SEKONIC

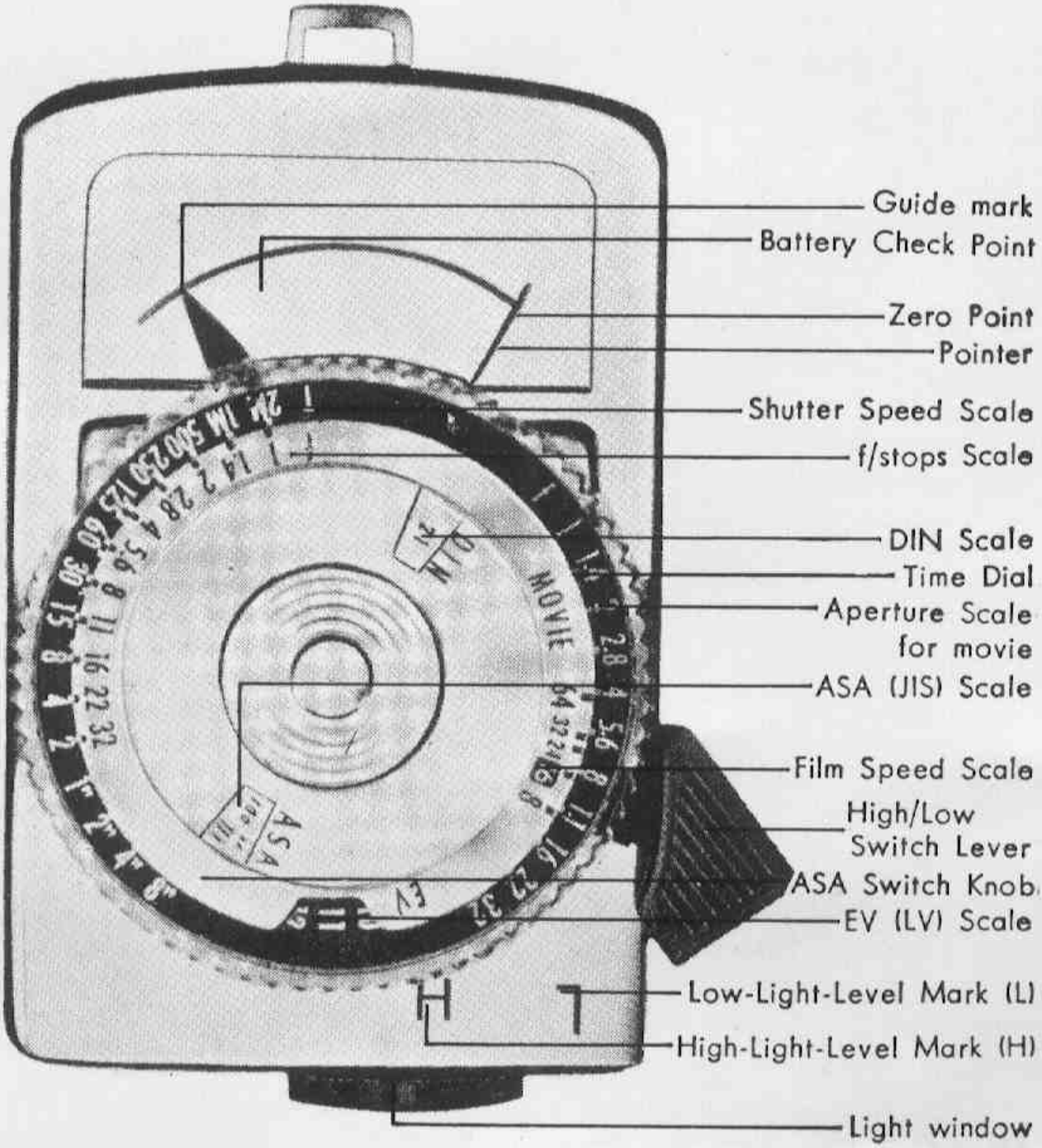
MICRO-LEADER

model

L-98

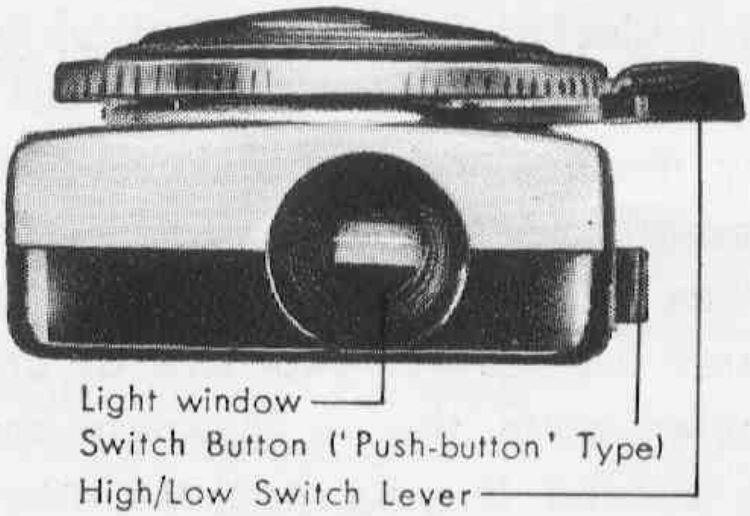
INSTRUCTION

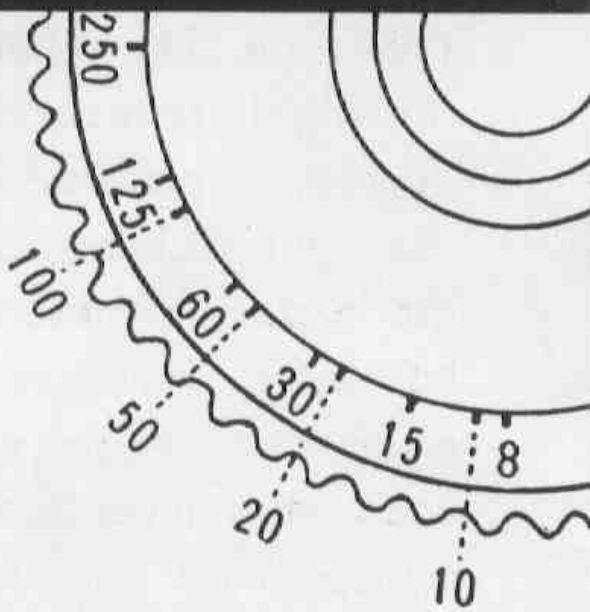
Name of Parts

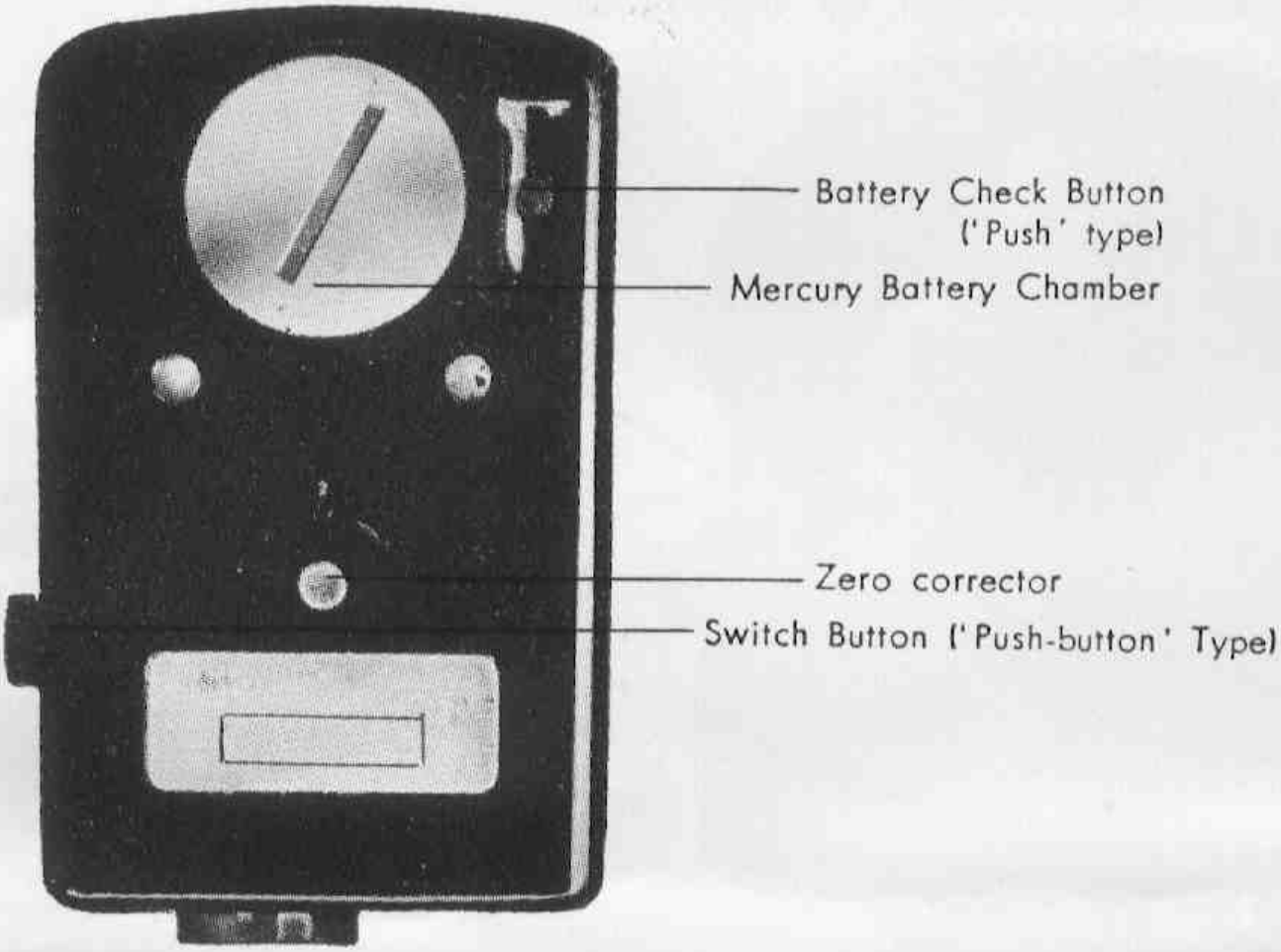


1″=one second

M=1/1000 second

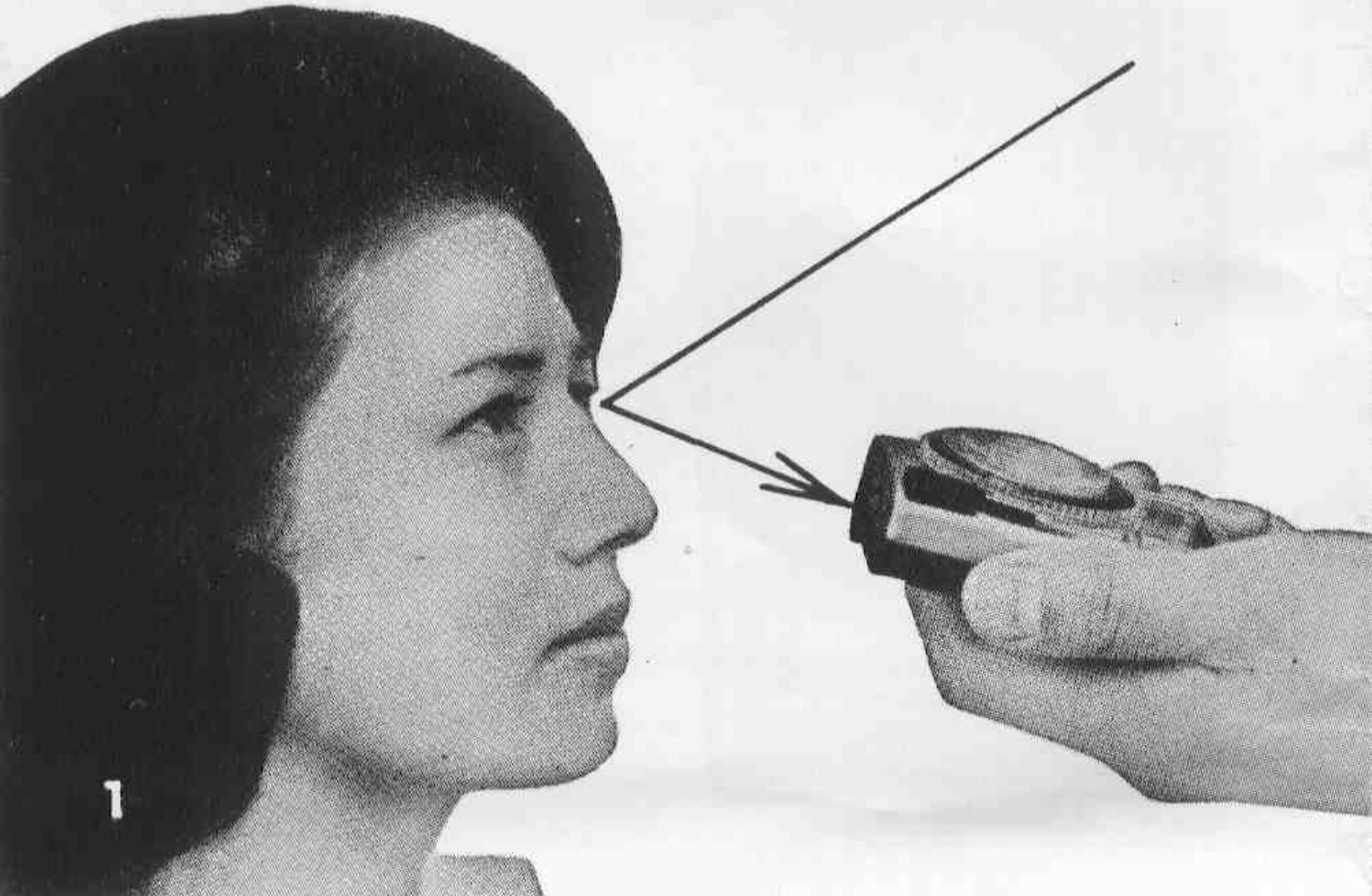






● Use the Reflected-Light-Type Meter Properly

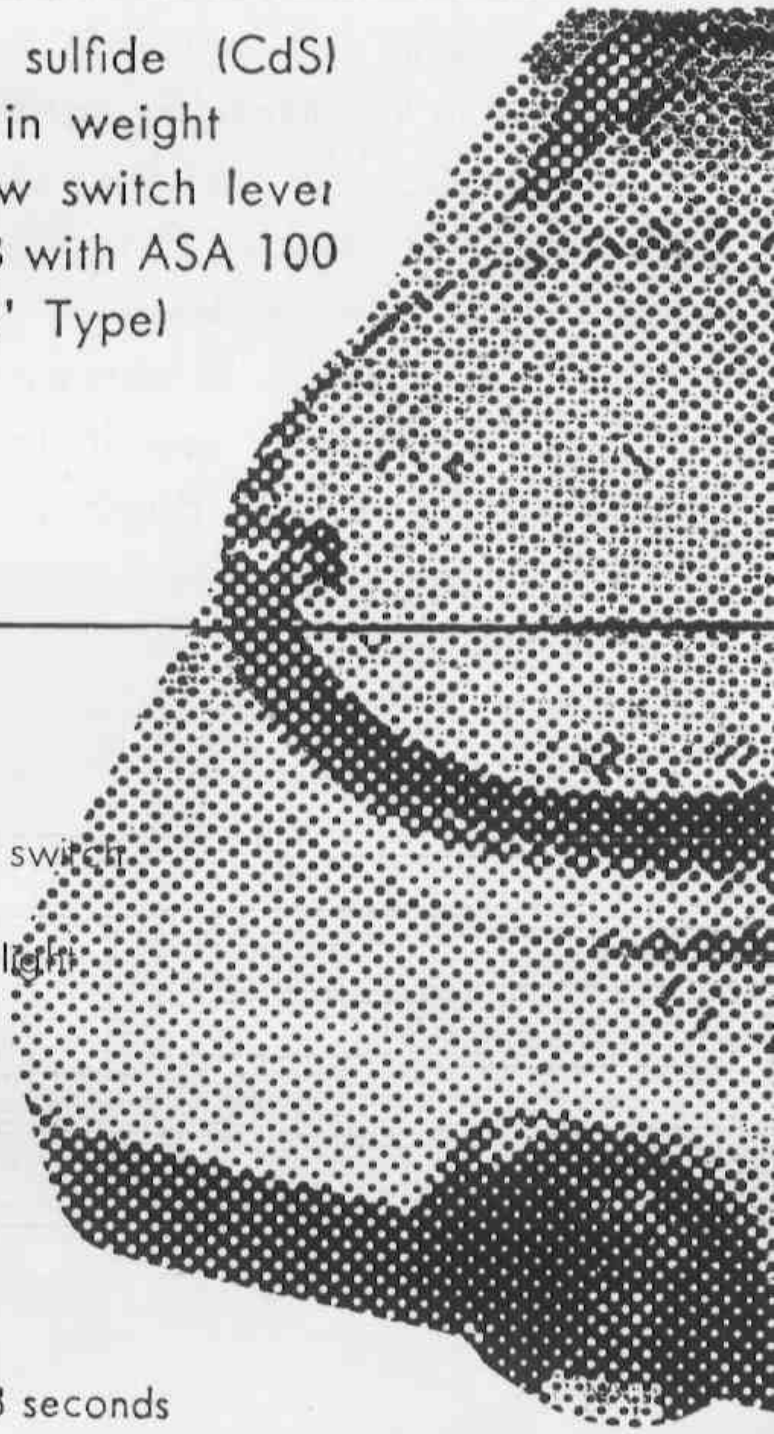
The Sekonic L-98 is an exposure meter of the reflected-light type. The reflected type of exposure meter measures the light reflected from a subject and indicates the correct exposure. Do not use this meter in measuring the light incident on a subject. L-98 is the best of all the exposure meters now available on the market as it has been developed by the engineers of Sekonic Co., after many years of research. Model L-98, which uses cadmium sulfide (CdS), has an extremely wide range of measurement and indicates the correct exposure at any time and place. The meter, quite thin in thickness and light in weight, may be carried in your pocket. It can be manipulated by one hand.



1

● Features:

Highly sensitive cadmium sulfide (CdS)
Thin in thickness and light in weight
Reflected type High/Low switch level
Measuring Range: LV 3~18 with ASA 100
Switch Button ('Push-button' Type)
Battery Checker

