





211-9/Engl.

## LEICINA

#### INSTRUCTIONS

The LEICINA® 8 V is a fully automatic 8 mm motion-picture camera for double-8 roll films. It features a photo-resistive exposure-control device, an electricmotor film drive for 16 or 24 frames-persec., a reflex focusing and viewing system, and a VARIOGON f/1.8 zoom lens with a continuously variable range from 8 to 48 mm.

Although the LEICINA 8 V is remarkably easy to use, please read through this little booklet before attempting to operate your camera. We're sure that it will answer many questions and add to your photographic pleasure and success.

R = registered trade mark

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# LEICINA 8V







### The flicker-free reflex viewfinder

shows the scene exactly as it will appear on the film, completely free of any parallax error. The automatic aperture scale appears beneath the picture field and the film-reserve indicator at the left. The eyepiece is adjustable from +5 to -5 diopters. Once adjusted, the eyepiece need not be changed unless the LEICINA is used by another person. The correct method for adjusting the eyepiece will be found on page 15; please read carefully.

#### The film reserve indicator

rises inside the arrow to indicate the amount of film remaining to be exposed:

- a 3/4 film remaining
- b 1/2 film remaining
- c- 1/4 film remaining
- d- Stop filming! End of useable film.
- End of film-leader; indicator stands still; film spool is empty.

### Setting the film speed index

- Turn the front part of the exposure meter until the red index-line clicks into position opposite the red circle. This is the normal position for filming scenes of average contrast.
- (2) Pull out the chromed front ring and turn until the red ASA bar points to the red ASA index for your film. (Or the white DIN bar against a white DIN speed). The speed index scales provide intermediate unengraved click-positions for setting intermediate values. On the white DIN scale each click = 1 DIN degree. The following table gives the intermediate ASA values:

Engraved ASA Indexes	6	10	16	25	40	64	100		200	400	
<b>Uemarked ASA Click-Stops</b>	3, 4, 5	8	12	20	32	50	80	125, 16	0 2	50, 320	500, 650, 800

#### The automatic exposure control

measures subject lighting and sets the correct lens opening like the pupil of your eye, opening or closing the aperture in response to every lighting change. As long as the indicator stands between "2" and "16" perfectly exposed films will be obtained.









#### Manual exposure control

(a) Normal automatic setting for subjects of average contrast when no filter is used. (b) Setting for the yellow filter with a 2 x factor.
(c) Setting for both the orange and the grey neutral density 4 x filters. (d) Setting for an intentional underexposure. Manual exposure adjustments are made by rotating the meter unit while observing the aperture indicator through the viewfinder. The exposure control remains fully automatic even after a manual adjustment, continuing to respond to lighting variations.

### Testing the automatic exposure control

Looking through the viewfinder, turn the circular switch (14) to the "RT" position. If the battery is good the indicator will move past "16." If not, open the meter battery coverplate (15) and replace with an RM 625 or PX-13 mercury cell obtainable from photo dealers.

#### The VARIOGON zoom lens

is controlled by means of the two coaxial rings shown above. The inner ring controls the zooming so that the focal length may be varied continuously between 8 and 48 mm to fill the viewfinder with as much or as little as is wanted. Specific, marked focal lengths can be set by aligning one of the numbers on the zoom control wheel with the white dot on the center core. The large outer ring controls focusing between infinity ( $\infty$ ) and 40" (1 m). Metric distances are in white; feet in red. For best focusing accuracy always use the 48 mm focal setting. Then rotate the zoom control ring to the desired focal-length setting, or until the composition appears as you want it in the viewfinder.







#### Correct eyepiece adjustment

is accomplished by means of a simple threestep procedure:

- (1) Set the focus at infinity  $(\infty)$ , the zoomcontrol ring to 48 mm, and turn the eyepiece control ring (7) as far as it will go counter-clockwise.
- (2) Center a very distant object (at least 500 ft from the camera) in the viewfinder so that it intersects the centrally engraved black ring.
- (3) Now rotate the eyepiece ring slowly in a clockwise direction until both the black ring and the distant object appear as sharp as possible.

