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PENTACON

PRAKTICA VLC

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DEUTSCHE DEMOKRATISCHE REPUBLIK

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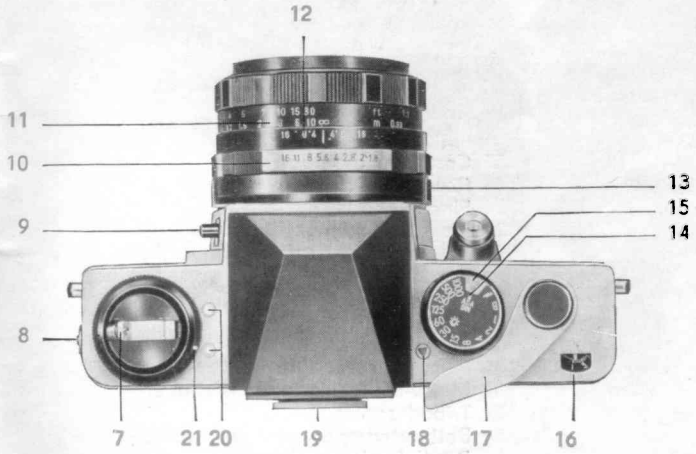
PENTACON

PRAKTICA VLC

Instructions for Use

Control Parts of the PRAKTICA VLC



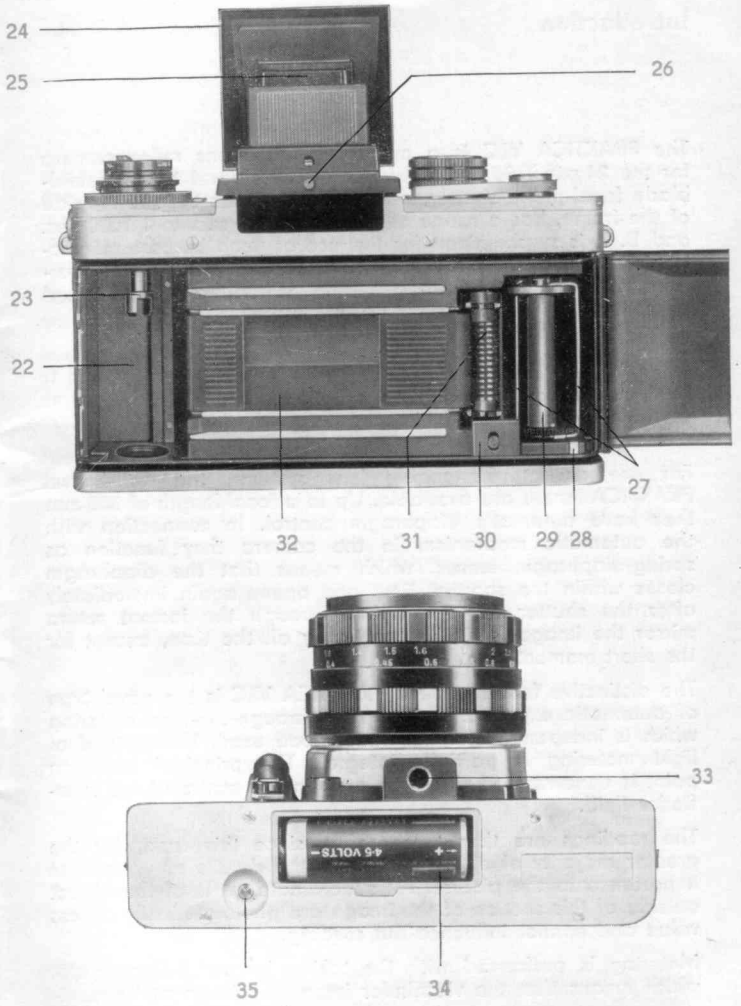
1 Cocking lever for delayed-action release
2 Delayed-action release button
3 Shutter release
4 Knob for setting the shutter speeds
5 Prism attachment
6 Rewind knob
7 Rewind crank
8 Flash contact
9 Unlocking button for changing viewfinder attachment
10 Diaphragm setting ring
11 Distance setting ring
12 Depth-of-field scale
13 Manual stop down key
14 Film speed mark

