

A thick, vertical orange bar runs down the left side of the page, partially overlapping the 'travemat' text box.

travemat

Operating
Instructions

EXAKTA

Congratulations to your acquisition of the SCHACHT TRAVEMAT.

Accurate and reliable through-the-lens metering is rendered possible with this combined prism viewfinder and exposure meter for the Exakta and Exa I, enabling you to fully benefit from the advantages of your mirror-reflex camera such as interchangeable lenses, extension tubes, etc. And we are sure you will like the results, so — good luck to you.

CONSTANTIN RAUCH KG
Division: ALBERT SCHACHT

SCHACHT TRAVEMAT —

Interchangeable Prism Viewfinder with TTL Exposure Meter

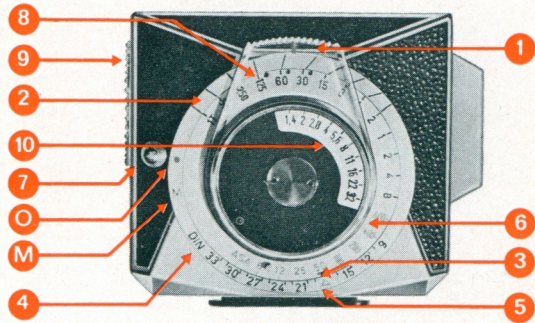
Measuring of the incident light is effected by a cadmium-sulphide resistance above the ground-glass screen. This CdS cell measures the light of the image on the film irrespective of lenses, extension tubes or other accessories. And measuring itself is very simple. Nevertheless it is advisable to first consult the instructions before using the Travemat.

The reference index specifies the individual functions described in the following folder.

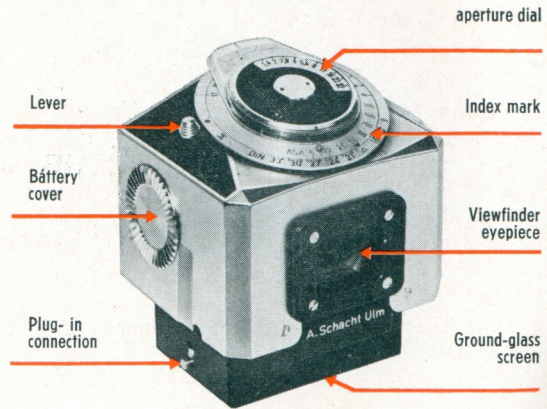
Explanation

- 1 Time lever
- 2 Graduated scale
- 3 Index mark for DIN film speed
- 4 DIN scale
- 5 Index mark for ASA film speed
- 6 ASA scale
- 7 Lever
- 8 Speed scale
- 9 Battery cover
- 10 Aperture dial
- o Battery switched off – red spot
- M Index mark for MEASURING

Instructions



Instructions



Instructions for Use

1. Ready for Operation

Remove the battery cover (9) by turning it to the left before inserting the Travemat.

Attention: In case the cover does not move smoothly, wedge the back of a knife into the corrugation and move it slightly to the left.

Insert the "Mallory PX 13" battery with the positive pole directed downwards, the coloured ring facing outwards, then reinsert the protective cover (9) and fasten it slightly.

The lack of sensitivity of the Travemat's mechanism to fading batteries permits the fullest use of the batteries. Batteries of reduced power do not alter

the measurements given, although they do reduce the sensitivity of the reading slightly, particularly for the longer exposure times. The life of a battery in normal use, provided it is remembered to switch it off when not in use is 1 to 1½ years.

The best way to check the battery is to set the lever to 1/60th second and take a reading against an evenly lighted wall in average daylight (hazy sky). Then close down the lens (5 cm) until the needle rises so far over the index mark that a slight counter turn of the aperture ring immediately produces a counter-swing in the needle. From this aperture setting, now slowly close the aperture.

One full stop (e. g. from 2.8 to 4 or 4 to 5.6) should now move the needle right to the bottom of the scale (beyond the index mark). With batteries of reduced power this can only be achieved by turning 2 or 2½ stops. Such batteries should be changed.

When testing batteries in this way the eye-piece lens should be in position.

2. Application

Insert the TRAVEMAT into the camera so that it catches.

Select the proper DIN film speed by turning scale (6) until index mark (3) is in register with the DIN factor on scale (4) of the film used. For ASA values proceed in reserved order. The ASA factor on scale (6) will then coincide with index mark (5) on scale (4).

Intermediate values between the standard factors, e. g. 17 or 22 DIN, can be assessed and then set on the scale.

3. Mode of Operation

There are three ways of measuring with the Travemat

- A) proceeding from the shutter speed to aperture
- B) proceeding from aperture to shutter speed
- C) by using a combination of shutter speed and aperture, with full aperture.