#### Making fade-outs between scenes

As you end the scene, turn the meter ring (13) slowly in a clockwise direction as far as it will go and then stop filming. This will have underexposed the last frames of the scene. Now set the circular switch (14) to "RT", pull off the lenshood, cover the lens with your hand (or by pressing the front of the lens mount against your body), and press the release button to run the film backward for no more than 5 seconds. When you start filming the next scene, slowly rotate the meter ring counter-clockwise until it falls back into the red-circle click-stop. Practice this procedure several times with an empty camera before attempting with film.

**Note:** Some photographers may prefer to apply filter factors to the ASA or DIN speed index instead of using the factor scale. This has the advantage of preserving the redcircle click position so that one can fade back in by "feel," without taking the eye from the viewfinder. To apply the filter factor to the film speed index divide the factor into the ASA number, using the nearest available value, or reduce the DIN rating 3 degrees for each additional stop required. **Example:** With an ASA 50 (= DIN 18) film and a 2 x factor we would reset to ASA 25 or DIN 15.

#### Viewfinder black-out control

When filming from a tripod, the eye may not be at the finder eyepiece and strong backlighting may enter. To prevent this turn the black-out control (10) clockwise (facing the eyepiece) as far as it goes.

#### **Mounting filters**

Remove the bayonet-mounted lenshood (1) by turning counter-clockwise about a half inch and lifting free. Unscrew its front section. LEITZ or other standard Series VIII (64 mm  $\phi$ ) filters drop into the back section of the hood, and the front part is replaced.





#### "Double-8" films

are available in all countries and are run through the camera twice to expose the first side, then the second. After the first side has been exposed the camera is opened and the position of the two spools is reversed to run the second side through the camera. The film processor cuts the film in half, straight down the middle, and splices the two halves together so that you receive a 50-foot (15 m) film ready for projection. Note: Because double-8 films are run twice through the camera there is a "leader" at one end, and a "trailer" at the other, each about 5 feet (1.5 m) long. These provide protection against light-fogging and facilitate loading; they are not intended for filming.



### Opening the film-spool chamber

Raise the hinged part of the chamber-latch (5) at the top of the camera and turn counterclockwise as far as it goes. The cover can now be drawn off by sliding to the rear.



#### **Film loading**

Avoiding direct sunlight, unwind about 2" of film, press down on the end of the film tension-bar as shown above, and drop the spool over the right-hand peg. The tension-bar will prevent the film's unravelling while you lead the film-end over to the filmgate, following the marked arrow-path. Push the film into the gate until a firm stop is felt. Pressing slightly on the tension-bar to reduce tension, press the release trigger to run off



about 6" of film (about 2" longer than the handgrip). Next, insert the film-end into the slotted core of the take-up spool and drop this spool over the left-hand peg. Finally,





secure the slack by giving the take-up (lefthand) spool about two clockwise turns.

Before closing the spool-chamber press the release trigger very briefly to note that the film is running smoothly, and glance at the galvanometer to check the condition of your batteries. Any reading within the white sector means that the batteries are in good condition. A red reading indicates that the batteries need replacement. (Special instruc-







tions for recharging the nickel-cadmium battery are provided with the charging unit.) Replace the chamber-cover by sliding back over its guide-rails, and re-engage the catch by turning clock-wise and folding flat. Before filming press the release trigger for about 12 seconds to run off the leader. You are now ready to film! (Note: Replacement of the chamber cover automatically releases the film tension-bar.)

### For the second run-through

reverse the positions of the two spools and reload by repeating the procedure already described, remembering again to run off about 12 seconds of film before filming on the second side. To remove the right-hand (feed) spool it is necessary to press the tension-bar. Make sure that the film-end is properly inserted in the slotted core of the take-up spool.

### To open the battery chamber

use a coin to loosen the locking screw (17) and pull the cover-plate straight off as illustrated above. The battery housing may now be eased out with your thumb and forefinger.





