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 ranges from exposure value (EV) 2—19, and the correct exposure value is indicated by LEDs on the digital display. The viewfinder has a 45° sighting angle in relation to the optical axis of the lens. The unretouched 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 rotatable, 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 protected 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. Repressing 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 11¼. 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. Excessive 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).

**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 15x×15 or 18x×21 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.) HASSEBLAD correction lenses in strength of −4 to +3 diopeters in 1 diopeter 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 very high spatial 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.

**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 3/4 of a f/stop with original Hasselblad filters but varies from filter to filter. Individual variations in lenses can amount to ±1 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 tracking which accepts the metering viewfinder.

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.