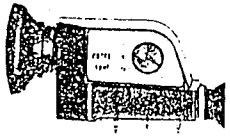
The use of the MASTERSIX-system attachments is described in the separate second part of this manual.

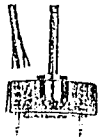
TELE
reduces the measuring angle to 15° or 7.5°
Page 54



PROFI-spot
for selective measurements and spot metering at 10°, 5° or 1°.
Page 58

PROFI-color
for measuring colour temperature and indication of correction filters.
Page 62.

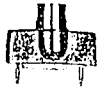
REPRO
provides exposure information for copying.
Page 74



PROFI-flex
particularly suitable for macrophotography, for ground-glass measurements of cameras and inaccessible areas.
Page 77

PROFI-lux
facilitates professional incident light readings.
Page 82

PROFI-select TTL
for measuring at the film plane of large-format view cameras.
Page 86



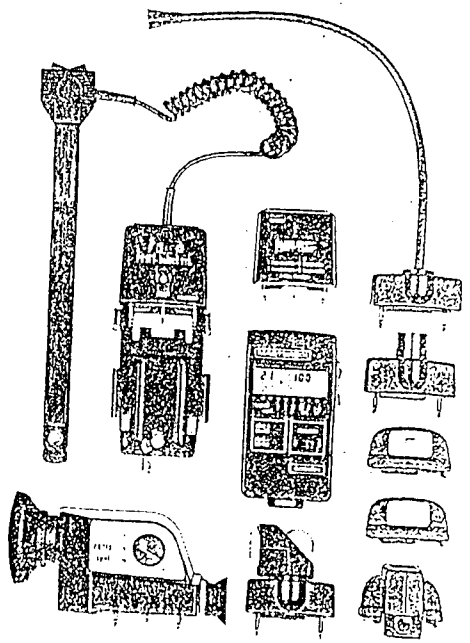
PROFI-micro
ensures convenient and precise measurement in micrography.
Page 94

LAB
determines exposure data for darkroom printing and enlarging.
Page 98

The attachments for the MASTERSIX form part of a light-measuring system and are made to fit other hand-held exposure meters produced by GOSSEN. Operating instructions consequently already exist for the attachments, in which their use in conjunction with other exposure meters is described.

The present manual explains how to handle the attachments in conjunction with the MASTERSIX. General information in the two sets of instructions will apply accordingly to other exposure meters in the GOSSEN range.

All attachments for GOSSEN exposure meters, including the MESS-SONDE (measuring probe) and MICRO, which are not electrically connected, can be used with the MASTERSIX. The MICRO attachment is handled in the same way as the PROFI-micro; the MESS-SONDE (MEASURING PROBE) is used like the PROFI-flex. They need a correction factor of +3 to be entered, however, in the CORR mode.

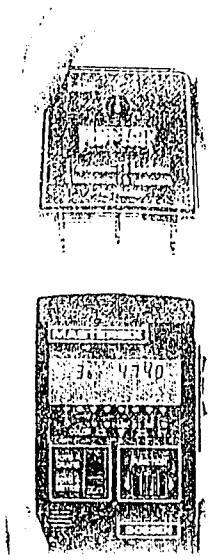


Contents
Part 2 „Attachments"

Electrically connected attachments

After the protective cover has been removed from the sockets of the MASTERSIX, the attachment and meter can be plugged together. The diffuser has to be slid to the right, or to the middle in the case of the PROFI-color.

With the PROFI-spot, PROFI-color, PROFI-flex, PROFI-lux, PROFI-select TTL and PROFI-micro attachments, which are electrically connected to the basic meter, the internal circuit of the MASTERSIX is automatically programmed with the requisite correction factors.



Mechanically connected attachments

The attachments TELE, REPRO and LAB are mechanically connected to the MASTERSIX. The diffuser is slid to the right and a lug on the side of the attachment engages in a recess on the MASTERSIX. With the knob pressed, the two are joined together; when the knob is released, the MASTERSIX and the attachment are rigidly connected.

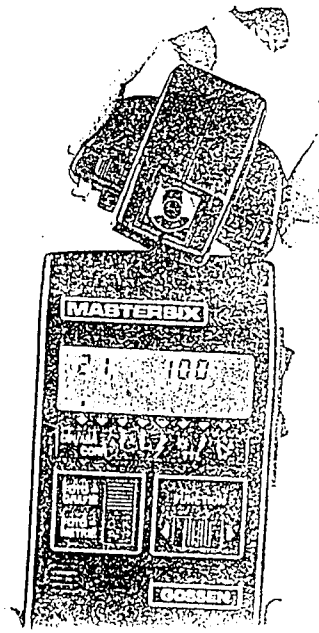
With the instrument set in the CORR mode, the appropriate correction factors must be fed in.

