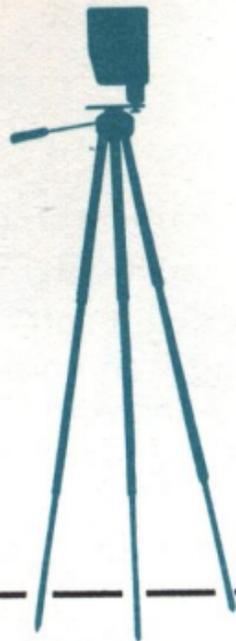
### lubrication

Your camera is factory lubricated and requires no oiling by you. Keep it in top notch condition by returning it periodically to Bell & Howell or one of the Bell & Howell Approved Service Stations. These men are experts. It is their job to keep your camera in first class operating condition.

# HELPFUL HINTS FOR BETTER PICTURES

## 1. hold your camera steady

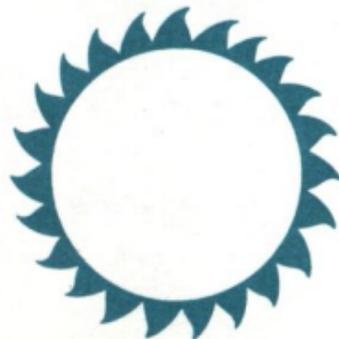
Any movement when pressing the Shutter Release Button will cause the entire picture to be blurred, especially at the slower shutter speeds. Keep your camera steady by using a firm support or tripod. For best results press the Shutter Release Button evenly.



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## 2. natural outdoor color pictures

When taking outdoor color pictures, the most natural colors will be realized if the pictures are taken around midday. If possible, avoid taking color pictures before 2 hours after sunrise and after 2 hours before sunset.



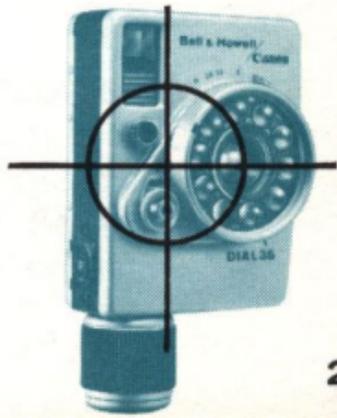
### 3. frame your subject carefully

When sighting your subject through the Viewfinder, choose the camera position that adds the most interest to the picture. Many times, shooting from a little higher or lower position, or further to the left or right, provides a more interesting background or foreground. Eliminate background that is unrelated to your subject. (A well-known professional photographer was asked what is the most important single change amateurs can make to improve their pictures. His answer . . . "Get closer to the subject.")



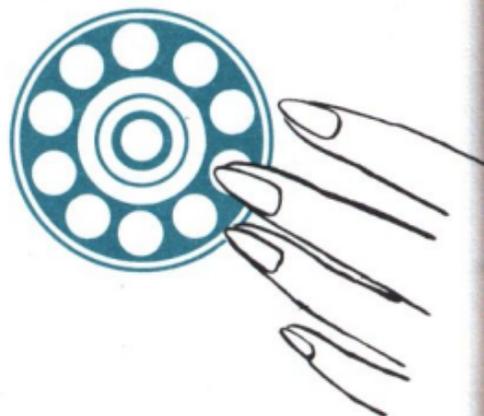
### 4. hold the camera level

Avoid tilting the camera when pressing the Shutter Release Button. This common error accounts for those strange pictures where a river appears to be running uphill or people and buildings appear to be standing at an angle on the side of a hill.



## 5. don't blind the electric eye

Be careful not to let anything cover part of the Electric Eye when taking a picture. Also, try to make certain that the sun does not shine directly into the Electric Eye. On strong backlighted scenes or scenes where there is a great deal of reflection, set the aperture manually.



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## 6. signs make good titles

Make your slide shows more interesting by letting your audience know what is happening. Road Signs, Entrance Signs, Landmark Signs all make good titles and help explain what the pictures are about.



## 7. travel tip

When traveling out of this country, secure the proper form from Customs and declare your camera and all accessories before leaving. This will eliminate the question of its foreign manufacture and assure your prompt passage through Customs upon your return.





## **Bell & Howell** **SLIDEMASTER PROJECTOR**

a perfect companion for your  
**DIAL 35 camera**

Add modern magic to your slide shows with today's most advanced slide projector. Pictures come brilliantly alive in dazzling colors! Remote Control gives you full command of the Slidemaster from across the room—focus for sharp clear pictures, advance slides, or reverse for another look.

Styled in a smart two-tone green, self contained case, the Slidemaster brings you and your family many years of proud ownership, many hours of funfilled enjoyment.

*"See your Bell & Howell dealer for a complete selection of Bell & Howell Slide projectors."*

## **Bell & Howell** GUARANTEE

This new Bell & Howell/Canon product is guaranteed to be free from imperfections in both material and workmanship for one year from date of original purchase. Should any part of this equipment be defective, it will be replaced or repaired free of charge (except for transportation), providing the equipment has been operated according to the instructions accompanying it.