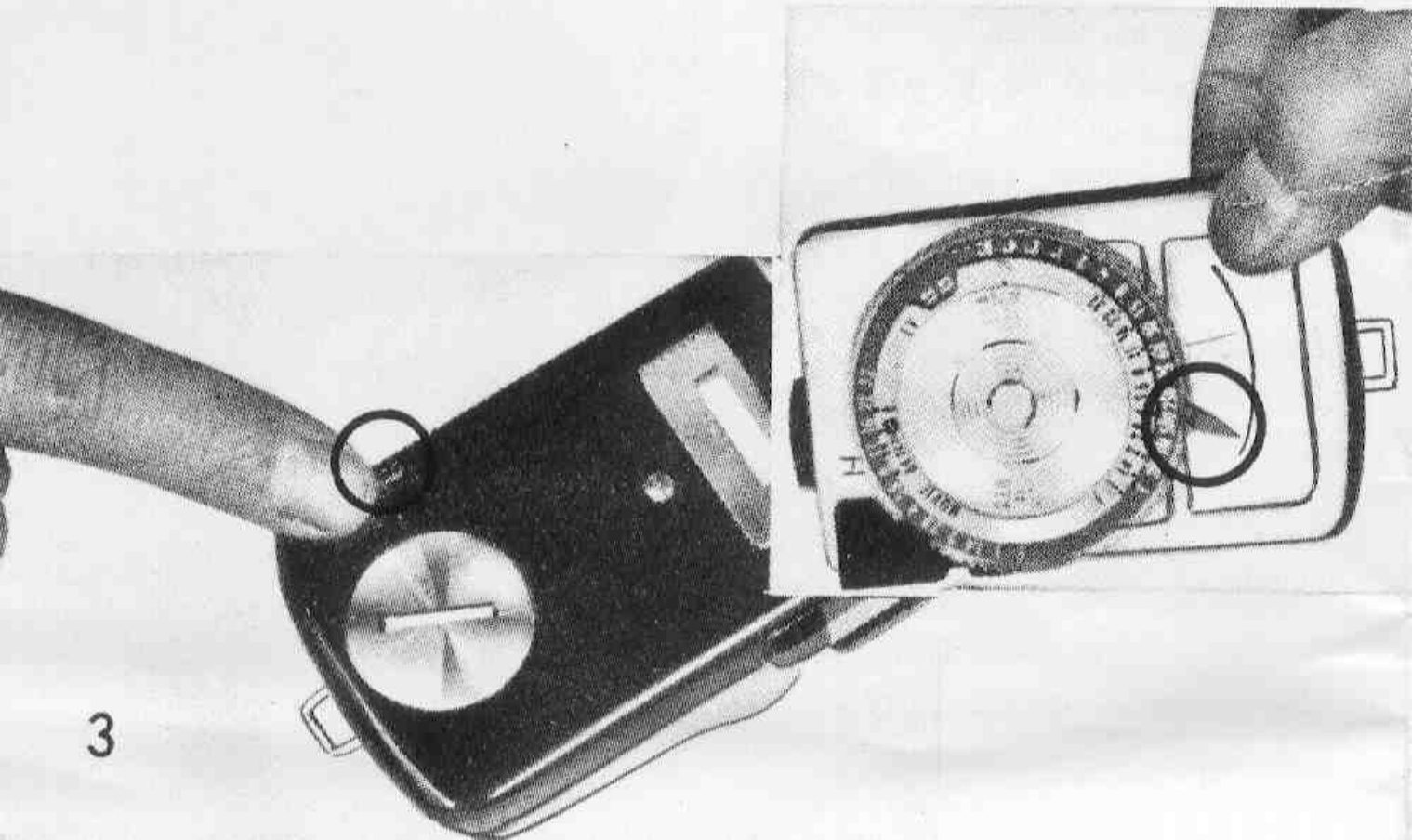


● Specifications

CdS (MPR 63) - one piece
Mercury Battery 1.35V
Reflected Light type
High-and-Low level switch
(coupled to multi-filter)
Measuring Range (ASA 100) & light receiving angle
High-level LV 10~18 40°
Low-level LV 3~11 60°
LV Scale: −2~19
ASA Scale: 6~12,000
DIN Scale: 9~42
f/stops Scale: F/1~32
Shutter Speed Scale: 1/2000~8 seconds
Cine Scale:
(Aperture) F/1~32
(Film Speed) 8~64 f.p.s.
Measurements: 50.6×77.2×28.3 mm
Dial Diameter — 48.5 mm
Weight: 120 grams

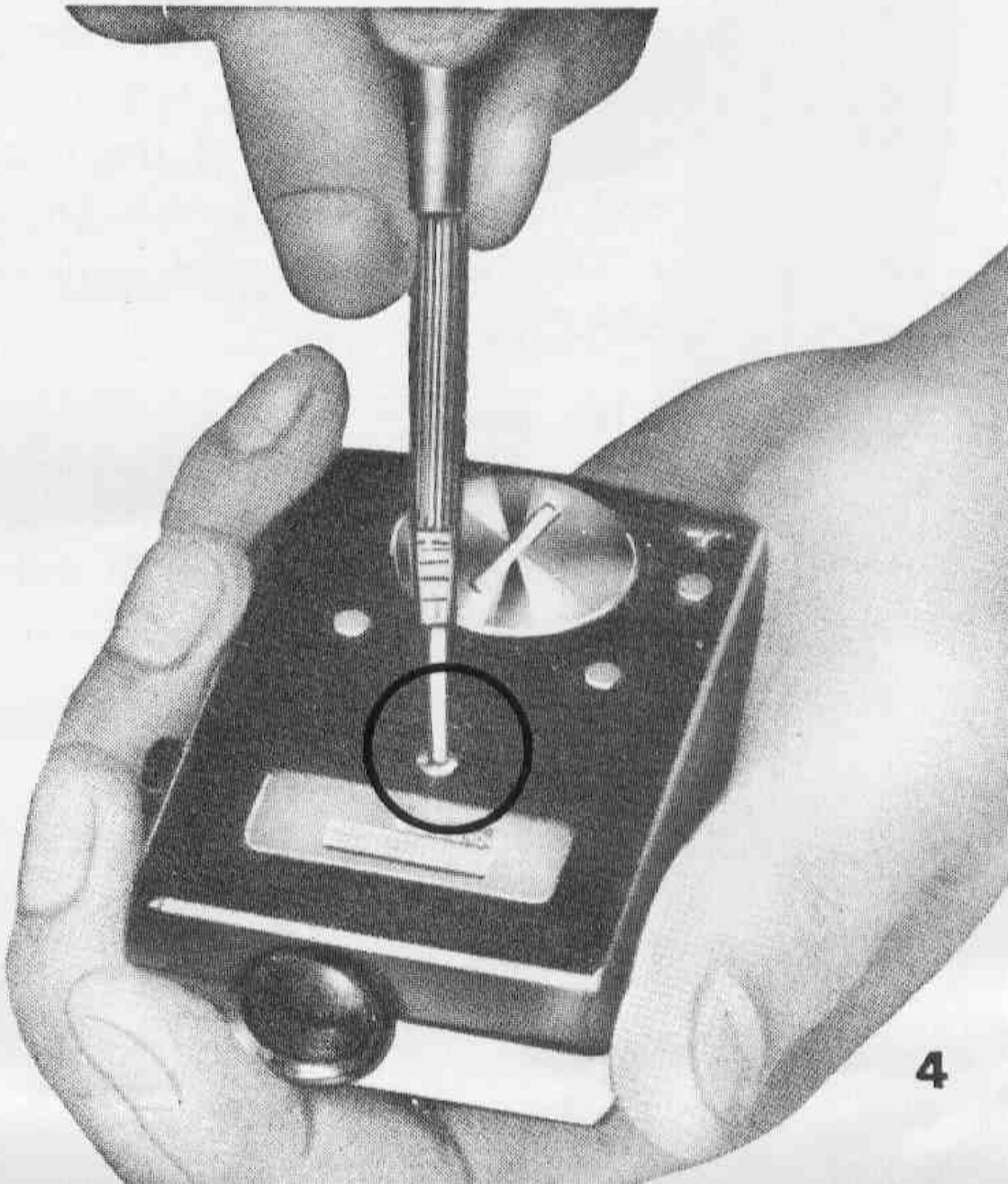
Equip a Battery to the Meter

When using the meter for the first time, put a mercury battery in the Mercury Battery Chamber. Set the battery into position so that that side of the battery bearing the mark "M-D" comes in contact with the Battery Chamber Lid. When the battery is placed in the chamber, make sure that the lid is screwed tight. Depress the Battery Check Knob and see if the Pointer stops in line with the Battery Check Point. If the Pointer does not swing and stop at the check point, the Meter is not working properly and if this is the case, you must change the battery with a new one. The Mercury Battery of 1.35V is used with the meter.