15 Film speed scales
16 Exposure counter
17 Cocking lever
18 Exposure speed mark
19 Ocular mount with fitting for accessories

20 Symbols for measuring at full aperture or taking aperture
21 Selector ring for automatic exposure control

Control Parts of the PRAKTICA VLC

22 Cartridge chamber
23 Rewind catch
24 Finder hood
25 Magnifying lens
26 Button for opening the finder hood
27 Bracket wires
28 Marking point for inserting the film
29 Take-up spool
30 Supporting piece
31 Film transport sprocket
32 Metal-blade focal-plane shutter
33 Tripod socket
34 Battery compartment with battery
35 Rewind release button



Introduction

The PRAKTICA VLC is a miniature single-lens reflex camera for the 24 mm × 36 mm picture format. Its novel type of steel-blade focal-plane shutter, which travels across the shorter side of the frame, has a range of speeds from 1 sec. to 1/1000 sec. and B. It is synchronized for the use of flash bulbs and electronic flash units. As a result of the rapidly moving steel curtains, the electronic flash can be synchronized with a speed of about 1/125 sec.

Interchangeable finder hoods offer an all-round applicability

For use as interchangeable lens systems, the well-known PRAKTICA lenses are available. Up to a focal length of 300 mm they have automatic diaphragm control. In connection with the automatic mechanism in the camera they function as spring-diaphragm lenses, which means that the diaphragm closes within the shortest time and opens again immediately after the shutter has run down. Through the instant return mirror the image is visible practically all the time, except for the short moment of exposure.

The distinctive feature of the PRAKTICA VLC is the novel type of automatic exposure control with through-the-lens metering which is independent of the finder hood used. The method of light metering is partially integral. The principal metering point is concentrated within an area in the centre of the viewfinder field.

The readings are thus true reality, since this area, for the greater majority of objects, includes the details of uppermost importance to the picture. All subordinate parts of the object outside of this section of the image are photometrically of less value and cannot influence the reading.

Metering is performed with the taking lens at full aperture, which means that the viewfinder image is always at its maximum brightness. In the PRAKTICA VLC the diaphragm values are transferred elecrically from lens to camera, without requiring any mechanical device. Also in connection with intermediate rings adapted for electric transmission, this modern method of light metering at full aperture can be employed.

Due to the special type of bridge circuit, reading is not affected by any variation in voltage of the power source.

But also all the PRAKTICA lenses without electric transmission of the diaphragm values may be used thanks to the possibility of readjusting the light meter for measuring with the lens at taking aperture.

The PRAKTICA VLC is also equipped with a delayed-action device.

Abridged Instructions

For further details please turn to page:

A **Opening the camera back** 10

Pull out rewind knob (6) as far as it will go.

B **Inserting the film** 10

Place film cartridge into cartridge chamber (22), push in rewind knob (6). Slant the beginning of the film and push it from above as far as it will go underneath the supporting piece (30) and over the transport sprocket (31). Bring the beginning of the film strip onto the core of the take-up spool (29) and to its green mark (28). Wire bracket (27) of the take-up spool must not stand upwards.

C **Closing the camera back** 12

D **Preparing for the exposure** 12

Actuate cocking lever (17) and shutter release (3) until exposure counter (16) stands on number "1".

E **Setting the film speed** 14

Lift the knurled ring of speed setting knob (4) and rotate it until the speed value of the film loaded in the camera stands opposite the film speed mark (14).

F **Setting the exposure speed** 14

Rotate speed setting knob (4) until the desired speed numeral stands opposite the orange-coloured triangle (18) on the cover plate of the camera.

For further details please turn to page:

G **Setting the diaphragm numeral** 16

Rotate diaphragm setting ring (10) on the lens mount to bring the desired diaphragm numeral against the relevant mark.

H **Automatic exposure control** 18

When using lenses permitting electric transmission of the diaphragm values, set the selector ring (21) to the ⊙ symbol = measuring at full aperture. For lenses without electric transmission set the selector ring to the ⊙ symbol = measuring with the lens at taking aperture!