TELE:

Setting at 15° measuring angle	+1
Setting at 7.5° measuring angle	
for ambient light readings	+3
for flash readings	+2

REPRO:

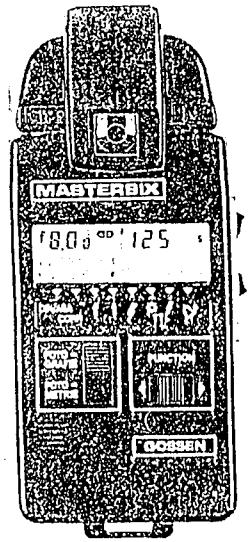
	+3



TELE

Using the TELE attachment, the measuring angle of your MASTERSIX can be reduced to 15° or 7.5°.

Attaching the TELE is quite easy. You remove the protective cover, simply slide the diffuser to the right and locate the lug on the TELE in the recess provided on the MASTERSIX. Then, with the knob pressed, join the two together; when the knob is released, the MASTERSIX and TELE are rigidly connected.

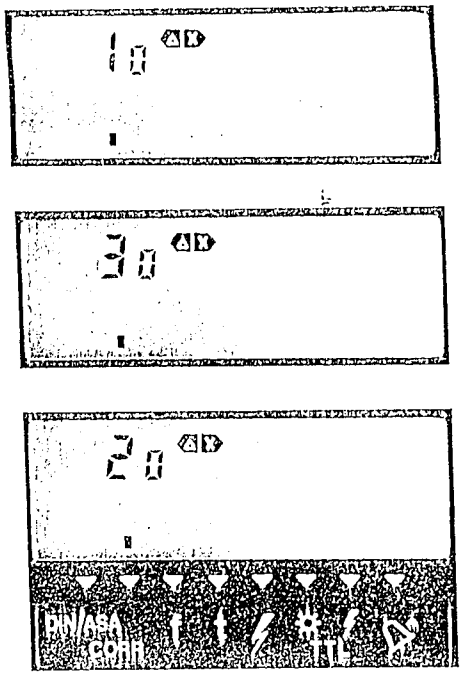


Taking a reading

Measurements are made as described in these operating instructions. **Exposure corrections** have to be made before the measurements. The following correction factors have to be fed in (see page 13):

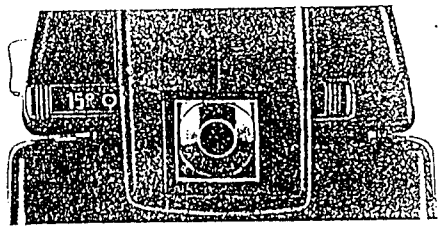
with a 15° measuring angle:	+1 for ambient and flash readings
with a 7.5° measuring angle:	+3 for ambient readings +2 for flash readings

The following method is also suitable for **rapid setting of correction factors** for ambient light readings: with the meter in the CORR mode and with the TELE attachment in place, aim at a uniformly illuminated surface, e.g., a house wall, and press M. Then remove the attachment and mesure at the same place by pressing M. This will program the individual correction factor of your TELE into the MASTERSIX. This, of course, assumes constant illumination.



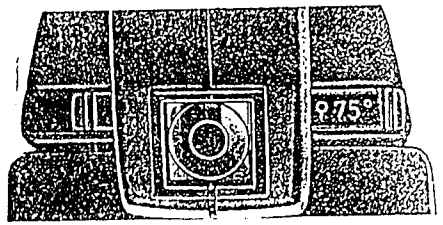
Before taking a reading

The measuring angle is adjusted with a switch, which slides fully to one side or the other. If " ♀ 15°" appears at the end of the slide, as shown in the diagram, the measuring angle is set at 15°.



If the slide is moved all the way in the opposite direction, the inscription " ♀ 7.5°" appears at the end of the slide, indicating that the measuring angle is set at 7.5°.

To avoid measuring errors, always ensure that the slide reaches a stop which you can actually feel and engages.



To take a reading, aim at your subject through the attachment's reflex viewfinder. The distance from your eye to the viewfinder should be about 25 cm. What you can see inside the (larger) red circle will be measured at a setting of 15°; the (smaller) green circle belongs to the 7.5° measuring angle.

The illustration shows the three measuring fields (30°, 15°, 7.5°)of the combination of MASTERSIX and TELE attachment for a constant distance from the subject being photographed.

PROFI-spot

The PROFI-spot attachment converts the MASTERSIX into an exposure meter with a choice of small angles of 1°, 5° and 10°.