The choice between the three methods offers the best possible combinations in all circumstances of obtaining the right exposure value.

Procedure According to 3A

Proceeding from exposure time to aperture means choosing the proper aperture at a preselected shutter speed.

The preselected time is set both at the camera time selector ring and the TRAVEMAT time lever (1).

It is advisable to choose a medium shutter speed corresponding to a medium f/number, e. g. 5.6. The cable is adjusted to 18° DIN.

The values being applicable to daylight from 2 hours after dawn to 2 hours before sunset.

It is not that important which value you preselect as it can be greatly varied according to the prevailing light conditions.

weather	shutter speed	aperture
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sunny – bright

1/200 or 1/250

5.6



sunny – misty

1/100 or 1/125

5.6



**covered sky or
clouds**

1/50 or 1/60

5.6



rainy

1/25 or 1/30

5.6

With the subsequent measuring procedure the proper f/number for the preselected shutter speed can be obtained.

Finding the Proper Aperture

Set the lens diaphragm mechanism to M (manual). Shift lever (7) to M (measuring). Focus the viewfinder image on the ground-glass screen at full aperture, then watch the indicator on the left-hand side in the TRAVEMAT viewfinder while slowly turning the aperture ring until the indicator lies in the centre of the measuring bracket.

The correct aperture setting is obtained as soon as the indicator is clearly centered in the bracket.

Now the camera shutter can be triggered.

This procedure offers the advantage of only having to vary the f /number when taking series of shots under different light conditions.

The readiness for shooting can be substantially increased by this mode of operation: lift the camera to your eye, wind it, focus it, find the proper f /number — and shoot.

The other procedure (3B) is particularly advisable under unfavourable light conditions or if a special f/number is to be used for obtaining a certain depth-of-field.

Procedure According to 3B

Finding the Proper Aperture

Focus the viewfinder image on the ground-glass screen at full aperture. Set the lens diaphragm mechanism to M (manual).

Then preselect the proper shutter speed.

Shift lever (7) of the TRAVEMAT to M (measuring). Move lever (1) to and fro while watching the index mark until the indicator is centered in the measuring bracket.

The shutter speed can be read on the scale (6) where the graduated scale (2) is connected with time lever (1).

Then shift the camera time selector ring to the same time factor and the camera is ready for operation.

Should the index mark lie between two graduations on the scale, shift it to the nearest time factor and correct the shutter setting according to A. Attention: Shift lever (7) to the red spot after shooting to prevent fast running down of the battery. If the mechanism is switched off after each exposure, the battery will have a life expectancy of 1—1½ year.

Porcedure according to 3 C

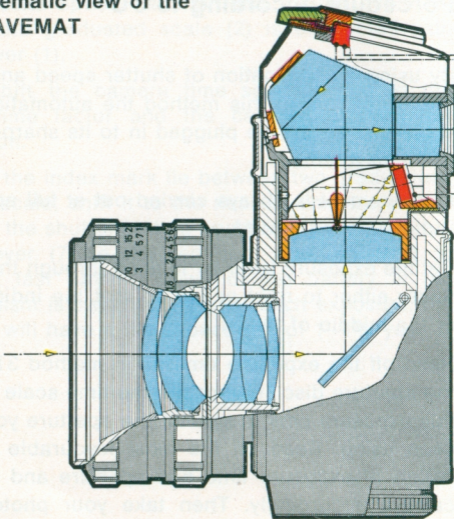
By using a combination of shutter speed and aperture. Whilst using this method the automatic exposure must always be plugged in to its sharp-setting and measurement.

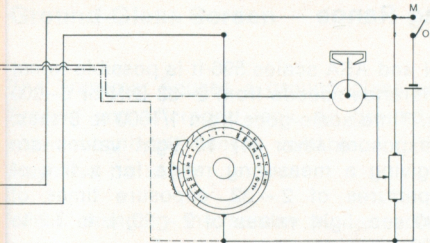
Measurement is always carried out at full aperture. Put the lever (7) to M.

Set the exposure lever by looking through the viewfinder either to right or left so that the indicator is in the middle of the V.

Read off the exposure time as in method 3 B. Turn the aperture disc 10 opposite the time scale so that this exposure time is against the aperture you have been using. Read off the most favourable combination of exposure time and aperture and set the camera accordingly. Then take your photograph.

Schematic view of the TRAVEMAT





Batteries for the TRAVEMAT

Standard equipment: Mallory PX 13
 for cold temperature: Mallory PX 625
 or Mallory Mu-625 G
 or a rechargeable battery accumulator: DEAC batte-
 ry 50 DK.

