



BROWNIE
REFLEX
CAMERA **20**



Your Camera Makes—

- Black-and-white
Snapshots
- Color
Snapshots
- Color
Transparencies

with
Kodak
620
Films



For 12 Black-and-white Snapshots—Standard enlarged black-and-white $3\frac{1}{2} \times 3\frac{1}{2}$ -inch prints are available from your $2\frac{1}{4} \times 2\frac{1}{4}$ -inch negatives.

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For 12 Color Snapshots—Standard enlarged full-color $3\frac{1}{2} \times 3\frac{1}{2}$ -inch prints can be made from your $2\frac{1}{4} \times 2\frac{1}{4}$ -inch color negatives.

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For 12 Color Transparencies—Full-color $2\frac{1}{4} \times 2\frac{1}{4}$ -inch positive transparencies can be obtained for direct viewing. Standard enlarged $3\frac{1}{2} \times 3\frac{1}{2}$ -inch color prints from these positives can be ordered or...

● When the "super-slide" format in the finder is used to frame the picture, color slides, mounted in 2 x 2-inch cardboard mounts ($1\frac{1}{2} \times 1\frac{1}{2}$ -inch opening), can

be obtained for projection or for making color prints. See page 9.

Your dealer can arrange for processing, prints or enlargements.

To make sure that you understand your camera, read these instructions. Before any important pictures, shoot a roll of film and take a few flash shots. Your Kodak dealer will be glad to help.



BUTTON

LOAD—

*but never
in bright,
direct light*

1 First, slide the bright metal **BUTTON** on the bottom of the camera to the end of its slot marked **LOAD**; then move the lock **LEVER** as far as it will go toward **OPEN**. Remove the **FILM HOLDER**, as illustrated.

Note: If you're practicing with an empty camera and find that the shutter release cannot be pressed down, turn the winding knob on the bottom of the camera to unlock the shutter release.

2 The empty spool should be over the **WINDING KNOB**, in the recess labeled **EMPTY SPOOL** on the film holder of the camera. Engage the center hole of the spool with the pin of the **SPRING**, push up against the spring; then press in the lower end of the spool, while turning the winding



FILM HOLDER

knob to engage the winding key with the slot in the spool.

3 Hold the spool of film so that the paper will draw over the outside of the roll; then place the film spool in the recess labeled **LOAD** on the film holder of the camera. Do this by engaging the center hole of the film spool with the pin of the spring. Now press up against the spring and swing in the bottom spool flange in the direction of the arrow so that the lower center hole of the film spool engages the lower **PIN**. The illustration shows the film spool just before pressing in the bottom flange to engage the lower pin.





4 Break the film seal; then draw the paper, colored side out, over the side of the film holder marked FILM THIS SIDE. Thread the end of the paper fully into the *longer* slot of the empty spool. Turn the winding knob two full turns to make sure the paper is straight and tight. To make sure the paper is tight,

apply pressure on the paper while winding the two turns.

5 Replace the film holder—*make sure that it is all the way in*. Lock it in place by moving the locking lever as far as it will go toward LOCK.

6 Uncover the red window on the back of the camera by rais-



ing the slide by its exposed tab (under thumb in illustration) as far as it will go, in the direction of the arrow. Turn the winding knob* until warning arrows appear in the window; then continue turning slowly until the pair of "1's" is centered in the window. (The film name precedes each of the 12 numbers.)

Lower the slide to cover the red window.

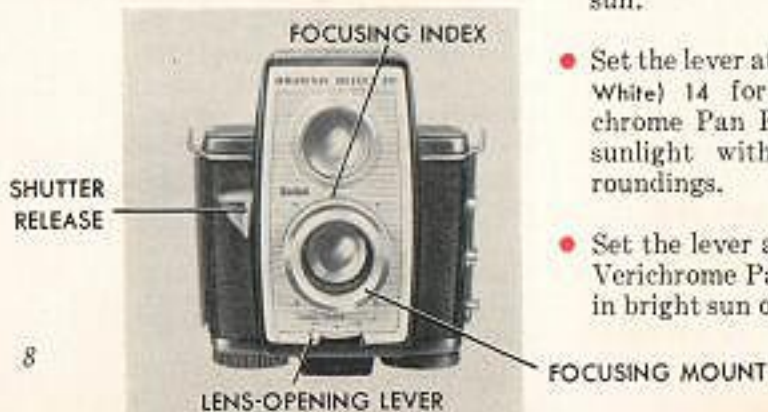
7 Now slide the bright metal button, on the bottom of the camera, to the end of its slot (marked EXP. 1-12). With the button in this position, it will not be necessary to consult the red window to center succeeding exposures—merely turn the winding knob to a stop. The slide can be raised, of course, to see how many exposures have been made. *Then lower the slide to protect the film.*