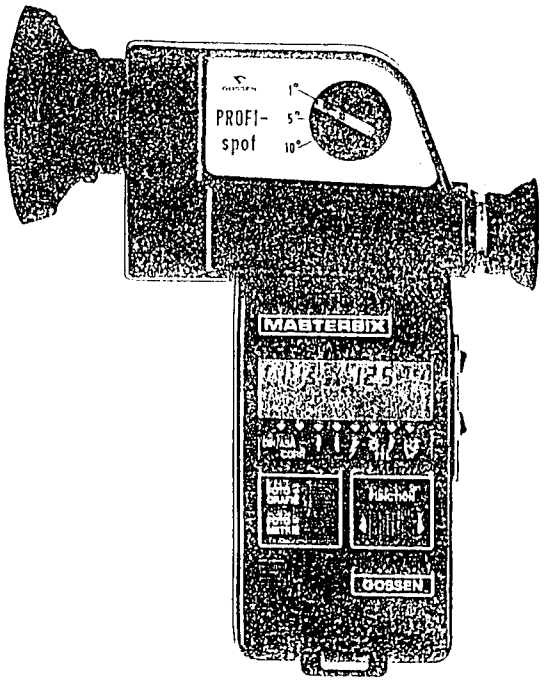
The PROFI-spot is attached to the MASTERSIX after removing the protective cover. To do so, the diffuser has to be slid to the right.

The neck strap provided is attached to an eyelet on the PROFI-spot. The snap hook at the other end of the strap clips on the carrying strap of the MASTERSIX. This provides additional security for the PROFI-spot.

The small measuring angles permit accurate aiming at even the smallest parts of a subject.

The high sensitivity of the MASTERSIX produces perfect readings in most practical cases, even in poor lighting conditions.

Parallax-free measurement is ensured by the fact that the light beam entering through the objective is split up in the PROFI-spot into a measuring and a viewfinding beam.



Taking a reading

The subject being photographed is aimed at through the viewfinder. Three circles are visible in the viewfinder: for 1°, 5° and 10°. The desired image angle is selected by a switch on the PROFI-spot and is indicated by a red light-emitting diode at the top edge of the viewfinder.

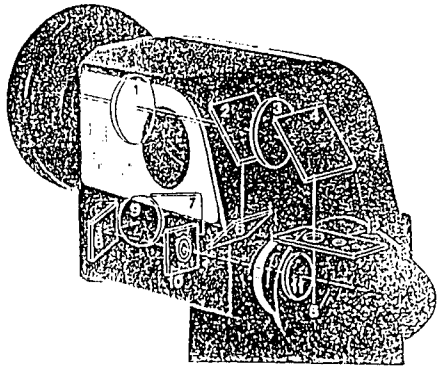
Now aim at the subject being measured and press rocker switch M. The reading from the part of the subject aimed at is stored in the memory. The apparatus is removed from the eye and the result of the measurement is read off from the display panel.

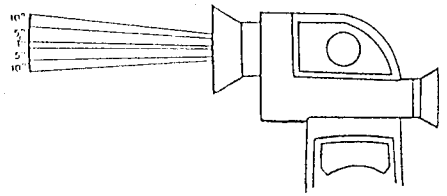
The combination of MASTERSIX and PROFI-spot can also be used for flash readings. At the various measuring angles, the following limiting values, related to 21 DIN, apply to the apertures:

Measuring angle	10° f/5.6
	5° f/11⅔
	1° f/32⅔

The MASTERSIX monitors these limiting values and automatically indicates whether you are over or under them.

The possible applications of this apparatus combination are further extended by the sensitivity ranges of modern film materials.





Selected area measurement in practice

The preselected measuring angles of 1°, 5° and 10°, are in accord with practical photographic requirements. However, illumination measurements made using the PROFI-spot and their application are only meaningful in relation to photographic techniques. They are dependent on the following factors:

1. the subject contrast (contrast between important bright and dark parts of the subject)
2. the nature of the film (negative or transparency film) and its contrast performance
3. the gradation performance of the combination of film and developing.

These three influencing factors are largely interdependent.

With many subjects, the contrast can be varied at random, and with others not. In photography in pure daylight, the differences between light and shade are fixed quantities, which can of course be influenced to a certain degree by brightening-surfaces. Attention is drawn to the averaging of readings (pages 19 and 38).

The MASTERSIX automatically calculates the mean value from up to 15 readings.

In many photographs taken in artificial light, on the other hand, these differences brought about by the illumination contrast can be controlled by changing the lighting conditions.

Every film exhibits a typical contrast performance, depending on its exposure and its processing. This performance is expressed as its gradation curve. It would be exceeding the scope of these instructions to go into the influence of developing. Reference should be made to the relevant literature.

