

HOW TO
USE
YOUR

Bell & Howell

8mm
SPOOL
LOADING
MOVIE
CAMERA

MODELS 319/220



GET ACQUAINTED WITH YOUR NEW Bell & Howell 8mm MOVIE CAMERA

Before you take pictures of the family, or a special event, pick up your Sunometer camera. Examine it closely . . . get the feel of it. Acquaint yourself with the use of the meter. Turn the Sun Dial. Sight through the big Picture Window Viewfinder. Most people find the position shown in the illustration is the most comfortable way to hold the camera. The camera is grasped with both hands and the elbows are braced against the body.

Press down the 3-way Starting Button. This runs film through the camera once it is loaded.

Now you have the feel of your Sunometer camera and we know you are anxious to use it. Before you do, read the important step-by-step instructions that follow. They are important to you and will help make your movie experiences more enjoyable . . . your very first try.



TWO SUNOMETER CAMERAS

are described
in this booklet.
Both models
are similar
in appearance
and have many
identical operating
features.



SUNOMETER 319

With fast $f/1.9$ Super
Comat lens.



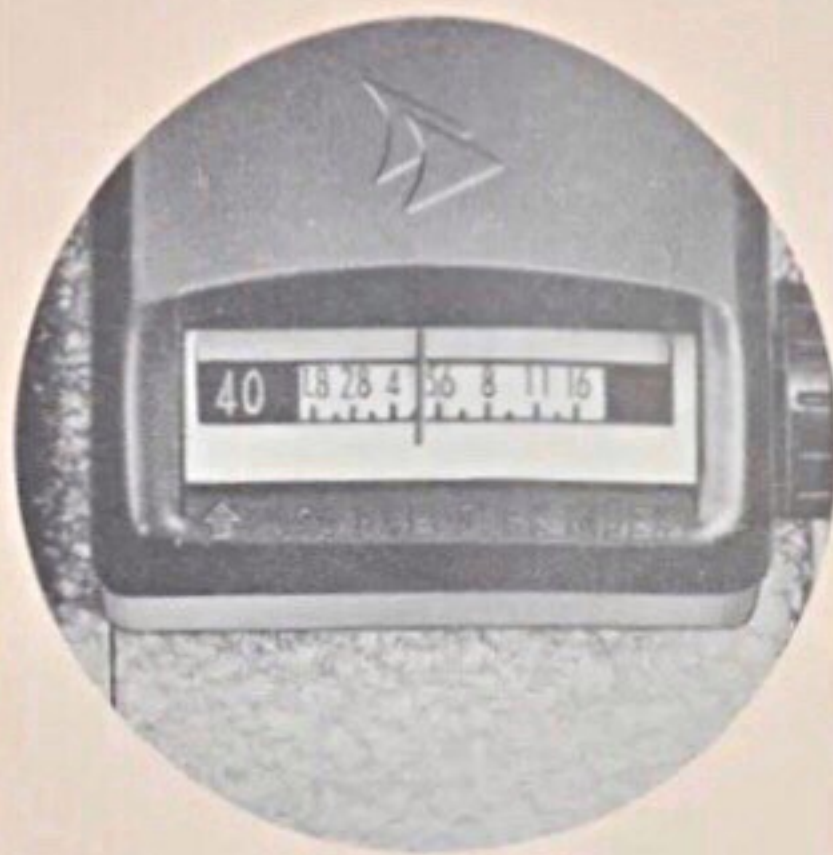
SUN DIAL 220

Same as 319, less
Sunometer.