●Align the Pointer with the Zero Point

After the battery has been placed in the chamber, check and see if the Pointer stops in line with the Zero Point when the Switch Button is not depressed. If the Pointer does not stop in line with the Zero Point although the Switch Button is not depressed, turn with a screwdriver the Zero corrector placed on upper back side of the Meter so that the Pointer comes in contact with the Zero Point.



● Use the Reflected Light-Type Meter Properly

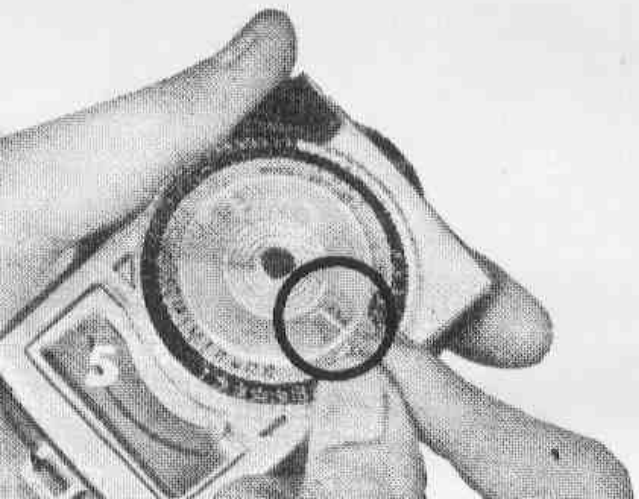
After the battery has been placed in the chamber, the battery checked and the Pointer brought in line with the Zero Point, L-98 is ready to measure the light and indicate the correct exposure with very seldom necessity for readjustment afterwards. The only remaining question lies in how you use the reflected light-type exposure meter as instructed.

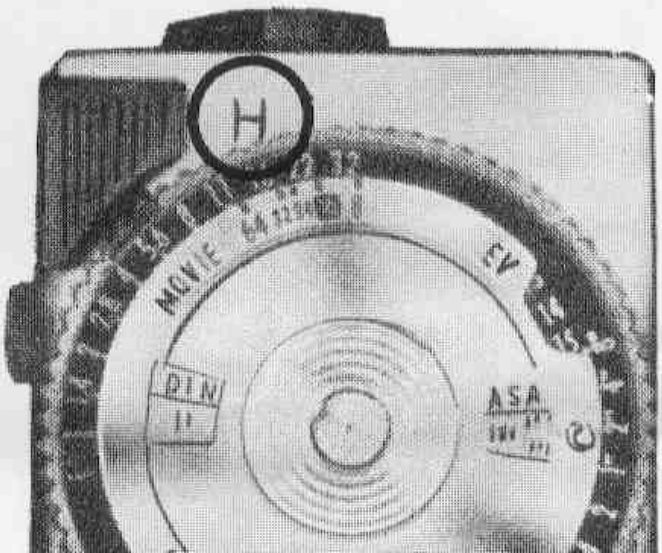
Set the Proper Film Speed

Check the instructions sheet of your film and you will find the sensitivity figure of the film you are using. If the figure is, say, ASA 100, hold the High/Low Switch Lever tight and turn the ASA Switch Knob so that the ASA reading "100" appears in the small slit underneath the word "ASA."

Set the ASA° film speed

Turn the ASA film speed switch knob so that the ASA° reading of your film appears in the slit under the word "ASA°"





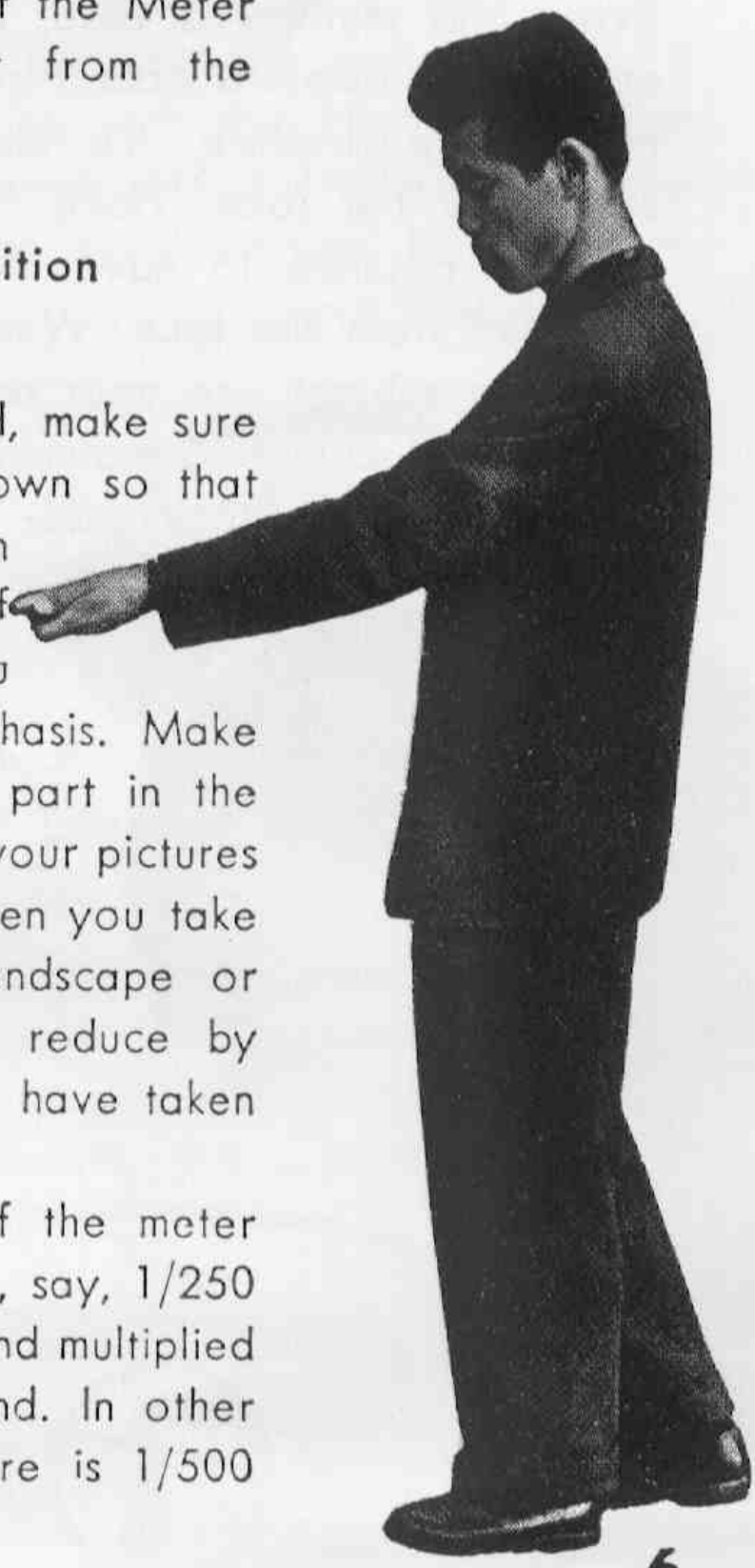
Point the Meter at the Subject

To measure the light, point the Meter toward the subject right from the camera position.