Technical data

Measuring circles 1°, 5° and 10°	visible in viewfinder
Indication of measuring angle in use	by light-emitting diode (LED) in viewfinder
Total field of view	approx. 15°
Sensitivity ranges related to 21 DIN	
10° measuring angle	≙ exposure value −2 to 20
5° measuring angle	≙ exposure value 0 to 22
1° measuring angle	≙ exposure value 3 to 25
Correction factors when switching angles	automaticalli taken into account
Course of beam	divided parallax-free beam (splitted beam optic)
Distance range with additional lens (2 dioptres) (Filter thread, diam. 35.5 mm, obtainable from your photographic dealer)	0.5 m to ∞ 0.2 m to 0.5 m
Eyepiece to adapt to observer's eye	adjustable by −4 to +2.8 dioptres

PROFI-color

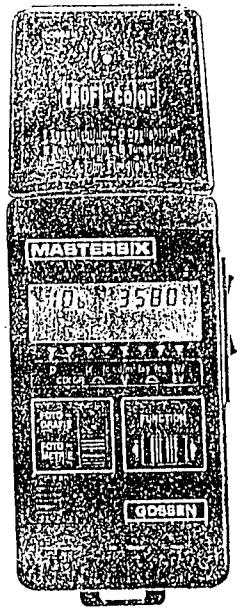
The PROFI-color converts your MASTERSIX into a colour-temperature meter. To fit the attachement, remove the cover from the MASTERSIX, slide the diffuser hemisphere to the middle, and join the two together.

With the PROFI-color attachment fitted to the MASTERSIX, you can measure colour-temperatures in daylight and in artificial light. At the same time, it indicates the conversion filter appropriate to the situation and to the film being used.

Reading tolerance

Under normal measuring conditions, the reading tolerance of the MASTERSIX/ PROFI-color combination is less than ± 1 decamired (≙ ± 1 filter value). For such a measuring accuracy, the illumination must be at least 10 lux. From that minimum value up to around 100000 lux, the colour-temperature reading is practically independent of the illumination.

You can determine the illumination, using your MASTERSIX (page 44).



Before taking a reading

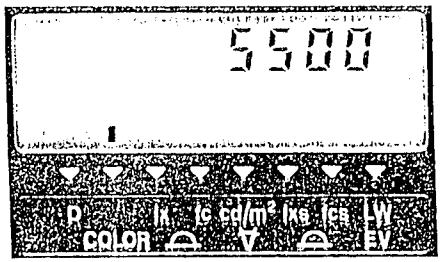
Remove the cover from the connection sockets, slide the diffuser to the middle, and fit the PROFI-color on the MASTERSIX.

Select the COLOR mode with the FUNCTION slide-switch. The display panel will show the colour temperature of the film last set, together with the last reading.

Before the very first colour-temperature measurement and after each battery change, the display will show the values preset by the manufacturer.

Using the value change switch, set the colour sensitivity of the film you are using, which will be marked on its box (e.g., 5500 K, daylight film).

The film sensitivity set on the MASTERSIX has no significane for the measurement of the colour temperature. The values stored in the equipment for other functions are also irrelevant to this measurement.



Film types

Colour films are intended for specific kinds of light: for "daylight" or "artificial light". If the light for the photograph is other than that required for the type of film being used, colour casts are produced, which are particularly disturbing with colour reversal film. Photographs in shadow, for example, are given a blue tinge by the light from the sky.

Colour casts of this type can be prevented by using appropriate filters (colour-temperature conversion filters). These transform the "wrong" light to match the type of film being used.

Even when one wishes deliberately to illuminate a photograph with "wrong" light to achieve certain certain colour effects, it is important to measure the colour temperature of the light in order to be able to foresee the effect on the image to a certain degree.

The colour composition of light, i.e., its spectral distribution, is characterized by stating the colour temperature in Kelvin (K).

Daylight films (T, D) for photographs in average daylight of approx. 5500 K or 5800 K are the most commonly used colour films. This type of film is also suitable for photographs with electron flash or blue flashbulbs.

There are two different types of **artificial-light films:**

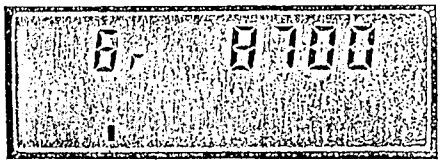
B and K	for photographs with photoflood lamps of approx. 3200 K.
A	for photographs with photoflood lamps of approx. 3400 K.

Basically what is measured is the light falling on the important part of the subject, i.e., **one measures from the position of the subject in the direction of the light.** Hold the combined MASTERSIX and PROFI-color so that the light admission surface is pointing in the measuring direction, i.e., towards the light source, taking care that the light admission surface is uniformly illuminated during the measurement. If it is partly in shadow, a false reading will be obtained.

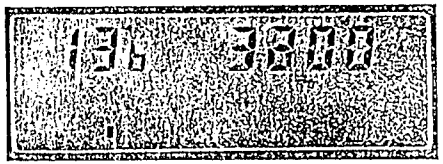
Measure by pressing M.

Reading examples:

For a photograph with accurate colour reproduction, a red filter R 6 must be used, and the colour temperature is 8700 K.



For your photograph you must use a blue filter B 13, and the colour temperature is 3200 K.



