GOSSEN

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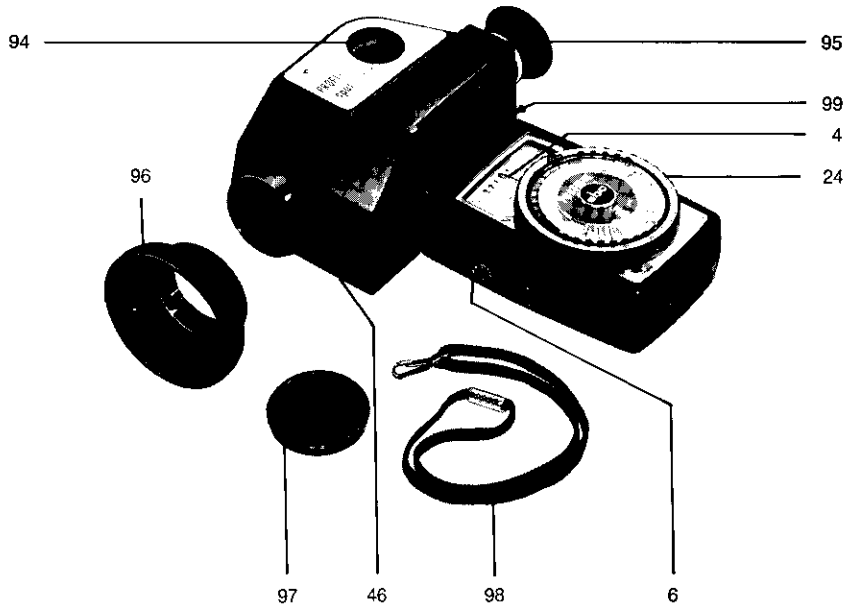
GOSSEN

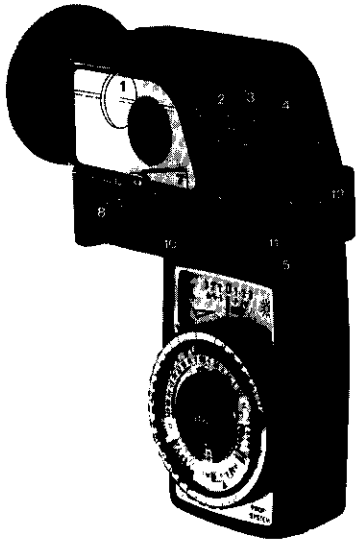
PROFI-spot



1 Spherical diffusor of the PROFISIX (please refer to PROFISIX instructions)
4 Indicator needle
6 Measuring button (red)
24 Computer ring for nulling indicator
33 Front shield for accessory jacks (please refer to PROFISIX instructions)
46 Ribbed sides
94 Measuring angle selector
95 Ocular with diopter correction ring −4 to +2.8
96 Sun shade for lens
97 Protective cover for lens
98 Safety cord
99 Eyelet for safety cord

Contents page

When using the PROFI-spot together with the MASTER-SIX please refer to the instructions "Attachments" containing the relevant information.

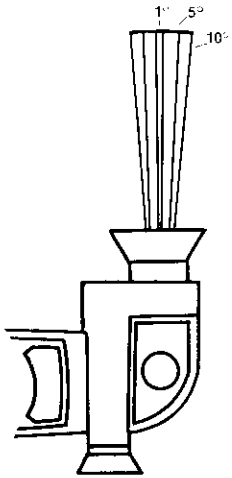


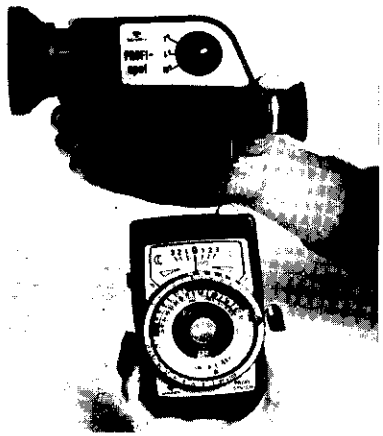
1 Lens
2 Beam splitter mirror which divides the light into a measuring beam (———) and a view finder beam (- - - - -)
3 Collective lens
4 Reversal mirror for measuring beam
5 Light entrance aperture of the PROFISIX
6, 7, 8 Reversal mirror for view finder beam
9 Reversal lens for view finder beam
10 View finder rings with LED readout
11 View finder ocular
12 Apertures for adjusting measuring angle

