

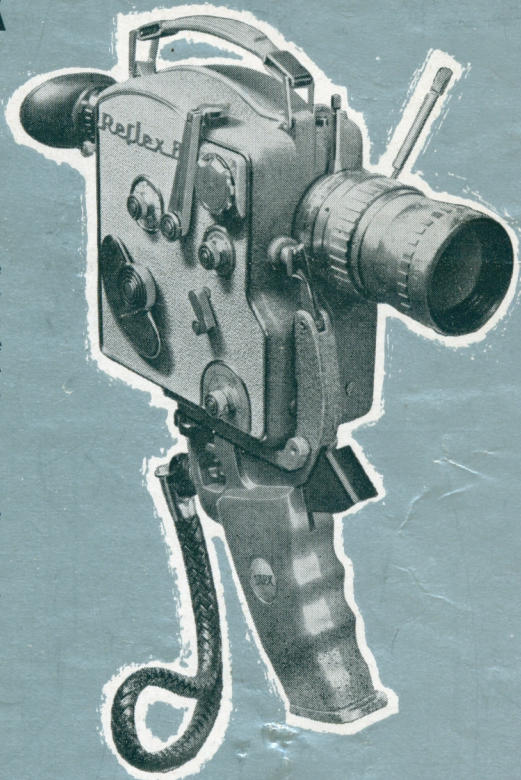
# CAMEX *Reflex* CR

## SINGLE-LENS REFLEX CAMERA WITH BUILT-IN EXPOSURE METER

In addition to its parallax-free through-the-lens viewing system, the Camex Reflex CR also has a parallax-free behind-the-lens exposure meter, **for continuous light adjustment while viewing and while filming.**

It consists of:

- 1) Galvanometer with needle, visible in the large 1:1 LIFESIZE image of the Reflex system.
- 2) Potentiometer with setting knob (located beside reverse crank), for film-emulsions from 10 to 320 ASA and speeds from 8 up to 32 frames per second.
- 3) Two longlife miniature batteries, in a special battery case between the 2 film spool baffles.



# INSTRUCTION FOR USE

## PRELIMINARY CONTROL

Open camera back and check position of the lid of the battery case between the 2 film spool baffles.

The tip of the lid must point between the 2 baffles (Fig. 1), so that the photoelectric cell operates.

## SETTING OF POTENTIOMETER

Adjust the potentiometer for both film emulsion and frames per second by turning the dial of the control knob, so that any of the figures 8, 16, 24, 32 or any intermediate speed is opposite the ASA rating (Fig. 2 and 2b). The sensitivity of the film is expressed in ASA. The conversion table on the left gives you the corresponding ratings in SCHEINER and DIN.

## SETTING OF DIAPHRAGM

Look through the Camex and turn the diaphragm scale with the attached lever, until the needle matches the vertical index line in the center of the Reflex image.

This automatically gives you **always** the correct setting. If the lens is set at its largest aperture and the needle remains immobile in the right field of the reflex image, you don't have sufficient light for filming.

Release camera and start filming. Watch the needle continuously and bring it back to the center, whenever a light change moves it to the left or right, by turning the diaphragm. The deflection of the galvanometer needle, visible in the large Reflex image, corresponds to approximately 2 diaphragm stops. This means that the zone of sensitivity corresponds to one diaphragm stop to the left and one to the right side of the vertical index line. Outside of this zone the needle does not react.

Lets suppose that the correct aperture is f/8. If you turn

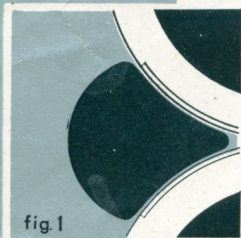


fig. 1

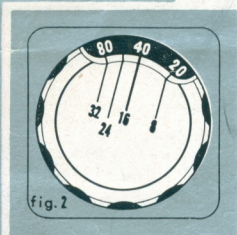


fig. 2

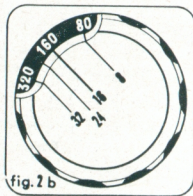


fig. 2b

ASA	Scheiner	DIN
10	22	11
20	25	14
40	28	17
80	31	20
160	34	23
320	37	26

the diaphragm scale from  $f/1.8$  all the way to  $f/22$ , you first see the needle completely immobile in the left field of the reflex image. It starts to move to its right, as soon as you reach diaphragm stop  $f/5.6$ , passes the vertical index line at  $f/8$  and continues to move to the right until you reach  $f/11$ . From  $f/11$  to  $f/22$  the needle remains immobile in the right field.