Preselect either shutter speed or aperture. Depress shutter release (3) till you feel the pressure point. At the same time rotate either the diaphragm setting ring (10) or the speed setting knob (4) till the meter needle comes to rest between the focusing marks within the indicator area of the viewfinder field. When using the taking aperture for meter reading, depress the stop down key (13) in case of automatic diaphragm control lenses or actuate downwards to the camera bottom the engaging kind selection means in case of the Pancolar 50 mm f/1.8 lens.

I **Focusing** 25

Rotate distance setting ring (11) until the image in the microprism screen or in the groundglass field appears perfectly sharp.

K **Cocking and releasing the shutter** 28

Depress shutter release (3) to beyond the pressure point. After the shutter has run down a signal appears in the lefthand side of the viewfinder. Swing cocking lever (17) around as far as it will go and return it into its initial position.

For further details please turn to page:

L **Delayed-action release** 29

Swing delayed-action cocking lever (1) upwards either before or after cocking the shutter. Depress button (2) to release the delayed-action mechanism.

M **Changing the film** 30

After the last exposure, depress rewind release button (35), swing out rewind crank (7), and turn it in direction of arrow to rewind the film. Open the camera back and remove the cartridge.

N **Exchanging the finder hood** 32

O **Exchanging field lenses** 33

P **Exchanging lenses** 34

Q **Flash exposures** 36

R **Exchanging the power source** 38

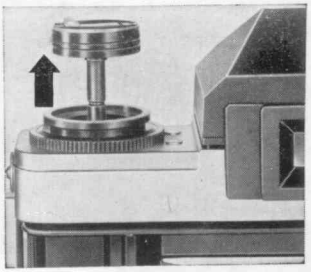
S **Maintaining the camera** 39

T **Accessories** 40

The Abridged Instructions are a short summary of the most important items. A detailed desciption is given in the main section on the following pages.

A Opening the camera back

Pull rewind knob (6) upwards until you feel hard resistance. The camera back is unlocked and can be opened. The exposure counter (16) will automatically jump to zero position.



B Inserting the film

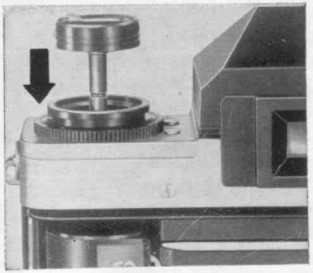
Any type of perforated 35 mm film in commercially available standard cartridges may be used. The cartridges contain film lengths for 36, 20 or 12 exposures in the 24 mm × 36 mm format. To make sure that no light enters the slit of the cartridge the film should not be loaded in direct sunlight but shaded by your own body.

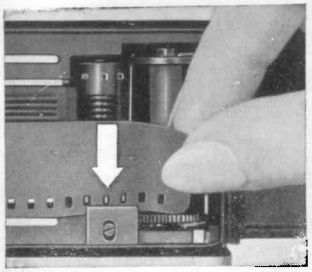
By having pulled out the rewind knob (6) to open the camera back you have withdrawn the rewind catch (23) from the cartridge chamber (22) so that you can now place the cartridge into the cartridge chamber.

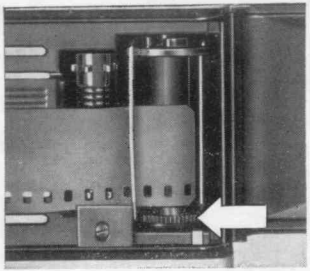
Push the rewind knob, with slight backward and forward movements, right back into the camera. The rewind catch will engage in the core of the cartridge.

Push the beginning of the film projecting out of the cartridge slit from above as far as it will go underneath the supporting piece (30) arranged above the transport sprocket (31). The beginning of the film strip must now lie on the core of the take-up spool (29) and meet the green marking point (28).

The bracket wires (27) of the take-up spool must not stand upwards. Should this happen to be the case the knurled flange of the spool has to be turned to bring the bracket wires to their lateral position. If the film tends to bow heavily, we recommend to turn additionally the knurled flange to the left until one of the bracket wires (27) is positioned on the beginning of the film.