Note: When winding film, grasp the camera so that your hand does not smudge either lens.

**Warning:* If the winding knob locks during this operation, the bright metal button on the bottom of the camera has not been moved to LOAD.

OUTDOOR SNAPSHOTS

The best outdoor color snapshots are made in sunlight. Kodak Verichrome Pan Film can be used on sunny or hazy days. Have the sun behind you.



1 Set the LENS-OPENING LEVER by moving it to the proper exposure value number. Make sure that the lever "click-stops" at one of the three numbers, *not between them.*

- Set the lever at **COLOR 13** for color films exposed in bright sun.
- Set the lever at **B & W (Black and White) 14** for Kodak Verichrome Pan Film exposed in sunlight with average surroundings.
- Set the lever at **15** for Kodak Verichrome Pan Film exposed in bright sun on sand or snow.

2 Focus the camera by revolving the FOCUSING MOUNT until the white dot of the zone which represents the correct camera-to-subject distance "click-stops" at the FOCUSING INDEX.

3 Lift the finder hood (shown raised, below). Compose the picture in the full reflex finder. However, with pictures on Ektachrome Film for mounting in 2 x 2-inch mounts, frame the picture you want within the area indicated by the "super-slide" format illustrated.

4 Hold the camera steady (see illustration) while slowly pressing the SHUTTER RELEASE all the way down to snap the picture.

A silver band will appear behind the lens to indicate that the film should be advanced. Advance the film.

Note: The shutter release remains locked after it is tripped until the winding knob is turned. This feature prevents double exposures.



SUPER-SLIDE
FORMAT

Compose picture within dotted-line area for 2 x 2-inch mounts only. Use full finder area for all others.



FLASH SNAPSHOTS

Flash pictures are as easy to make as those in sunlight. Just add a flash holder, such as the Kodalite Midget Flashholder, described on page 12. Or if you want real speed and ease, ask your dealer about the Kodak Rotary Flashholder, Type 1.

To make color transparencies indoors, use Kodak Ektachrome Type F and *clear* flash lamps or

Kodak Ektachrome Film for Daylight and *blue* flash lamps. With Kodak Verichrome Pan or Kodacolor Films, use *clear* flash lamps.

- 1 Attach a flash holder to the camera (see page 12).
- 2 Insert a flash lamp in the socket. Push the lamp straight into the socket until it clicks.
- 3 The setting of the lens-opening lever and the distance from the camera to the subject are very important. Keep within the distances listed in the table below or on the back of the flash holder and adjust the lens-opening lever and the focusing mount accordingly.

(The distance ranges in the flash table overlap a single distance zone on the camera in some instances. Make sure that the focusing mount is adjusted to include the correct distance.)

4 Compose the picture in the finder. If you are taking pic-

tures on Ektachrome Film for slide mounting, use the "super-slide" format (page 9).

5 Slowly press the shutter release to flash the lamp and take the picture.

6 Press the LAMP RELEASE to remove the used lamp.

FLASH EXPOSURE TABLE

KODAK FILM	LENS OPENING	Approx. Distance	
		M-2, No. 5, or No. 25	M-5 or M-25
Verichrome Pan	14 or 15	CLEAR	4 - 12 ft
Kodacolor or Ektachrome F	13		6 - 9 ft
	14		4 - 6 ft
		No. 5B or No. 25B	
Ektachrome for Daylight	13	BLUE	M-5B or M-25B
	14		7 - 10 ft
			5 - 7 ft

Although the camera is marked COLOR 13 and B&W 14, flash pictures can be made at the 14 setting with color films for shorter distances.