General indications

For even greater selectivity the PROFI-spot attachment for the PROFISIX provides not only 10° and 5° but, in addition a 1° angle for ultra precise exposure measurement. Once the attachment is connected to the PROFISIX it automatically adjusts the meter sensitivity. The small measuring angles permit precise viewing and taking readings of even the smallest detail of the scene, thus ensuring maximum accuracy. Because of its extremely high sensitivity the PROFISIX will cope with most of the job requirements – even with very difficult light situations. The single reflex lens design permits measuring and viewing through the same lens eliminating parallax problems; the light beam is split inside the PROFI-spot into a measuring beam and a viewing beam (see illustration page 1).

The proven advantages – selective readings of specific subject various, greater creative possibilities, top quality pictures are appreciated and enjoyed both by top professionals and demanding amateur photographers.





Attaching to the meter

Remove detachable front shield (33) covering the accessory jacks from the PROFISIX. Put the hemispherical diffusor (1) at the right, align the PROFI-spot attachment so that the plugs on the attachment are opposite the jacks in the meter and the recess in the attachment opposite the hemisphere. By holding the PROFI-spot by its ribbed side (46) push the accessory straight on to the meter. When attached to the meter the PROFI-spot automatically adjusts the meter sensitivity i.e. the loss of light caused in the PROFI-spot will thus be compensated and this in relation to the measuring angle selected.

Thread the safety line that comes with the PROFI-spot through the eyelet (99) at the PROFI-spot and attach the metal hook at the other end to the carrying cord of the PROFISIX meter. This will make handling the combination PROFISIX plus PROFI-spot safer and easier.

Technical data

Measuring circuits 1°, 5° and 10°	visible in the view finder
Readout of the selected angle:	with LEDs in the view finder
Full visible area:	approx. 15°
Sensitivity at 21 DIN and	
measuring angle 10°	EV 2...20
measuring angle 5°	EV 0...22
measuring angle 1°	EV 3...25

Maximum sensitivity at	15	18	21	24	27 DIN
and measuring angle 1°	1	2	3	4	5 EV
measuring angle 5°	−2	−1	0	1	2 EV
measuring angle 10°	−4	−3	−2	−1	0 EV

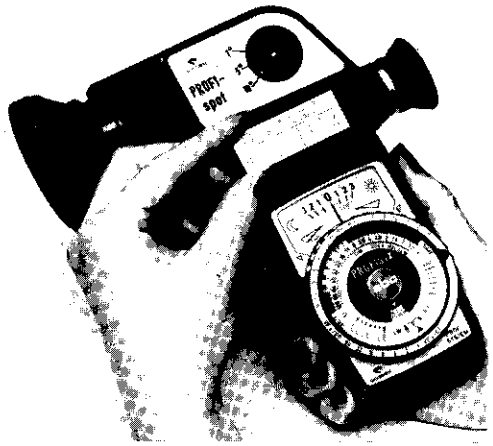
Correction factors when changing the angle	are automatically adjusted for
Light beams	split beam optics, free from parallax error
Distance range	0.5 m . . . ∞
with additional lens (2 diopters) (available at your photo dealer's; filter thread ⌀ 35.5 mm)	0.2 m . . . 0.5 m
View finder ocular with diopter correction for adjustment to the viewer's eye	by −4 to +2.8 diopters

Operating procedure

Set the film speed at the PROFISIX according to the PROFISIX manual. Connect the PROFI-spot to the PROFISIX. Point the PROFI-spot at the subject to be measured and look through the view finder. You will see there the three rings – for 1°, 5° and 10° respectively. Turn the selector (94) to the appropriate setting. Red digits at the upper edge of the view finder will show you the measuring angle chosen. Thus the measuring angle selected will stay visible in the finder while the reading is being taken.

