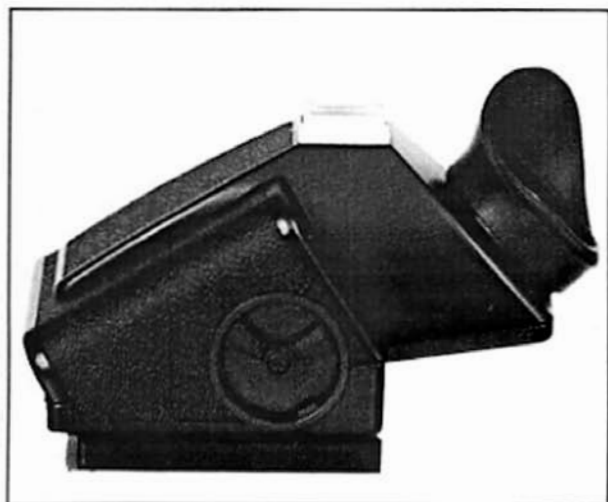
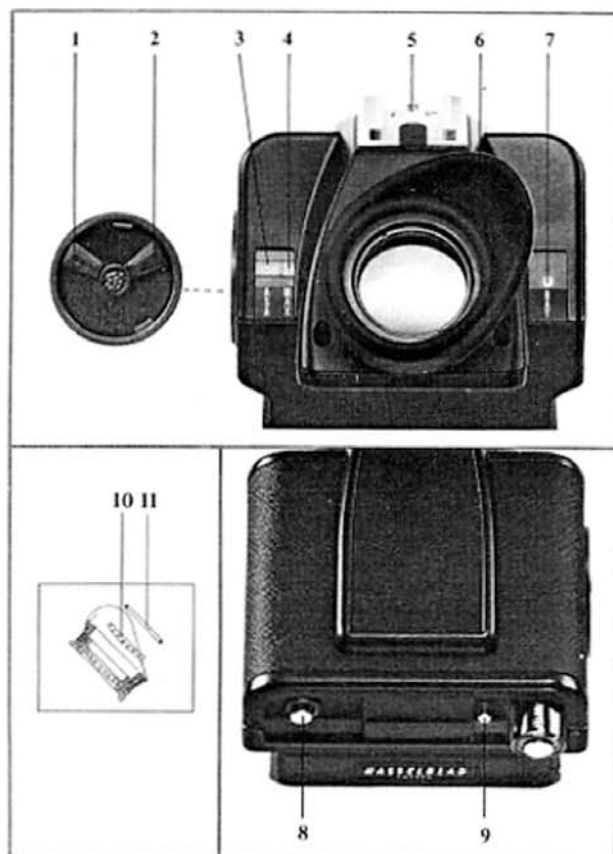


HASSELBLAD®

Instruction
Gebrauchsanweisung
Mode d'emploi
Bruksanvisning



① ②
③ ④
⑤



Instructions for use Hasselblad Meter Prism Finder PME

The PME meter prism finder is designed for measuring the intensity of light falling on the camera's focusing screen after passing through the lens. The center-weighted meter has a silicon cell with a fast response even at low light levels.

The meter's sensitivity range is from exposure value (EV) 2—19, and the correct exposure value is indicated by LEDs on a digital display. The viewfinder has a 45° sighting angle in relation to the optical axis of the lens. The unreversed viewfinder image is enlarged 3×.

Buttons, selectors, and scales are countersunk for protection against physical damage. The Hasselblad meter prism finder has an accessory shoe (5) and a rotating, removable rubber eyepiece (6). The viewfinder's shape enables you to conveniently lift the camera with the attached viewfinder.

Battery

Use a 6 V type U1, PX 28 or the equivalent. Use silver oxide or lithium batteries in protracted cold weather.

Battery insertion or replacement

Slide the lid (9) to the left and insert the battery with the (+) terminal inward. Close the lid.

Battery check

Press the battery check button (8). A green signal will light above the letters BAT in the window (7) if the battery is still satisfactory. (This also turns on the meter which then remains activated for about 15—20 s. Also see "Light readings" below!)

If the battery check shows the battery to be satisfactory but no LED lights up on the EV scale, the film speed set and the prevailing light intensity may form a combination beyond the range of the meter's sensitivity (EV 2—19).

Even if the battery is satisfactory it should still be replaced after a year of use to avoid damage to the meter from battery leakage.

Use

Attach the PME prism finder to the camera in place of the focusing hood.

Three settings must be made before taking the first light reading.

1. Make sure the lens is *not* stopped down. Readings must always be taken with the lens wide open.
2. Set the maximum aperture of the lens in the middle of the window marked MAX. This setting is made with the rear selector (2). Some of the f/stops have been omitted to make the scale more legible.

The complete scale is as follows:

Half stops:	2,4	3,4	4,8	6,8	
Full stops:	2.0	2.8	4.0	5.6	8.0

3. Set the ASA/ISO speed in the middle of the window marked ASA. This setting is made with the front selector (1). Only ASA values have been indicated to make the scale more legible.

The complete scale, supplemented with DIN values, is as follows:

ASA/ISO	25	50	100	200	400	800	1600	3200	6400
DIN	15	18	21	24	27	30	33	36	39

The viewfinder is now ready for taking readings.