It is recommended to turn the diaphragm scale slowly, in order to match the needle with the index line within the zone of sensitivity.

### CONTROL OF BATTERIES

The 2 longlife miniature batteries ought to last for 18 months. Nevertheless it is recommended to check them periodically.

Take off the gate and remove the lid of the battery case by lifting it. Put it on again with its tip pointing **downwards** (Fig. 3), locate the small contact spring in its place, then press the lid down completely.

Turn the setting knob of the potentiometer, so that the speed of 16 frames per second is opposite the ASA rating 320. Point the camera towards a well illuminated surface. The needle must reach the central index line or move to its left. If the needle remains on the right of the index line, the batteries have to be changed.

It is recommended to change **both** batteries at the same time (Fig. 5).

### UPKEEP OF BATTERIES

Certain precautions extend the life of the batteries. As with any ordinary photo cell it is recommended not to expose the lens to the light too much and too long, except while filming.

If you do not use the camera for a certain length of time, it is suggested to interrupt the electric circuit. Turn the lid of the battery case such that its tip points **upwards** (Fig. 4), which disconnects the batteries (Fig. 5).

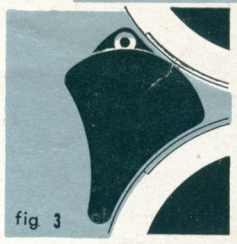


fig 3

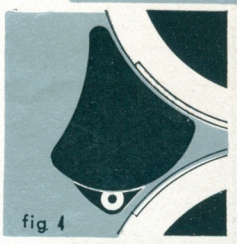


fig 4

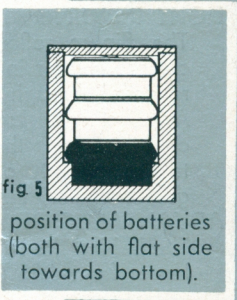
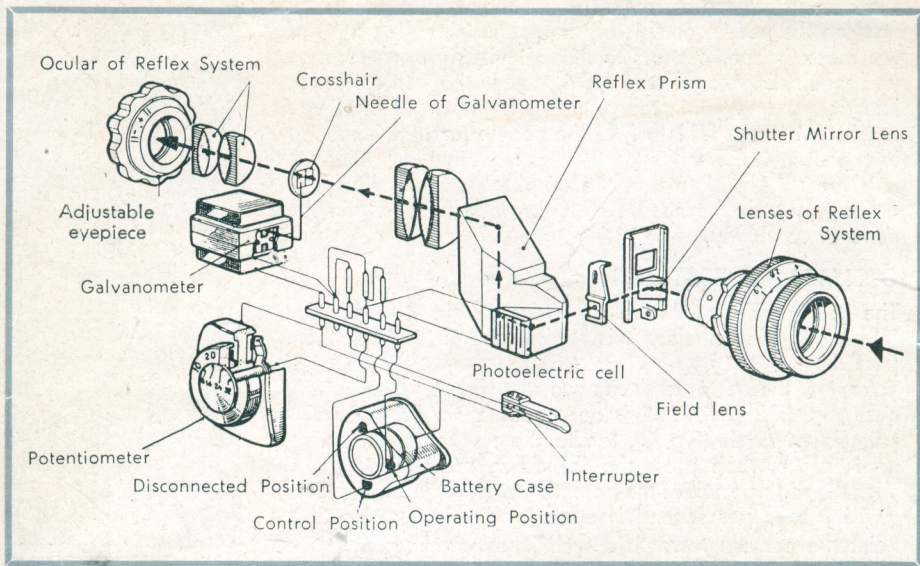


fig 5

position of batteries (both with flat side towards bottom).



## PRINCIPLE OF OPERATION

### LIGHT READING

The flip-up reflex mirror in the CAMEX Reflex CR is synchronized with the camera shutter in such a way that all the light rays passing through the lens are reflected through the reflex system, rendering a strikingly brilliant reflex image. A reflecting surface of one of the reflex prisms is coated, so that a small fraction of light passes through it, which activates the photoelectric cell. Proportionately to the intensity of light this cell creates an electric current, which operates the galvanometer, the needle of which is visible in the reflex image.

### ADVANTAGES OF THE PARALLAX-FREE BEHIND-THE-LENS EXPOSURE METER

The behind-the-lens exposure meter works with any of the 20 quick-change CAMEX lenses from 6.25 up to 145 mm. It automatically makes the necessary corrections when using lens accessories, such as close-up lenses, filters, extension tubes, microscopic and endoscopic adapters, etc.