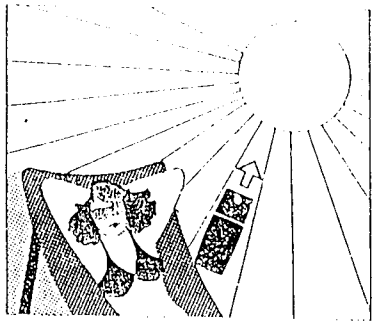
Pressing M displays the colour sensitivity setting of the colour film to be used.

The filter values indicated by the MASTERSIX are decamired differences. They represent the difference between the measured colour temperature and the ideal colour-temperature value of the type of film set.

Examples of readings

Subject in sunlight:

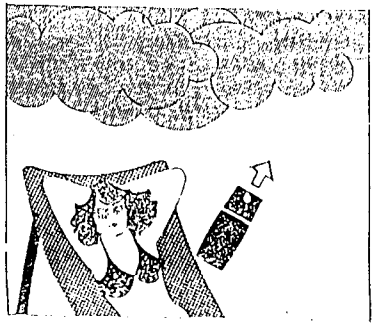
Take your readings towards the sun. The colour temperature of your light will vary in the course of the day. Do not "filter out" illumination creating atmosphere, e.g., red evening light.



Overcast sky (no sun):

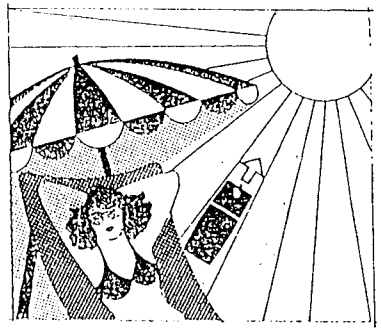
Measure obliquely upwards towards the sky,

Beware of passing clouds (even when the sky is completely overcast): readings can change very quickly. In this instance, there should be a minimal interval between reading and shooting.



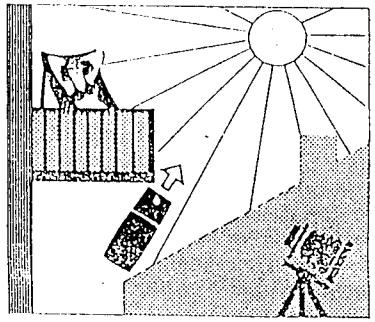
Subject in shadow:

The colour temperature is particularly high in this case. Take your reading obliquely upwards towards the sky. All sunlight and coloured light should be avoided on the light admission surface, otherwise an incorrect reading will be displayed. Coloured light is produced, for example, by reflection from coloured surfaces or by transparent materials, through which the subject is illuminated.



Subject in both sun and shadow:

Measure the light illuminating the important part of the subject: this is generally the sun. In such a situation and with such great colour-temperature differences, colour casts in the "neglected" parts are hardly likely to be avoided without supplementary artificial lighting. This additional illumination will have to match the colour temperature of the main illumination.



Inaccessible subject:

Measure from a substitute point, receiving as nearly as possible the same light as the subject.

Fitting filters

The filter determined by the reading is placed in front of the camera objective. Should such a filter, e.g., a red filter 9 (R 9), be unavailable, choose the next weaker, R 6. The same value can also be achieved by a combination of filters, e.g., R6 + R3 = R9.

To start off with, a set of filters, consisting of two weak R-filters and one weak B-filter, will be sufficient.

Filter factors (exposure-increase factors)

When using filters, the exposure time has to be increased, since the filters absorb light. The so-called "filter factors" are usually marked on the filter mount, e.g., the difference "⅔" in stops or the factor "×4". If the filter factor is fed in the CORR mode before the subsequent exposure measurement, you will not need to recalculate when reading off the exposure time (see page 13).

Use filters correctly!

The filters indicated by the PROFI-color only help to prevent colour casts produced by the "wrong" colour temperature. Other colour casts may be caused, for example, by improper storage or by the processing of the film.

If you wish to achieve special effects, e.g., in the evening sun, a filter weaker than that indicated by the PROFI-color should be used, or no filter at all (depending on the effect intended and on the basis of experience).

In doubtful cases use a weaker filter!

Incidentally, filters of the same type (equal B-values or R-values) but made by different manufacturers, may look different and have **different filter factors.**

Mixed light

Photographs taken under illumination by light with different colour temperatures are rather tricky. All colour films are intended for a particular colour temperature and cannot cope adequately with such mixed light.

Care must also be taken with fluorescent lamps, sodium-vapour lamps, mercury-vapour lamps and with coloured or multi-coloured light sources. This applies to measurement and to the photograph, since the kinds of light listed have a different spectral composition from the light from incandescent bodies and cannot therefore be measured with the PROFI-color.