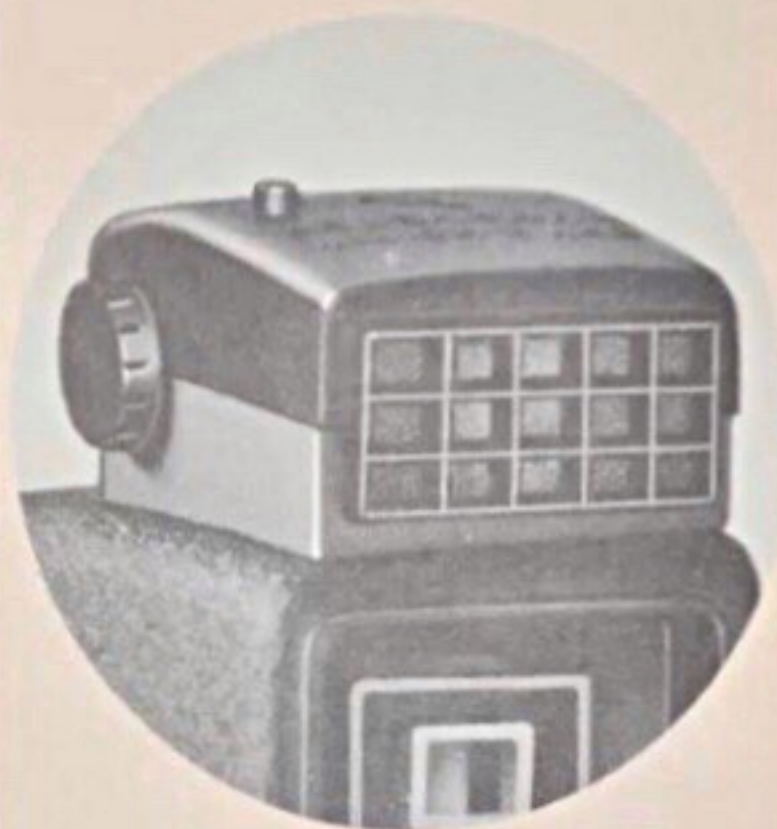
SET THE SUNOMETER MODEL 319



Turn the dial on side of Sunometer (Model 319 only) and you'll see the following numbered scales in the top viewing window: 10, 16, 25, 32 and 40. This scale lets you set the Sunometer for different kinds of film. Turn the dial until the index number of the film you load into your camera is visible in the viewing window.

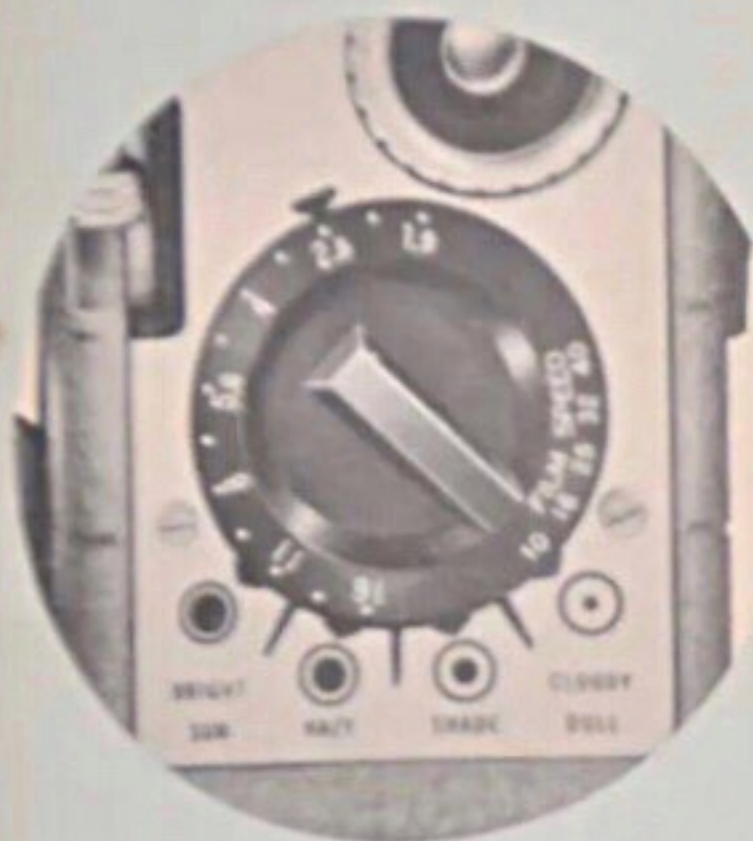


Your Sunometer will adjust for film index numbers as high as "40". When using films with higher numbers, make sure you use the number recommended in the film manufacturer's instructions. The scale directly opposite the exposure index number is calibrated with lens settings from $f/1.9$ to $f/16$. These settings are similar to the numbers that appear on the camera Sun Dial. Once you set the correct film index number, you're ready to set the Sun Dial.



Here's all there is to it:
(1) Point the camera directly at your subject. (2) Look in the viewing window of the Sunometer. If there's enough light, a red needle will move to one of the lens setting numbers. (3) Set the Sun Dial so it corresponds to the lens setting shown by the red needle.
Note: If the light on your subject changes, repeat above to determine new lens setting.

SET THE SUN DIAL MODEL 220



The Sun Dial is a quick and easy method of setting your camera for various lighting conditions and with different types of film. On the base of the dial are the numbers ASA 10, 16, 25, 32, and 40. Immediately below the dial on the camera are weather symbols indicating lighting conditions of Bright Sun, Hazy, Shade and Cloudy Dull.



To set the camera for correct exposure:

1. Determine the ASA Speed of the film you are using by referring to the film literature.
 2. Decide which light condition, as indicated by the weather symbols, is applicable at the time of filming. Set the Sun Dial for the type of light on the subject.
 3. Rotate the dial until the ASA Indicator Mark is opposite the selected Weather Symbol.
- You are now ready to shoot.