Point the PROFI-spot at the subject to be measured and activate the PROFISIX by pressing the measuring button (6). After you release the button (6) the reading of the subject area measured is made and electronically stored in the meter. Now while looking at the meter rotate the computer ring until the meter nulls. Read any combination of f/stops/shutter speeds you desire from the calculator dial and set them at your camera; no additional calculations or corrections will be necessary at all. Exposure factors due to filters or bellow extensions can be programmed into the PROFISIX with the EV modification setting (15) on the PROFISIX computer ring (24), just as you would do it when measuring with the PROFISIX alone. The corresponding instructions in the PROFISIX manual are applicable also for the combined unit PROFISIX + PROFI-spot.

Taking a reading at low light levels



When taking readings frequently at very low light levels you should attach the sticker enclosed with the PROFI-spot to the unit as shown in this illustration. The table shows the maximum sensitivities for the individual measuring angles, these being the minimum light levels below which the readings of the PROFISIX would no longer be valid. This very same table is also shown on the back of the PROFI-spot.

Helpful hints

The measuring angles of 1°, 5° and 10° you can preselect will normally meet any photographer's requirements. Precise exposure readings as obtained with the PROFI-spot will only be of use to you when applied correctly to your personal technique of taking pictures. The following factors will have an influence:

1. the scene brightness range (the difference in contrast between areas of high light and shadow in the subject area)
2. the type of film used (negative or transparency film) and their recording ability
3. the resulting gradation of the combination of film and developer

These three influencing factors are to a large extent interdependent. In some subjects you can change the scene brightness (the areas of high light and shadow) – but this is impossible when photographing subjects illuminated by daylight only. Lights and shadows are a natural phenomenon which can be changed to a certain extent by using reflector surfaces. When photographing subjects illuminated with artificial lights, the differences in contrast can be controlled by changing lamps and lights.

All films have a characteristic response to exposure and developing processes. This can be seen from the characteristic gradation curve. A certain control can be effected through the developing process. We refer you in this regard to the special literature available, because we cannot include all of it in this manual.

Scene brightness range

Only when knowing the scene brightness range you will be able to take precise exposure readings. The brightness contrast of a subject is the difference between the exposure data measured at the lightest and at the darkest important area of the subject which are to be recorded with sufficient detail in the photo. The contrast ratio is thus the difference between these two readings expressed in EVs or f/stops. With relatively small contrast ratios it is of no importance in which portion of the straight line section of the gradation curve the blackening will occur when considering reproduction of contrast. Exposure will get more important the bigger the contrast ratio is. When trying to obtain optimum values as to differentiation of detail and grain size, the lowest possible exposure should be used. Shorter exposure will normally increase the recording capability of your film. A correctly exposed negative will show slight but still recognizable detail in the shadow area.

The following general rules apply when measuring the scene brightness range:

Negative film

Provided the contrast between important bright parts and dark parts does not exceed two aperture stops, each intermediate value could be used as a setting; in more demanding situations the mean value is more appropriate. An acceptable picture will be obtained in this way in most cases.

Dense negatives produce poor sharpness of outline. With a reading difference of, say, f/4 to f/11, the best reproduction of detail can usually be expected with f/8.

If the important light and dark parts are within two stops of each other, a better result will usually be obtained with the less-generous exposure.

Example: reading-difference f/4 to f/8; aperture setting f/8.

Colour reversal film

Compared with negative film, a colour reversal film can cope with a greater contrast, but its practical exposure-tolerance is considerably lower.

Measurement of the subject contrast is the basis for the decision as to whether, under given lighting conditions, the subject can or cannot be faithfully reproduced. If the subject does not call for special treatment, it is recommended that the exposure be based on the highlights.

Your PROFI-spot is a valuable precision unit, made with great care and accurately calibrated. It deserves your good care! If repair or adjustment should ever become necessary, send your PROFI-spot, carefully packed to

GOSSEN GMBH
Servicestelle B
Nägelsbachstrasse 25
D-8520 Erlangen

or to the GOSSEN agency in your own country.

To expedite handling please send yur **PROFI-spot only — without case or cord or any other accessories.**