More about colour temperature

Light is composed of rays of different wavelengths. In the spectrum (e.g. rainbow), the individual wavelength regions have their own characteristic colours, viz. (from shorter to longer wavelengths) violet, blue, green, yellow, orange, red. Depending on the kind of light, the radiated proportions of these spectral regions will vary in magnitude. For example, light from an incandescent lamp contains more red radiation than blue. In a blue sky, on the other hand, blue radiation is predominant.

This "spectral composition" of the light governs the colour reproduction of the film. In a photograph in shadow, for example, blue light from the sky, as the unique light source, will produce a "blue tinge".

Our eyes are not capable of accurately judging the colour of the light (i.e. its spectral composition), since our "subjective" perception of colour always accords with the predominant colour of the light.

For this reason, we need an objective instrument, which can measure the colour or spectral distribution of the light. This light "composition", which is of such importance in colour photography, is characterized by the "colour temperature". The relationship between "colour" and "temperature" is provided by the properties of the light from incandescent bodies. With these bodies, the spectral composition of the light, i.e. its "colour", is clearly determined by the incandescence temperature. This temperature is called the "colour temperature" and is expressed in K (Kelvin) (K = °C + 273).

The term "colour temperature" is, however, also applied to light which is not directly radiated by incandescent bodies. Stating a colour temperature of, say, 10000 K for blue light from the sky means that this is the light that would be radiated by a body glowing at 10000 K.

Filter designations

Colour temperatures are not expressed only in "Kelvin" (K), but also in "mired" values.

$$\text{mired-value} = \frac{1000000}{\text{K-value}}$$

MIRED = MIcro REciprocal Degree.

In practice, the value in "decamireds" is usually used, in order to obtain smaller numerical values: the mired-value is divided by 10, i.e. 10 mired = 1 decamired.

Example:

5000 K = 200 mired = 20 decamired.

The mired or decamired values permit perfect characterization of the filters, since the same filter will always transform colour temperatures by the same decamired amount, regardless of the initial temperature. The „conversion value", expressed in K, on the other hand, is different.

Example:

An R-6 filter transforms the colour temperature by a value of 6 decamireds, for example:

8900 K (11.2 decamired)
to 5800 K (17.2 decamired)
or 3960 K (25.3 decamired)
to 3200 K (31.3 decamired)

The decamired difference is the same (i.e. 6) in both cases, but the K-difference is different (3100 K and 760 K, respectively).

B-filters increase the K-value of the colour temperature; R-filters reduce it.

The term LB is also used for blue filters (Ligth-balancing Blue), and LA for red filters (Light-balancing Amber).

A blue filter of 60 mired (≙ B 6) is also referred to as an LB −60.

In these designations, a minus sign indicates that the filter increases the stated colour temperature, since the equivalent mired-value is reduced.

Example:

If the colour temperature of a light source is, say:

$$5000\ \text{K} \triangleq \frac{1000000}{5000\ \text{K}} \triangleq 200 \text{ mired}$$

The desired colour temperature:
200 − 60 mired = 140 mired.
The colour temperature achieved by the LB −60 filter is thus:

$$\frac{1000000}{140} \approx 7140 \text{ Kelvin (K)}.$$

A red filter of 30 mired (≙ R 3) is also referred to as an LA+30.

A plus sign indicates that the filter reduces the colour temperature, since the associated mired-value is increased by the filter.

Example:

If the colour temperature of a light source is, say:

$$6600\ \text{K} \triangleq \frac{1000000}{6600\ \text{K}} \approx 151.5 \text{ mired}$$

The desired colour temperature:
151.5 + 30 mired = 181.5 mired.
The colour temperature achieved by filter LA+30 is thus:

$$\frac{1000000}{181.5} \approx 5500 \text{ Kelvin (K)}.$$

The following equivalences are obtaines for Agfa and Kodak-Wratten filters:

Filter details	Agfa filter
B 1.2	CTB 1
B 2.4	CTB 2
B 4.8	CTB 4
B 9.6	CTB 8
B 14.4	CTB 12
B 19.2	CTB 16

These filters increase the colour temperature

Filter details	Agfa filter
R 1.2	CTO 1 B
R 2.4	CTO 2 B
R 4.8	CTO 4 B
R 9.6	CTO 8 B
R 14.4	CTO 12 B
R 19.2	CTO 16 B
R 24	CTO 20 B

These filters reduce the colour temperature.

Filter details	Kodak-Wratten filter
B 3	82 B
B 6	82 + 82 C
B 9	82 + 82 C
B 12	80 B
B 15	80 B + 82 A
B 18	80 B + 82 C
B 21	80 B + 82 B + 82 C

These filters increase the colour temperature.