Your Bell & Howell Dealer can supply you with an exposure guide for making indoor movies. There is also an exposure guide attached to most light bars, which you will need for indoor movies. The numbers on the top edge of the Sun Dial (1.9, 2.8, 4 etc.) correspond to the f/ numbers on the exposure guides. Just set the proper f/ number opposite the arrow to set for proper exposure.

3-WAY STARTING BUTTON

1.



Press downward slightly on the starting button and film moves through your camera. If your camera has been fully wound, you can expose $6\frac{3}{4}$ feet of film, enough for 4 or 5 average length scenes. Your camera is factory set to run at a steady speed, governor-controlled to prevent any slow-down at the end of the film run.

2.



Press all the way down and you lock it in its continuous run position. This lets you get into your movies. Place the camera on a tripod or steady support whenever you want to step into the picture. To release the continuous run lock, merely push up on the starting button.

3.



Press upward and a single frame is exposed. A minimum of single frame shots is necessary to make an adequate animation scene. An animation scene can give you unusual effects: For example, if you move a toy very slightly between each frame, it will appear to move when you project the scene. Similarly you can shoot tricky titles or the beauty of a sunset. You'll want to use a tripod here also.

VIEWFINDER



Sight through the viewfinder and you'll see three colored rectangles. These rectangles outline the picture areas photographed by available lenses. With a Wide Angle lens—use the entire area of the viewfinder. With the normal 10mm lens—use the larger RED rectangle. With a Telephoto lens—use the small YELLOW rectangle. Attachment lenses are shown on page 9.

UNLOADING



After you have exposed the first 25 feet of film as shown on the Film Footage Indicator, keep your finger on the starting button until the footage indicator stops or reads "End." Avoiding direct sunlight, remove the camera door. The top spool is now empty, film is on the bottom spool. Lift out both spools carefully and you're ready to reload for the second half.

USING SECOND HALF OF FILM



Each 8mm spool contains 50 feet of film (25 feet double width) so you must run the film through your camera again to expose the second half. Turn the spool containing the film over and place it on the upper or right hand spindle. Proceed with loading for the second half as instructed under "Loading." After you have exposed the second half, your film is ready for processing.

PLAN YOUR MOVIES



When you're ready to shoot movies, hold your camera steady and level. Try to plan your movies so they tell a story with continuity and interest. Shoot each scene for at least 7 seconds, taking a series of pictures with relationship between them. Naturally some scenes should be longer than others, depending on the nature of the subject you are filming.

CLOSE-UPS



When shooting close-ups of subjects 3 to 6 feet away from your camera, point the camera up slightly. No part of your subject should extend above the imaginary dotted close-up lines for each lens, as shown in the illustration. To insure well centered subjects it is important that you follow these instructions. See how close you can get to your subject, page 9.

KEEP YOUR CAMERA CLEAN



A clean camera is a more efficient camera. Whenever necessary wipe off the lens, viewfinder and film channel with a piece of lens tissue moistened with Bell & Howell Opti-Kleen. Use a toothpick to dislodge any hardened emulsion or dirt that might accumulate in the film channel from the passage of film. Never use sharp tools on your camera.

Congratulations . . . ON YOUR RECENT PURCHASE

The Bell & Howell Camera that you now own will provide you with many years of enjoyable service. The latest refinements, some of which are not covered in the instruction manual, have been added to your camera. Therefore, please read these additional instructions before operating your camera for the first time.

FILM COUNTER

The numbers immediately above the Film Counter Needle (the upper scale) show the amount of film used, expressed in feet. On those cameras having a lower scale, the figures indicated are in meters.

WIND AFTER EVERY SCENE

A new type, high-torque spring motor has been installed in your camera that allows you to use any standard 8mm movie film now on the market. One full winding gives you enough power to expose $6\frac{1}{2}$ ft. of film, enough for 4 to 5 average length scenes. However, it is a very good practice to wind after every scene. By doing this, you will never miss part of an important event that you could possibly never take again.

SETTING THE DIAL

The Front Plate and Dial on the front of your camera differs slightly from the illustrations in the manual. To more adequately accommodate the wide range of films now available, the film speeds (ASA 10, 16, 25, 32, and 40) are used on the bottom of the dial rather than the words "Color" and "Black & White". The base of the dial is marked with the weather symbols indicating the lighting condition of Bright Sun, Hazy Shade and Cloudy Dull. To set the camera for correct exposure:

1. Determine the ASA speed index of the film you are using by referring to the film carton or manufacturer's literature enclosed with the film.
2. Decide which light condition, as indicated by the weather symbols at the base of the dial, is applicable at the time of filming.
3. Rotate the dial until the indicator mark in the center of the appropriate ASA Speed locates opposite the selected light symbol. You are now ready to shoot.

NOTE: When setting the aperture with the aid of an exposure meter or guide, the correct f stop (1.9, 2.8, 4, 5.6, 8, 11, or 16) on the top edge of the dial should be aligned with the red arrow on the camera face plate.