#### Loading the battery holder

Open the holder by loosening the end-screw and insert four 1.5-volt "AA" penlight cells, taking care to follow the "+" and "-" markings. Page 29 of this manual lists recommended penlight cells for various countries. Those marked with an asterisk (\*) give best service. Reassemble the holder (mating the raised guides circled in the picture at right) by dropping the screw into the hollow shaft and tightening. The end of the protective adhesive tape should lie next to the legend " $4 \times 1.5 v$ ".

**Caution!** When inserting the battery housing be sure that the small slot at the front of the housing points down, and check to see that the battery and camera contacts overlap properly.



#### LEICINA maintenance



- (1) Clean the film pressure-plate (lifting the shiny spring-lock and swinging open as shown above) occasionally, using a camel's hair lens-brush. Do not play with the gate, and never attempt to load the camera with the gate open.
- (2) Dust lens surfaces with a camel's hair brush. If further cleaning is required use

a soft, previously washed linen cloth. Disposable, nonchemically treated white lens tissues may also be used. Beware of chemically impregnated or colored tissues; these are for spectacles only and may damage optical surfaces.

(3) Always remove the battery housing if the LEICINA is to be stored for more than a few months.

- (4) Charging and maintenance instructions for the nickel-cadmium battery are provided in a separate sheet. Please read this carefully, and remember that this battery must be kept charged at all times.
- (5) One set of four penlight cells (or one charging of the nickel-cadmium battery) provides sufficient energy for a minimum of 10 complete films. The expendable penlight cells should be changed annually, even if less than 10 films were exposed. Always replace the cloth tape across the battery holder opening as a protection against leaky batteries.
- (6) The list on the back cover of this manual lists applicable batteries for both the motor-drive and exposure-control. Beware especially of miniature non-mercuric button-cells which have the same dimensions as the proper mercury cells. These cheaper button-cells deliver excessive voltages, leading to inaccurate exposure. Only 1.35-volt mercury cells listed on page 29 should be used in your LEICINA.

### The measuring LEICINA strap

has black dots printed at 4" (10 cm) intervals to facilitate critical measurement of short distances as, for example, when making film titles.

#### **Batteries for the LEICINA**

Batteries and miniature mercury cells suitable for use in the LEICINA are widely available throughout the world. All size "AA" (DIN 40850) batteries can be used to provide energy for the LEICINA motor drive providing that their individual output is at least 1.1 volts at a load of 250 milliamperes. The following is a list of batteries tested and recommended by us:

#### I. 1.5-volt "AA" Batteries for the Motor-Drive:

a) Made in Europe:	Eveready 815 USA	Tat Sheng UM-3 Japan			
Daimon 1298* West-Germany Pertrix 284* Pertrix 254 Pertrix 251	Eveready 915 Burgess 930 Mallory ZM 9* Mallory MN 1500*	Toshiba 25 Y 3 Five Rams 555 Hong Kong Flying Bomb 363 Winchester 1711			
Ever Ready U 7* England Berec U 7* Vidor V 0028	Marathon         173           RCA         VS         313*           RCA         VS         334*           RCA         VS         034	* These batteries are specially recom- mended because of their high electrical output.			
Hellesens 18* Denmark Hellesens VII-75*					
Tudor T 6 Sweden	c) Made in Asia				
Sajo JS-8 De Witte Kat H 13 Holland Leclanché 518 Switzerland	Diamond 2005 Japan Flamax UM-3A Key Max 640	II. 1.35-volt Miniature Mercury Cells for the Automatic Exposure-Control System.			
Superpila 433 Italy	Lumina UM-3A Maxell 5766 National 690	Mallory PX 13** Mallory PX 625** USA			
b) Made in USA	National Hyper 3	Mallory RM 625 R and Mallory RM 625 England			
Eveready E 9* USA Eveready E 91* Eveready 1015*	New Max UM-3 A Novel 687 Sharp UM-3 A	Eveready E 625 ** These cells are specially recommend- ed because of their longer storage life.			



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