Filter details	Kodak-Wratten filter
R 1.5	1 A
R 3	81 B
R 6	81 EF + 81
R 9	85 C
R 12	85
R 15	85 B
R 18	85 B + 81 B
R 21	85 B + 81 EF
R 24	85 B + 81 EF

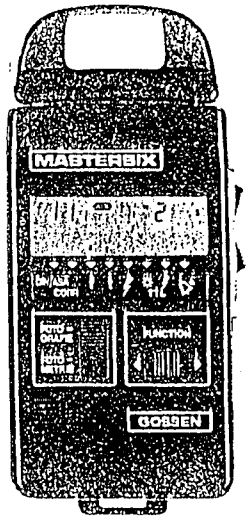
These filters reduce the colour temperature

REPRO

The REPRO attachment converts your MASTERSIX into an instrument with which you can determine the requisite exposure values for copying.

The exposure values for the copying of a black-and-white or coloured original can be determined with the MASTERSIX + REPRO combination, as can the uniform distribution of the illumination.

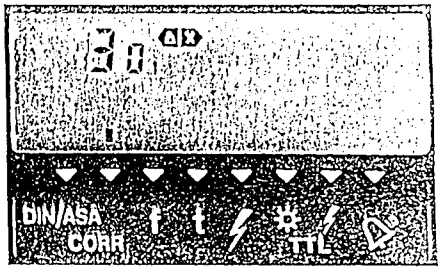
The REPRO is simple to fit. You remove the cover, slide the diffuser to the right and locate the lug on the REPRO in the recess provided on the MASTERSIX. With the knob pressed, unite the two units; when the knob is released, the MASTERSIX and REPRO are rigidly connected.



Before taking a reading

Before a reading is taken, a correction factor of "+3" should be set on the MASTERSIX (see page 13). This correction factor, which is unique to the REPRO, is automatically taken into account in the readout.

The film sensitivity is set in the usual way (see page 12) and M is pressed to take a reading.



Mode of operation

The MASTERSIX + REPRO combination is placed on the original with the measuring window pointing towards the camera. It is therefore the incident light that is being measured.

Take care that the reading is not affected by shadow from your hand, your arm or your body. Reflection and glossy light must be avoided. If necessary, you should alter the lamp arrangement.

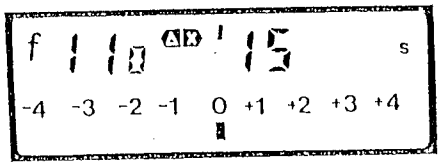
Taking a reading

The measuring procedure is largely as described in the general instructions for the MASTERSIX.

The exposure determined will, if necessary, have to be corrected (see page 13) by the factors resulting from the use of focusing bellows, adapter rings, filters, etc. This will be on the basis of the manufacturer's data.

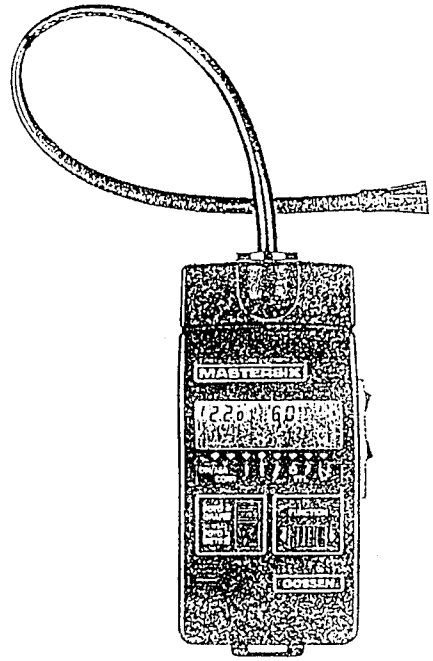
In order to **check the even illumination** of the original, slide the combination of units about on the original and, with rocker switch M pressed, observe the analuoge readout. Ideally, a value of 0 will be indiccated on the scale at every part of the original. If not, the lighting should be changed until optimum illumination is obtained.

The procedure for **density measurements** is as described on page 27.



PROFI-flex

The PROFI-flex attachment converts your MASTERSIX into a special instrument for tasks which cannot be performed with an exposure meter on its own. Optimum utilization of the very high measuring sensitivity of the MASTERSIX its achieved. Wherever one is faced with small objects or locations which are difficult to get at for exposure readings, we can recommend this attachment with its flexible measuring probe and its small measuring aperture. It is particularly suitable for exposure measurements for macrophotography, groundglass measurements for small-format, medium-format and large-format cameras, density measurements on films and for measuring the light density. Contrast measurements (density contrast, subject contrast, etc.) are equally easy.



Before taking a reading

The PROFI-flex is fitted on the MASTERSIX. To do so, the cover is removed from the MASTERSIX and its diffuser slid to the right. Fitting the PROFI-flex automatically programmes the circuit of the MASTERSIX.

Should you already possess a MESSSONDE (MEASURING PROBE) for a different GOSSEN exposure meter, feed in the factor +3 in the CORR mode and then proceed as described here.