Note: Since lamps may shatter when flashed, use of a transparent flashguard, such as the Kodak Midget Flashguard, is recommended. Never flash lamps in an explosive atmosphere.



KODALITE MIDGET FLASHHOLDER

How to install the batteries:

- 1** Remove the cover by loosening the coin-slotted screw.
- 2** Make sure that battery and flashholder contacts are clean; then insert two 1½-volt photoflash penlite BATTERIES, both base down. Have the PULL TAB under the batteries with end out.

Note: Batteries must be fresh (test at least 3¼ amperes each). Weak batteries may cause picture failures. For most dependable lamp firing, a Kodalite Midget B-C Flashpack and 15-volt photoflash battery are recommended.

- 3** Replace the cover and tighten the screw.
- 4** Place the flashholder posts into the holes in the side of the camera. Tighten the knob on the side of flashholder.

The Kodalite Midget Flashholder is primarily designed for the midget-type M-2, M-5, or M-25 lamp.* Bayonet-base No. 5 or 25 lamps can also be used.

Note: Do not place a lamp in the socket until the flashholder has been attached to the camera.

*Use blue lamps—M-5B, M-25B, No. 5B or No. 25B—with Kodak Ektachrome Film for Daylight only. See flash table.

UNLOAD—*Never in bright or direct light*

- 1 After the 12th snapshot, first slide the bright metal button, on the bottom of the camera, to the end of its slot marked LOAD.
- 2 Turn the winding knob until the end of the paper has passed the red window and is completely wound on the spool.
- 3 Move the lock lever as far as it will go toward OPEN and remove the film holder.

4 Grasp the spool of film, press toward the spring end and remove the film. Fold under the end of the protective paper and fasten it with the sticker.

5 Move the empty spool to the winding knob end of the camera so that it is ready for reloading.

Important: Do not leave exposed film in bright light. Have film processed as soon as possible.

PHOTO AIDS



- Kodalite Midget Flashholder or Kodak Rotary, Type 1—Don't miss the many indoor picturing opportunities made possible by one of these flashholders. Make pictures around the clock.
- "How to Make Good Pictures" is perhaps the most famous and popular picturing book of all time. See your Kodak dealer for this and other publications.
- The Kodak Close-up Attachment No. 7A is slipped over the lens for close-ups of people, flowers, etc. To make pictures, set the focusing mount at the CLOSE-UP dot; the lens-to-subject distance must be $2\frac{1}{2}$ to 4 feet.
- The Kodak Cloud Filter 7A captures fluffy clouds by making the blue sky appear darker. Use it with Kodak Verichrome Pan Film—*never with Kodak color films.*
- The Kodaslide Pocket Viewer combined with the Kodak Illuminator, Model 1, really lets you enjoy your super slides.
- The Kodak 300 or 500 Projector lets you see the full beauty of your super slides brilliantly projected on a screen.
- The Brownie Reflex 20 and Twin 20 Carrying Case will protect your camera.

DETAILS

FILM • Negative Size—2¼ x 2¼ inches
• Film Load—Kodak 620; 12 exposures
• Film Advance—Film metering provided after visually setting to first exposure

LENS • Lens Openings—E.V. 13 for color films, E.V. 14 and 15 for black-and-white film (Verichrome Pan Film)
• Focusing—"CLOSE-UPS" 4-6 ft., "GROUPS" 6-12 ft., and "SCENES" 12 ft. to infinity

SHUTTER • Instantaneous, with double-exposure prevention

FINDER • Brilliant, reflex-type, protected by hood. Provides "super-slide" format for 2 x 2-inch slides from Kodak Ektachrome Film

NECK STRAP • Adjustable, supplied with camera

FLASH • Built-in synchronization, M-2, M-5, M-25, No. 5, No. 25 lamps in Kodalite Midget Flashholder or M-2, M-5, or M-25 lamps in Kodak Rotary Flashholder, Type 1

CONSTRUCTION • Durable, molded two-piece body. Bright aluminum finished metal parts

GUARANTEE

Within a year after purchase, any repairs necessary to this Brownie 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 unsatisfactory operation, 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.

EASTMAN KODAK COMPANY, Rochester, New York