A. From the Camera Position «Landscapes»

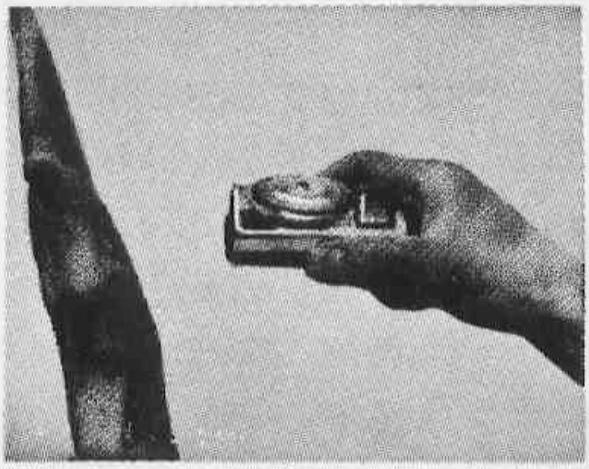
When you use this method, make sure that the Meter is tilted down so that it points midway between your feet and the part of the subject on which you desire to put special emphasis. Make sure that the sky has no part in the meter reading. Otherwise, your pictures will be under-exposed. When you take photographs of a vast landscape or mountains in the distance, reduce by half the reading which you have taken from the Meter.

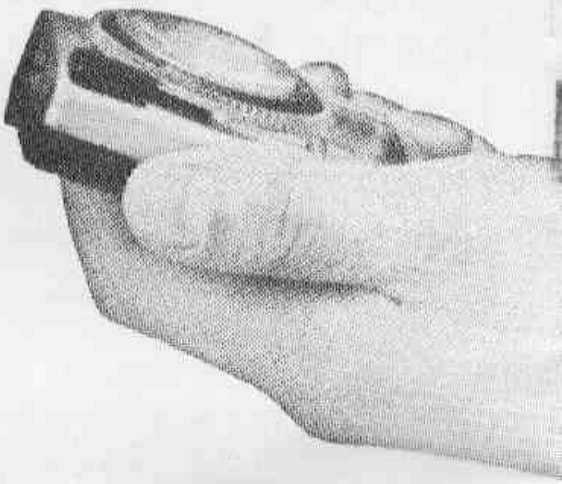
Let us assume that one of the meter readings you have taken is, say, 1/250 second at f/22, 1/250 second multiplied by 1/2 equals 1/500 second. In other words, the correct exposure is 1/500 second at f/22.



B. Measurement for Close-ups. «Portrait»

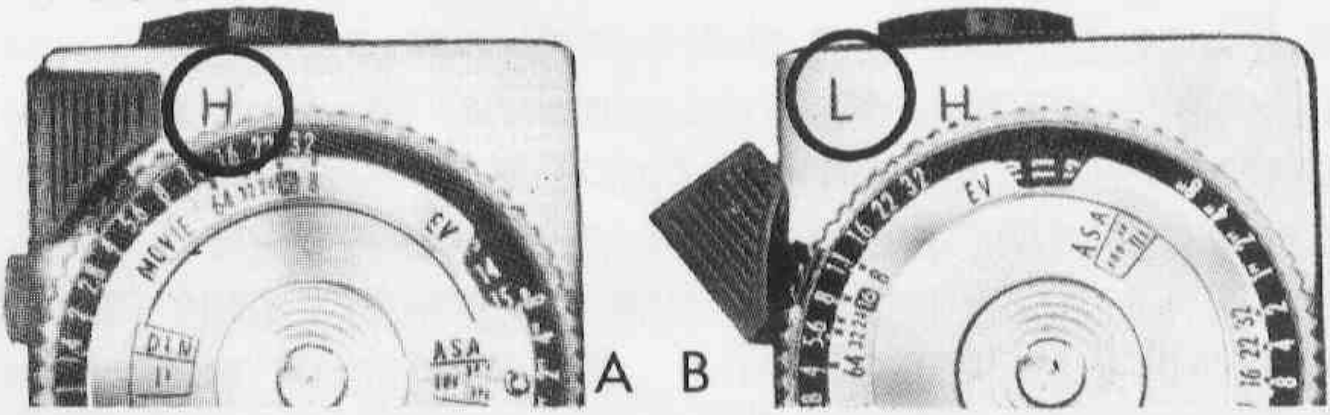
When this method is used, place the Meter about 10 centimeters (about 3 inches) from the subject for measurement. In portraiture, the most important part of the subject is the face. Place the meter as close to the face as possible to have the meter measure the light reflected from the face. When it is impossible to come near the subject, use your palm or a standard reflector in the light condition matched to the important part of the subject. In either case, make sure that your palm or the reflector must not be shadowed by the meter.





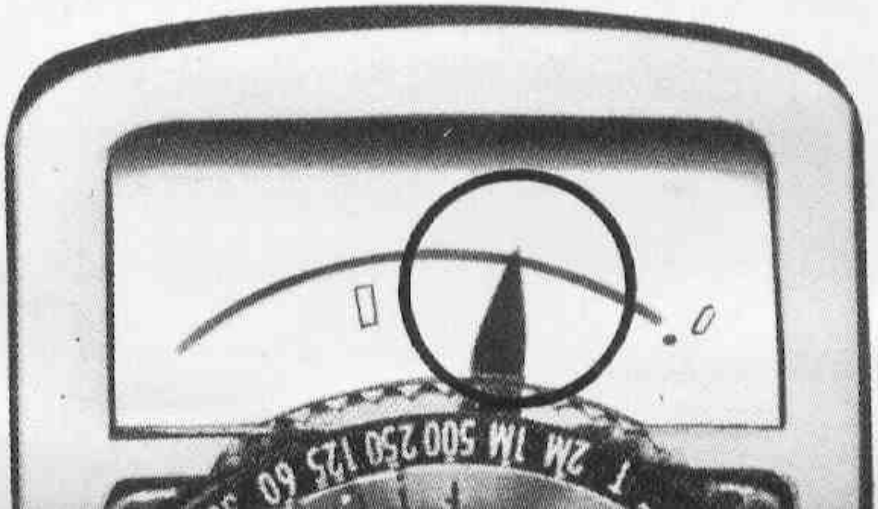
Depress the Switch Button

With the Meter pointed toward the subject in the manner mentioned earlier, depress the Switch Button. If the Pointer does not swing with the High/Low Switch Lever set for highlight measurement (Picture A), move the lever fully in the opposite direction for low light measurement and then depress the Switch Button again. (Picture B)



Turn the Guide Mark Dial to Align the Guide Mark with the Pointer

When the Switch Button is depressed, the Pointer swings and stops at a certain point within one second. Turn the Guide Mark Dial (outer dial) to align the Guide Mark (green-colored follow-pointer) with the Pointer.