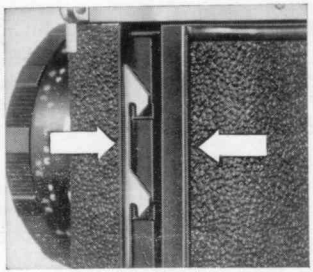






C Closing the camera back

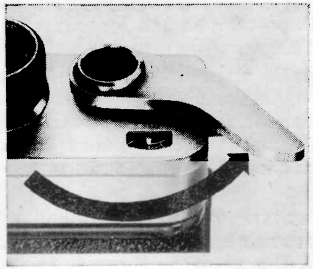
Press the camera back firmly onto the camera body. It locks automatically.

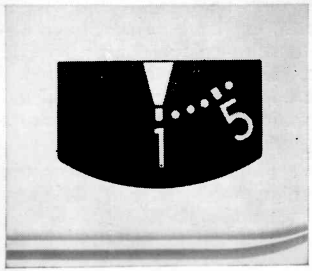


D Preparing for the exposure

The cocking lever (17) has an idle stroke of about 15° so that it can be moved from its rest position into that of readiness for action, and can thus be easily grasped – a great advantage especially in serial shots.

Swing the cocking lever around as far as it will go, return it, and depress shutter release knob. Repeat this operation and then cock the shutter once more. The automatic exposure counter (16) now stands on number "1". Special setting of the exposure counter is not necessary since it starts working automatically when the camera back is closed.





E Setting the film speed

To set the film speed value for the automatic exposure control, lift the knurled ring of the speed setting knob (4), and rotate it until the speed value of the film loaded (DIN or ASA) stands opposite the white mark (14). When lowered, the knurled ring clicks in at the selected film speed numeral.

F Setting the exposure speed

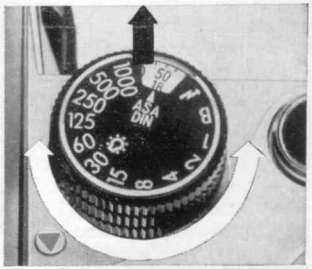
The metal-blade focal-plane shutter can be set for exposure speeds ranging from 1 sec. to 1/1000 sec.

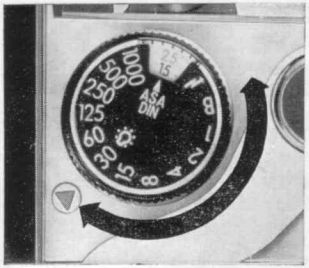
When set on "B" the shutter remains open as long as release knob (3) is being depressed. For exposure of a longer duration a cable release with locking device should be used, which can be screwed into the thread in the body of the release knob. Regarding shutter speeds in connection with flash units please refer to Section Q.

The orange-coloured numerals on the shutter-speed setting knob (4) stand for slow speed exposures from 1 sec. to 1/15 sec. which require the use of a tripod. The white numerals indicate the values for instantaneous shots from 1/30 sec. to 1/1000 sec.

The exposure speeds are set by rotating knob (4) until the desired numeral coincides with the orange-coloured triangle (18) on the cover plate of the camera. Please note that the knurled ring of the setting knob must not be lifted up since this would alter the film speed setting and cause the automatic exposure system in the PRAKTICA VLC to give incorrect results.

The exposure speeds can be set either before or after the shutter has been cocked. The setting knob clicks in at every numeral. Intermediate values are not adjustable.





G Setting the diaphragm numeral

On the lenses with automatic pressure diaphragm (APD) only the desired aperture numeral on the diaphragm setting ring (10) of the lens has to be brought to meet the appropriate mark on the lens mount. The diaphragm thus remains fully open at first and closes down to the preselected value when the shutter release is depressed. The automatic diaphragm control mechanism in the PRAKTICA VLC causes the pressure diaphragm to function as an automatic spring diaphragm. Regardless of the speed with which the shutter release (3) is depressed, the diaphragm will spring to the preselected value and then open again immediately after the shutter has run down.

For checking the depth of field in the viewfinder image, most lenses can be stopped down, before the exposure is made, to the preselected value or to the value determined by the exposure meter by means of a manually operable key (13) on the lens mount.