Measurements at subject

The PROFI-flex is suitable for measurements for macrophotographs, for close-up measurements in particularly small areas or for spot readings on small subjects which are physically inaccessible with an exposure meter, e.g. reduced simulations of indoor scenes and landscapes, details of architectural models, circuitry or artistic exhibitions.

Aim the measuring aperture of the PROFI-flex at your subject, taking care that your field of measurement is not in shadow. You will get the best results by measuring with a grey card. To do this, place a small grey card in front of the important part of your subject and direct the measuring aperture towards the card, without putting it in shadow. Ensure that only the area of the grey card is covered by the measurement. The distance between the card and the measuring aperture must not be greater than the diameter of a circle which can just be inscribed inside the card. Otherwise the surrounding area will invalidate the reading.

Ground-glass readings

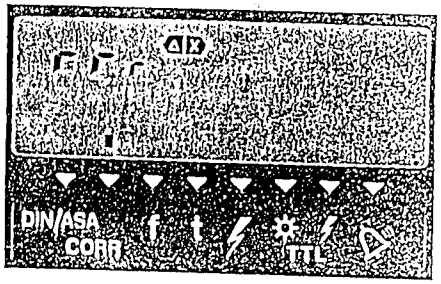
Ground-glass measurements of ambient light are particularly simple using the PROFI-flex. Extension factors for open bellows or any aperture errors, filter factors and light-scatter components are automatically taken into account in the reading.

The measuring aperture of the PROFI-flex is placed on the point of the ground-glass plate being measured. Any undesired stray light must be excluded with a black cloth. It is recommended that readings should not be taken at the corners of the ground-glass plate, because of the light drop there, caused essentially by the objective lens, particularly with wide-angle objectives. A Fresnel screen should always be used in order to achieve a more-or-less uniform light-distribution over the ground-glass plate.

To determine the exposure time, it is best to use a grey card, arranged so that it receives the same illumination as the important part of the subject. Switch in the CORR mode. Then take a reading at the ground-glass plate of the image area of the grey card. Press M. The readout shown here will appear in the display.

Then use the measuring probe to take a reading directly at the grey card and press M. The MASTERSIX will have stored the requisite correction and you can measure as usual with aperture preselection at the ground-glass plate and determine your exposure data.

Flash readings at the ground-glass plate are not possible with the PROFI-flex.



When ground-glass readings are not possible with the working aperture

This can occur with small apertures or when filters in front of the camera objective have to be taken into consideration.

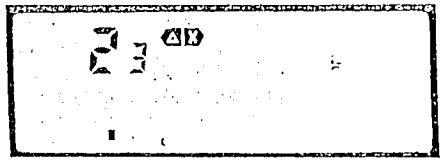
The following advice may help:

1. Use the white side of the grey card, thereby gaining 2⅓ stops for the measurement, which have to be taken into account. In the CORR mode, use the value change switch to program these 2⅓ stops additionally into the MASTERSIX, e.g. 4 stops + 2⅓ stops = 6⅓ stops.

2. Take a reading with the aperture open and observe the difference compared with the working aperture. The MASTERSIX will yield the correct result if you have fed in the difference, using the value change switch in the CORR mode.

Density measurement

The measuring aperture with a diameter of 5 mm enables densities to be measured at very small locations. The measuring method is described on page 27.

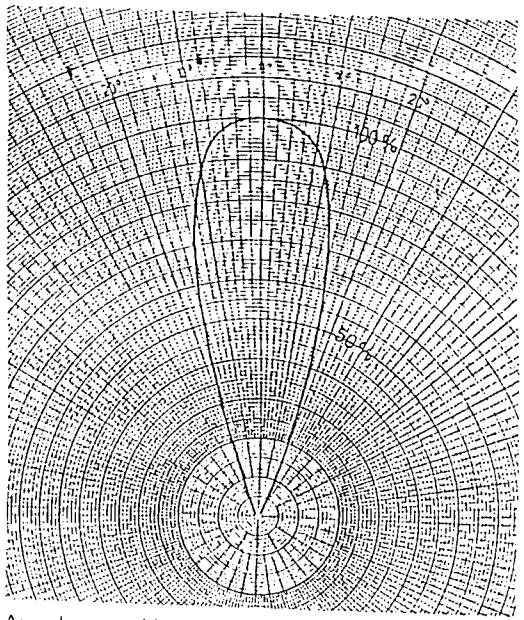


Technical data

The fibre-optics cable of the PROFI-flex consists of roughly 4000 glass fibres each having a diameter of about 70 µm (= 0.07 mm). It must not be kinked, since breakage of fibres causes loss of light.

The correction factor is automatically taken into account by plugging into the MASTERSIX.

Length	400 mm
Measuring aperture	5 mm diam. ≙ 19.6 mm²
Start of measuring range for flash readings	f/5.6⅔ at 21 DIN
Measuring angle	approx. 30°



Angular sensitivity of PROFI-flex