When the Pointer and the Guide Mark are brought into line with each other, the scales of shutter speeds and lens apertures are now in their correct relation to each other to give a complete range of related shutter speeds and lens apertures, any one of which will give the correct exposure. If one of the correct combinations of shutter speeds and lens apertures is 1/30 second at f/5.6, any intermediate combination, such as 1/250 second at f/2 or 1/60 second at f/4, may also be used.

In other words, whatever cambination you choose depends upon the subject conditions and your photographing motive. For example, a rapidly moving subject needs a fast shutter speed and therefore a large aperture, which in turn covers a narrow zone of sharpness. A subject of great depth needs a small aperture and therefore a slow speed. Choice of best settings may need a compromise.

Set your camera according to a set of related shutter speed and lens aperture readings. If your camera is of the light-value system, then take a reading from the EV (LV) Scale.

1. Balancing for Tone Range

The following method is recommended when pictures are to be taken in the condition that there is a sharp contrast in the tone range of the subject.

Place the Meter about 10 centimeters (about 3 inches) from the subject to measure the light reflected from the highlight and shadow of the subject. Choose the intermediate value from both scale readings. When portraits are to be taken in this method, it is advisable to use auxiliary lights or reflectors so that the tone range will be of the order of 4:1 or less. (The tone range is the ratio of highlight to shadow brightness.) In color photography, make sure that the tone range is of the order of 4:1 or less.

2. Measurement in an Extremely Dark Place

In the extremely dark place where the light is so poor that the Pointer does not swing at all even if the High/Low Lever Switch is set for low light measurement, point the Meter toward the light source (for example, the moon). Whatever scale reading you may obtain must be multiplied by 10. If one of the correct combinations of shutter speeds and lens apertures is 1/15 second at f/1.4, 1/15 second must be multiplied by 10. The answer for the correct exposure is about one second at f/1.4.

3. When the Camera Is Against the Light...

A. To make Silhoettes

Point the Meter toward the sky or the white background. Take photographs exactly as the Meter indicates. Since the exposure is set for the bright background, the subject is under-exposed and shown as a black shape on the white background.

B. To Delineate the Subject in Rear Lighting

To measure the light, place the Meter near the shadow of the subject. In this case, make sure that the light coming from the back of the subject has no part in the meter reading.

C. To Delineate the Subject and Background In Rear Lighting

Measure the light reflected from the shadow of the subject first and then measure the light reflected from the bright background. For the measurement of the background, refer to the method taken from the camera position on Page 6. Then choose the intermediate value from both readings. This method, however, does not fit for use when the ratio of subject to background is of the order of 1:16 or more.

4. When a Filter Is Used . . .

The Sekonic Meter L-98 is not provided with a scale of filter factors. The aperture value obtained from the meter must be increased according to the factor of the filter you are using on your camera. Example: If your filter has a factor of 2× and one of the combinations of lens apertures and shutter speeds is the order of 1/250 second at f/8, the correct exposure will, therefore, be of the order of 1/125 second at f/8.

5. Extreme Close-ups

The true lens aperture value for a close-up is given by the equation:

$$T = \frac{M \times D}{F}$$

where T - True aperture value F - Focal length of lens
D - Distance between lens and film surface

Example: When the focal length of the lens is 50 millimeters, the distance between the lens and the film surface is 100 millimeters and one of the correct combinations of apertures and shutter speeds is the order of 1/4 second at f/4, the true aperture value is:

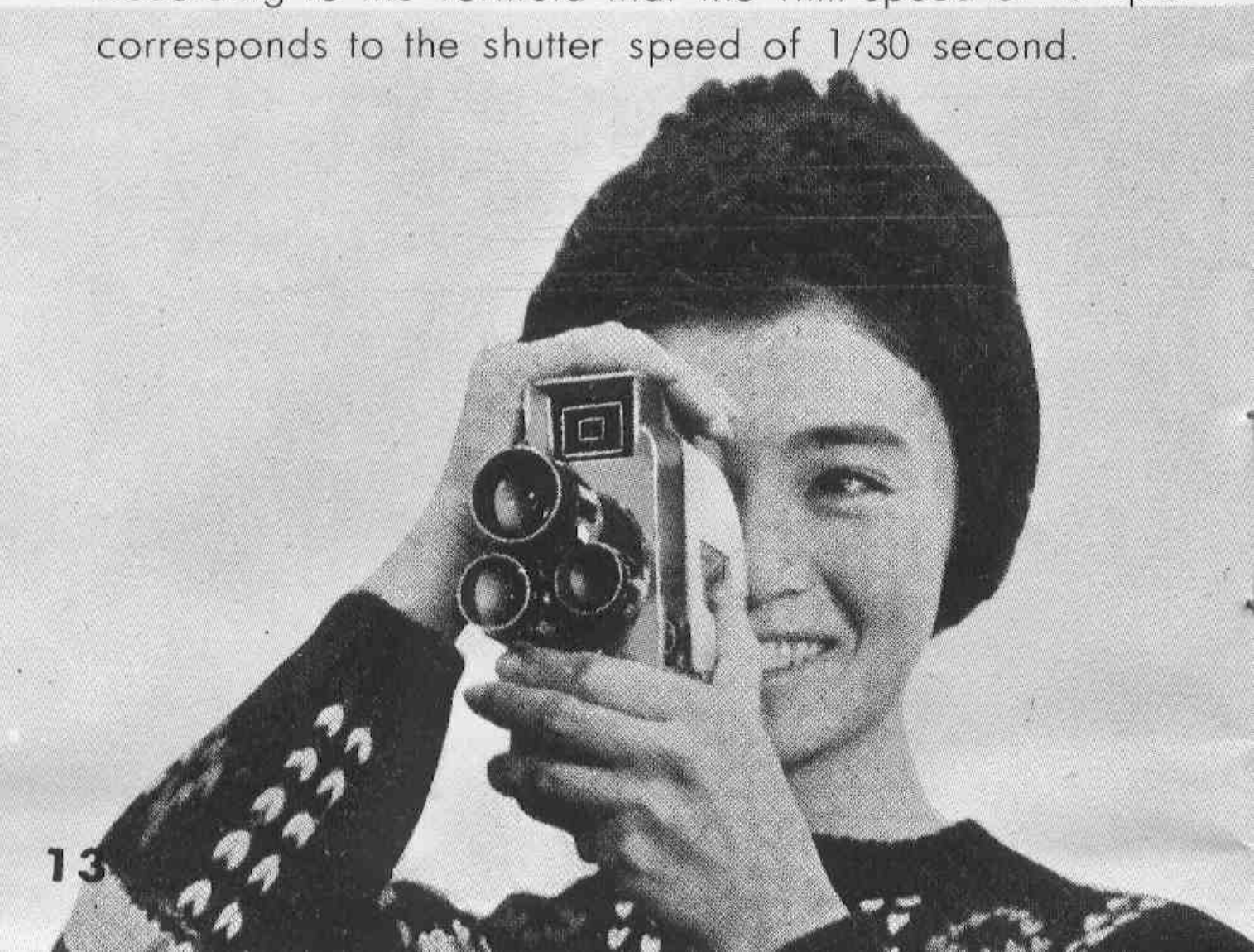
$$\frac{4 \times 100}{50} = 8$$

This means that even if the lens is stopped at f/4, the aperture in this instance is the same as for f/8. Therefore the aperture must be increased by four times. The correct exposure is the order of 4 seconds at f/8 or one second at f/4.

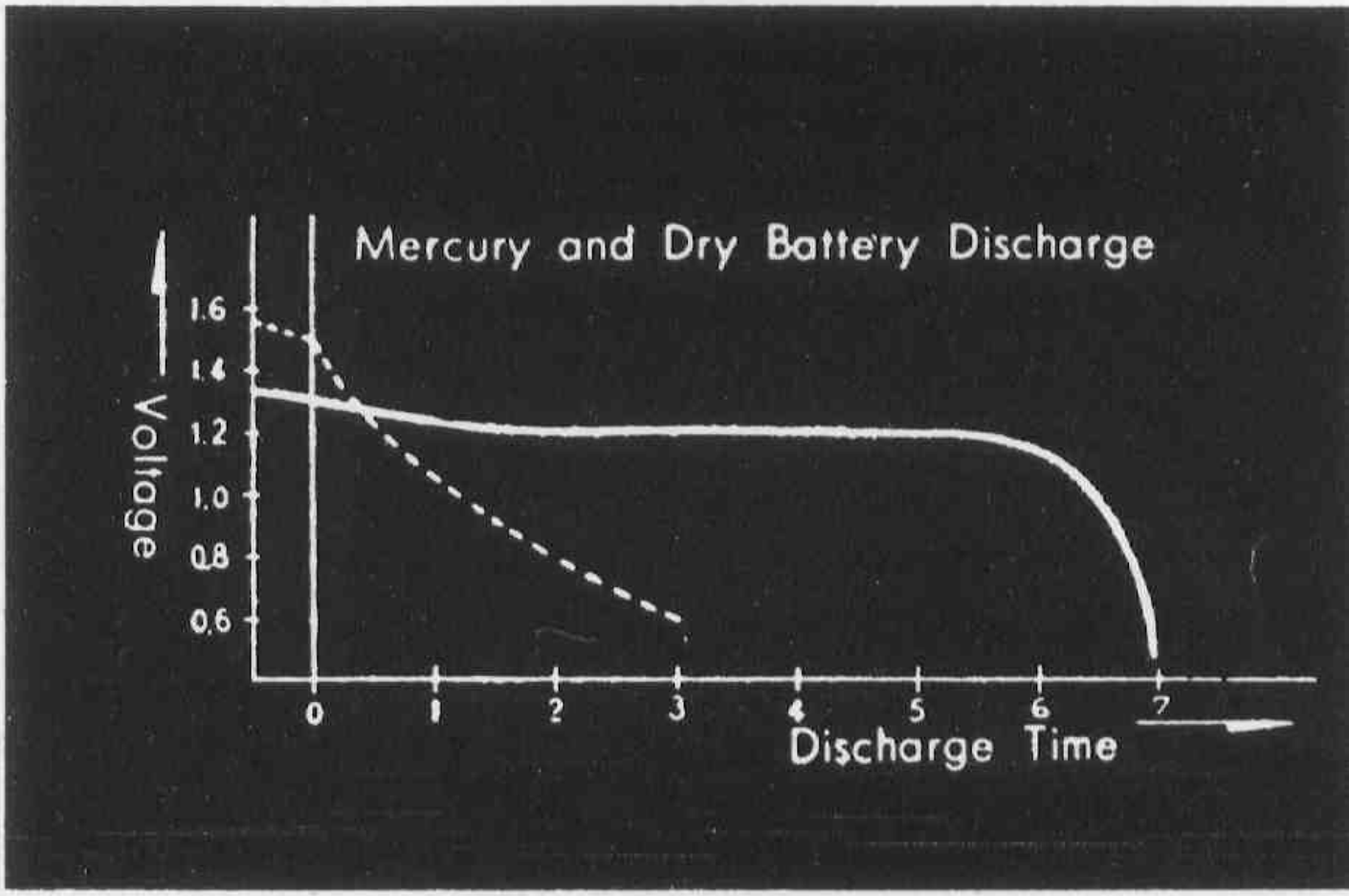
● Cine Photography

As far as the measurement is concerned, there is no difference between cine cameras and still cameras. In contrast to the 35mm still camera, the cine camera has a shutter speed scale calibrated in frames per second, such as 8, 16, 32 and 64 f.p.s. Take a film speed reading from the "Movie" scale provided on the inner dial of the Meter.

In ordinary 8mm cine photography, the standard film speed is 16 f.p.s. (1/30 second). A scale of related film speeds and lens apertures may be easily computed according to the formula that the film speed of 16 f.p.s. corresponds to the shutter speed of 1/30 second.



●To Safeguard the Meter



1. Do not leave the meter in a humid place for a long time.
2. Do not place the meter in a place with a temperature of more than 60°
3. Do not drop or jar the meter.
4. The meter, when not in use for a long time, must be taken out of the leather case and kept with a damp-proofing agent in a paulownia or other box. Do not keep it in a safe or any other metallic container.
5. Also, the same method as above 4 must be applied to safeguard the mercury battery.

●GUARANTEE

Your Sekonic Micro-Leader Exposure Meter is guaranteed against faulty workmanship and materials for a period of one year from the date of sale. It should be handled with the care which fine, precision mechanism deserves.

Should it become inoperative within the guarantee period, return it for repair. Re-pack it in its original container, packing with at least an inch of cushioning to prevent further damage. If original container has been disposed of, use a sturdy corrugated cardboard box. Address it to any Sekonic Service Department listed below whichever convenient with you to send.

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