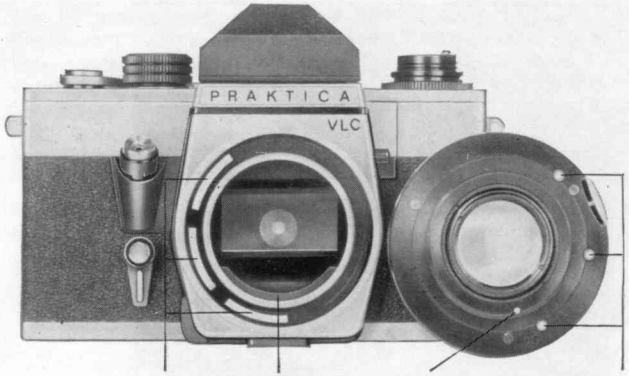
The 50 mm f/1.8 Pancolar lens with electric transmission of diaphragm values has a kind selection means opposite the lens mount instead of the down key. With the means in its upper position the diaphragm operates as an automatic spring diaphragm whereas in its lower position, directed towards the camera bottom, the automatic diaphragm control mechanism is disengaged. The diaphragm acts as a click stop and closes according to the value preset on the diaphragm ring.

The kind selection means engages in both end positions. For full-aperture measurements it is **absolutely necessary** to set it to its **upper** position (automatic operation).

H Automatic exposure control

The newly devised automatic exposure system in the PRAKTICA VLC makes it possible, by means of the electric transmission of the diaphragme values, to **take the meter readings with the photographic lens at full aperture,** so that the viewfinder image remains at its maximum brightness. The lenses arranged for metering at full aperture are recognizable by three resilient contact pins visible at the rear end of the barrels, which join the contact paths on the camera.

But it is also possible to use the well-known lenses of the PRAKTICA family without automatic diaphragm control. In this case, **metering is performed with the lens stopped down to taking aperture.** The finder image will thus be somewhat darker, according to the aperture selected, or determined by the exposure meter.



Contact paths | Swing mechanism for automatic diaphragm control | Pin for automatic diaphragm control | Contact pins

Whether your lens is at full aperture or stopped down, you have, in either case, two methods of metering from which to choose:

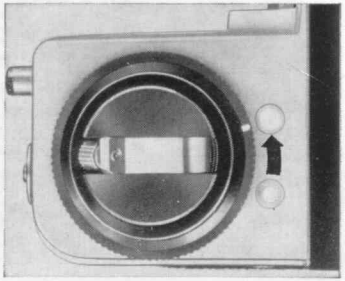
a) You preselect the shutter speed and adjust the aperture to centre the meter needle, or

b) You preselect a certain aperture and adjust the shutter speed to centre the meter needle.

The first method is applied, e. g. if movement of the subject requires a certain exposure speed, whereas the second method will be preferred if a specific aperture has to be preselected to achieve the necessary depth of field.

Metering at full aperture with shutter speed preselected

Set the mark of the selector ring (21) which, as a knurled ring, encircles the rewind knob, to coincide with the ⊙ symbol. Preselect the exposure speed by actuating knob (4). Depress shutter release (3) till you feel the pressure point and rotate diaphragm setting ring (10) on the lens mount till the meter needle visible in the viewfinder field is centred between the focusing marks.

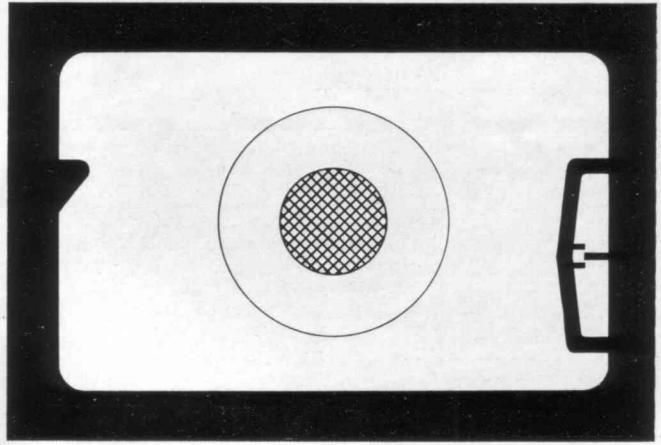


If on the rotation of the diaphagm setting ring or the exposure speed setting knob the meter needle deflects no more, replace the power source (please cp. Section R).