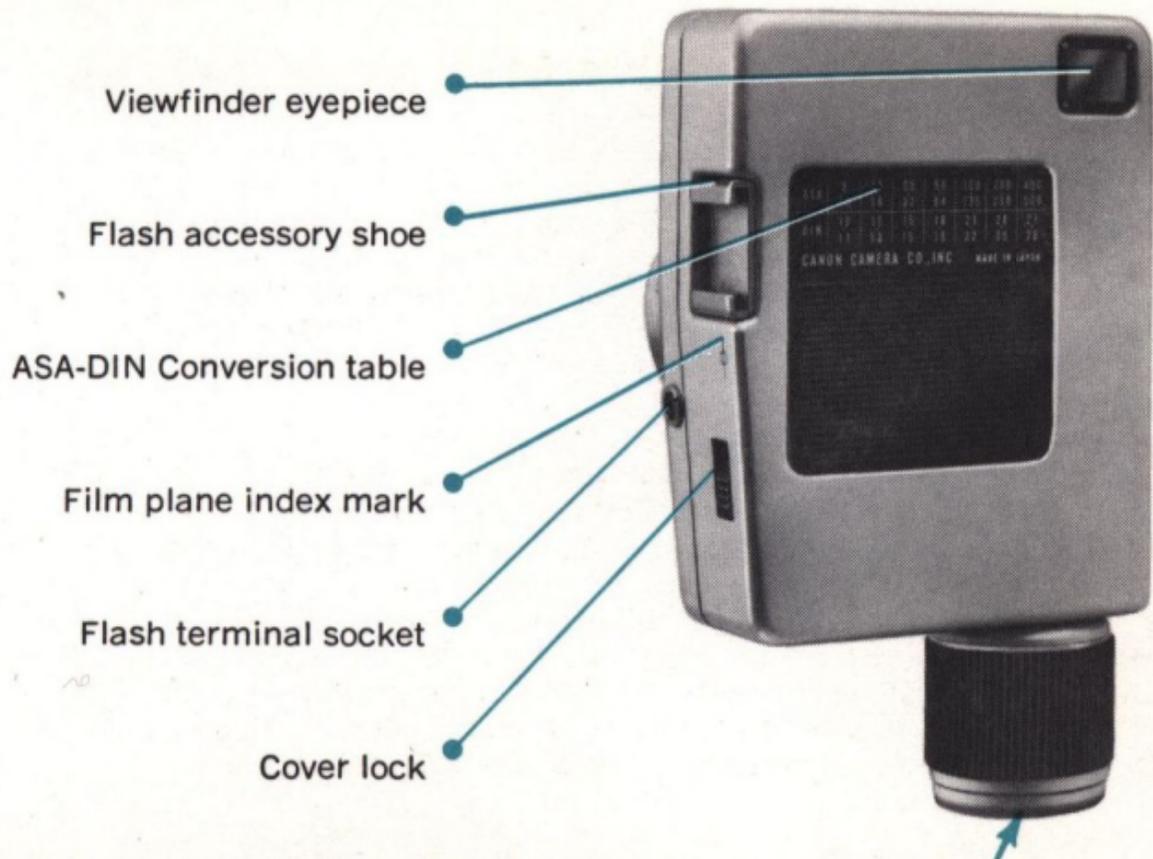
No liability is assumed for film which is damaged or is unsatisfactory for any reason and no liability is assumed for interruptions in operation of equipment.

This guarantee is void:

- a) If equipment has been damaged by accident or mishandling.
- b) If equipment has been serviced by other than Bell & Howell or Canon.\*
- c) If adaptations or accessories other than Bell & Howell or Canon have been made or attached.

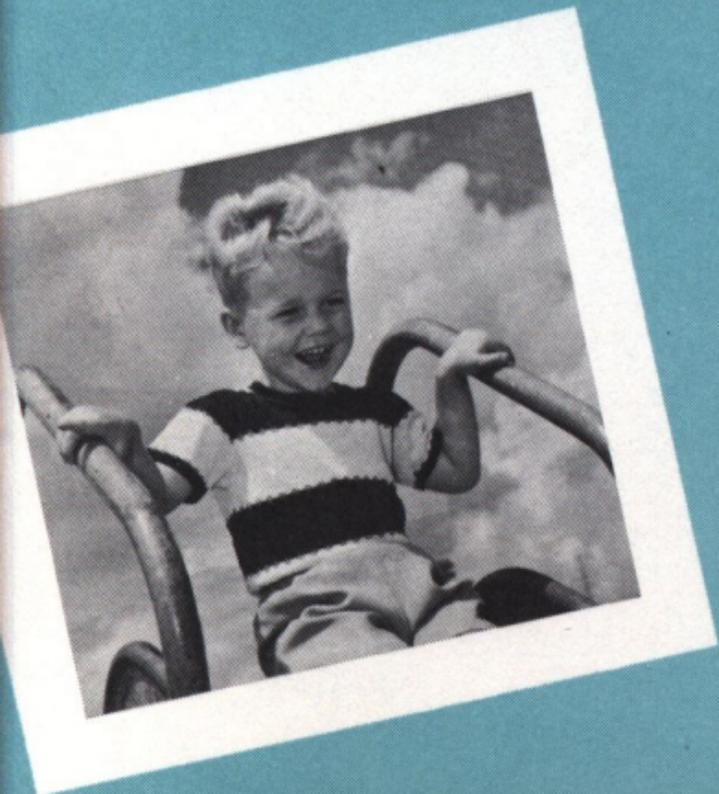
The foregoing is in lieu of all other warranties expressed or implied and Bell & Howell Company neither assumes nor authorizes any person to assume for it any other obligation or liability in connection with this product.

\* Free warranty service outside the United States and Canada is provided only by Canon Camera Company, Tokyo, Geneva and Panama.



Your camera serial number is located on the bottom of the Spring Motor Winding Grip. Keep a record of it in case of loss or theft.

## KEEP YOUR DIAL 35 HANDY



Now that you've familiarized yourself on how to use your new camera keep it handy. Use it often.

Birthdays, Christmas, vacations and other special events are obviously picture-taking occasions, but so is every day of the week. The little things that happen every day make natural, warm pictures . . . ones that will be treasured even more in years to come. These pictures normally go untaken by most people. Don't let it happen to you.

**Bell & Howell PHOTO SALES COMPANY**

**7100 McCormick Road, Chicago, Illinois 60645**