Light readings

Turn the meter on by pressing the activation button (8) for a second, aim the camera at the subject, and read off the value indicated on the EV scale in the viewfinder. The meter will automatically turn itself off after about 15–20 s. Repeating the button will activate the meter for another 15–20 s, etc. Only one LED will light for full EV values. Intermediate values are indicated when two LEDs light. If e.g. 11 and 12 light up with equal brightness, then the correct EV value is 11½. If 12 lights up more brightly than 11, then the correct value is 11¾. The designated EV value is then transferred to the red exposure value scale on the lens.

NOTE: The eye must be kept close to the rubber eyepiece during light measurement. Extraneous light entering the viewfinder can lead to erroneous readings.

Changing lenses

When changing lenses, do not forget to set the maximum aperture of the new lens with the selector (2).

Changing film

When changing to a film with a different speed, do not forget to set the new film speed with the selector (1).

Exposure compensation

1. Intentional overexposure and underexposure

Some photographers like their negatives/transparencies slightly overexposed. Others prefer underexposure in relation to the correct exposure indicated by the meter.

Exposure compensation with the Hasselblad PME meter prism finder is made using the selector (1) for ASA settings.

When the speed setting is *halved*, the meter displays a reading equivalent to *overexposure* by one f/stop.

When the speed setting is *doubled*, the meter displays a reading equivalent to *underexposure* by one f/stop.

The two intermediate settings yield compensation by ½ f/stop.

2. Filters and lenses

Since the viewfinder meter obtains its information from through-the-lens light falling on the focusing screen, there will be automatic compensation for any filter attached to the lens. The difference between the true exposure value and the value shown in the viewfinder will never be more than ½ of an f/stop with original Hasselblad filters but varies from filter to filter. Individual variations in lenses can amount to ± ½ f/stop, so no general calibration factor can be given. Variations in lenses and filters can cancel out or reinforce one another. Therefore, each photographer must determine the need for calibration correction by making tests with his/her own equipment.

3. Focusing screens

Some focusing screens can cause the meter to deliver erroneous readings. Erroneous readings can be corrected with the film speed selector (1). Even here normal variations in lenses may reinforce or cancel out any discrepancy caused by a focusing screen. So individual testing is required.

For through-the-lens measurement with the Hasselblad SW, SWC, and SWC/M, use the focusing screen adapter in place of the film magazine. The adapter has tracks which accept the metering viewfinder.

Set the selector (2) at the mark between 4 and 5.6 in the window labeled MAX. Readings must then be made with the lens wide open and an open shutter.

4. Focusing screen masks

All the focusing screen masks affect readings. The PME meter prism finder must be calibrated to each photographer's equipment for accurate readings. The black focusing screen mask should not be used.

NOTE: In work with the 1½×1½ or 1½×2¼ format and a focusing screen mask, light and dark areas outside the format field may affect meter readings. Correction for such discrepancies may be necessary.

5. Correction lenses

The rotating eyepiece (6) is removable. A correction lens (10), 24.5 mm in diameter can be inserted behind a threaded locking ring (11) in the eyepiece mount to compensate for defective vision. (The correction lens should be selected in consultation with your optician.) HASSELBLAD correction lenses in strength of -4 to +3 diopters in 1 diopter intervals are available as optional accessories.

Care and maintenance

Treat the PME meter prism finder with the same care as any other optical instrument. Keep glass surfaces clean using a lens brush. Protect the viewfinder with the cover provided whenever the viewfinder is not attached to a camera. Remove the battery from time to time, dry it and check for signs of leakage. At the slightest hint of leakage, clean the battery compartment and switch to a fresh battery.

Hints on metering

Even lighting

When the subject is illuminated with equal intensity, aim the camera at the subject and read the indicated value. (Picture 1 on the fold-out page.)

Contrasty subjects

The meter's photocell takes a reading of the light striking the entire focusing screen but has somewhat greater intensity in the center of the field than at the sides. The meter reading is largely an average value for the intensity of light reaching the focusing screen.

When the subject has large areas with widely differing light intensities (picture 2), the photographer must decide whether to expose for the bright areas or the dark areas. The lens must then be aimed at the key area chosen. It may be necessary to move in for a close-up reading of this area or to aim the camera at an area illuminated with the same intensity and having the same reflectivity.

Light subject—dark background

For accurate exposure of the two people in picture 3, a close-up reading must be made of their clothing. The dark background would otherwise cause the meter to display an erroneous reading.

Dark subject—light background

Even here, take your reading close to the main subject so the background does not interfere with an accurate reading of a suitable exposure for the main subject (picture 4).

Backlit scenes

Take a reading close to the subject. Try to keep direct light from entering the lens and avoid taking readings of the open sky. Reduction by one or two f/stops of the reading obtained may be necessary for good rendition of shadow detail.

Sea and snow

A beach, snow, or sand reflect large amounts of light and may give rise to readings which are too high when the overall light level is measured. The best results are obtained when readings are made close to the main subject or of a surface with equivalent illumination and reflectivity.

Close-ups

The Hasselblad PME meter prism finder reads the light passing through the lens and is therefore a useful aid in close-up photography. The meter automatically compensates for the exposure increase necessitated by the increased extension.

Tolerances

Incorrect exposures may be due to a number of factors. Film, shutter, and diaphragm tolerances may cancel out or reinforce one another. So the photographer should check out the results yielded by his PME prism finder in combination with different lenses.