Measuring Range

On the DIN and ASA scales 596 it is possible to set films of difference speeds from 9–33 DIN or 6–800 (1400) ASA. Time scale goes from 1/1000 to 8 secs. With the exposure lever (1) 10 light values are available, giving a measuring range for a film of 18 DIN apertures of 2 – 32, exposure times of 1/2 – 1/1000 sec. light values of 2 – 20, i. e. 3.2 to over 100,000.

The measuring range of the TRAVEMAT comprises approximately 20 light factors, i. e. for a film speed of 18° DIN = 50 ASA the shutter speed can be set to any value between 1/2 and 1/1000 sec. Any time factor can be connected with every f/number and vice versa.

Having 10 different exposure times and 9 f/numbers, this gives a total of 90 possible settings to cope with any light graduation of the image on the ground-glass screen.

Ground-Glass Screen

The Travemat houses a ground glass screen with Fresnel and Microgrid lens. All ground-glass and clear magnifying lenses suitable for the Exakta may also be used.

When changing the screen please note the following:

- a) Installation — Hold the ground-glass screen between thumb and index finger by the narrow sides and press it into the plastic case by the long side.
- b) Extraction — Lift the ground-glass lens by the corner (E) (if necessary use the finger nail) and lift it out.

If a different ground-glass or clear/spotted lens is

used instead of the original then the DIN values change as follows:

With a built-in fresnel lens	18° DIN
(a) ground-glass	17° DIN
(b) ground-glass with clear spot	17° DIN
(c) ground-glass with measuring grid	17° DIN
(d) ground-glass with 10 mm ϕ clear spot	16° DIN
(e) ground-glass with 20 mm ϕ clear spot	15° DIN
(f) limpid magnifier with or without divisions until	12° DIN

When using films of other speed the alteration is similar e. g. instead of 21, 20 and so on.

General Instructions

To prevent the reading being misled by tricky back-light or incident sunlight from the side, use the Exakta eyecup.

The same effect can be achieved with the help of an eyepiece cover provided with an opening. This protective eyepiece cover simultaneously serves for holding diopter glasses. A special glass correcting the eye's deficiency can be inserted by an optician on request.

If a small aperture is selected in great brightness caused e. g. by sun and snow, glaciers, etc., special attention must be paid to backlight. Make sure that the TRAVEMAT is always protected with its cover when removed from the camera to prevent any detrimental effect on the CdS cell.

Make sure that the TRAVEMAT is protected with its cover when detached from the camera to prevent any detrimental effect on the sensitivity of the CdS cell.

Technical details are subject to change without notice.



For years the ALBERT SCHACHT has been specializing in the development and production of high-quality taking lenses for SLR cameras. On the following pages you will find a survey on our interchangeable lens programme. For individual folders see your photo-dealer or write to us directly.

SCHACHT lenses meet the requirements of modern photography. Our specialized delivery programme comprises the focal lengths from 35–400 mm as

lens type	camera	relative aperture	focal length mm	diaphragm
S-Travegon Wide angle lens	Edixa Pentaflex Exakta, Exa I/II	f/2.8	35	fully auto- matic
Travegon Wide angle lens	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa I/II	f/3.5	35	fully auto- matic
Travenar Wide angle lens	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa I/II	f/3.5	35	preset
S-Travelon Standard lens	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa I/II	f/1.8	50	fully auto- matic

well as the fully automatic diaphragm, the automatic diaphragm and the preset diaphragm.

lens type	camera	relative aperture	focal length mm	diaphragm
Travenar Standard lens	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa I/II	f/2.8	50	fully auto- matic
M-Travenar Macro- and Standard lens	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa I/II	f/2.8	50	preset
Travenar Portrait- and Tele lens	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa I/II	f/2.8	90	automatic
Travenar Portrait- and Tele lens	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa I/II	f/2.8	90	fully auto- matic

S-Travenar	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa II	f/2.8	135	preset
Travenar Telephoto lens	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa II	f/3.5	135	automatic
Travenar Telephoto lens	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa II	f/3.5	135	fully automatic
Travenon Long focus lens	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa II	f/4.5	135	preset
Tele- Travelon	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa II	f/2.8	180	preset
Tele- Travelon	Edixa, Praktica Pentacon, Pentax Pentaflex Exakta, Exa II	f/4.0	200	preset

SCHACHT lens system

(diagram)



M-Travenar 2.8/50



Travenar 2.8/90



S-Travenar 2,8/135



Travenar 3.5/135



Travenon 4,5/135



Tele-Travelon 2,8/180



Tele-Travelon 4/200

SCHACHT lens system

(diagram)



Travegon 3.5/28



S-Travegon 2.8/35



Travegon 3.5/35



Travenar 3.5/35



S-Travelon 1.8/50



Travegar 2.8/50



Travenar 2.8/50

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