▶

Metering at full aperture with diaphragm stop preselected

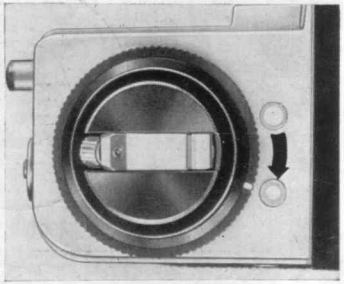
Set selector ring (21) to the ⊙ symbol. Move the diaphragm setting ring (10) on the lens mount to a stop corresponding to the taking conditions. Depress shutter release (3) till you feel the pressure point and rotate the exposure-speed setting knob (4) till the meter needle is centred between the focusing marks within the indicator area. The exposure speed knob must always be set to click-stops and not to intermediate values. Should this not bring the meter needle precisely to the centre of the focusing marks, the diaphragm ring has to be moved for fine adjustment. The diaphragm ring can be set to intermediate values between the click-stops.



Metering at taking aperture with shutter speed preselected

This method is employed in connection with lenses not permitting electric transmission of the diaphragm values. Move selector ring (21) to the ⊙ symbol. Preselect the shutter speed, adjust the diaphragm ring to centre the meter needle as described above. On lenses wih automatic pressure diaphragm the stop down key (13) on the lens mount has to be depressed while the meter reading is taken.

The 50 mm f/1.8 Pancolar is provided with an engaging kind selection means by which you can change over from automatic diaphragm control to manual operating (please cp. Section G on page 16). For meter reading this means must be shifted to its lowermost position so that the diaphragm acts as click stop. As soon as this lever is returned into its upper position, metering is performed automatically again.

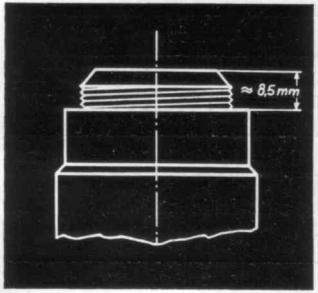


Metering at taking aperture with pre-set diaphragm

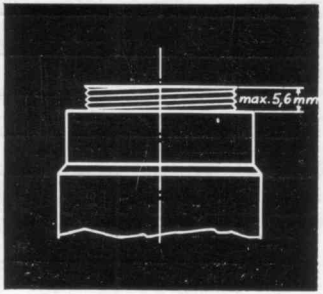
To be employed with lenses not permitting electric transmisson of the diaphragm values. Selector ring (21) stands on the symbol ⊙. Preselect aperture on diaphragm ring of lens mount and adjust shutter speed setting knob to centre meter needle. Pay attention to click-stops and fine adjustment by means of diaphragm ring. Here, too, the shutter release has to be actuated up to the perceptible pressure point.

If lenses **without** automatic diaphragm control, i. e. lenses with pre-set or plain diaphragms, are being used for metering at taking aperture, the lens remains stopped down until the shutter is released. It is, therefore, advisable to focus with the lens wide open **before** taking the meter reading.

Owing to the construction of their barrels, some of the older types of lenses protrude so far into the interior of the camera body as to impede the functioning of the swing mechanism for the automatic diaphragm. Thus, mirror and shutter cannot work. These lenses cannot be used with the PRAKTICA VLC. They are recognizable by the structure of their barrels, as may be seen from the illustration below.



not usable



usable

Measuring range of the PRAKTICA VLC

If the luminous density of the subject to be photographed is very low, the meter needle, even at the smallest diaphragm numeral – e. g. 1.8 – and a slower shutter speed, cannot be centred within the focusing marks. In fact, the selection of yet longer exposure periods will disconnect the automatic exposure system, so that the meter needle will swing downwards to its stop point. When lighting conditions become more favourable again, a **shorter** exposure time has to be set before the automatic exposure system will recommence functioning.

The table shows within which range of shutter speeds the automatic system will work in connection with the various film speed settings.

Speed of film DIN	ASA	Exposure speed
12	12	1 sec. to 1/1000 sec.
15	25	1 sec. to 1/1000 sec.
18	50	1 sec. to 1/1000 sec.
21	100	1/2 sec. to 1/1000 sec.
24	200	1/4 sec. to 1/1000 sec.
27	400	1/8 sec. to 1/1000 sec.
30	800	1/15 sec. to 1/1000 sec.
33	1600	1/30 sec. to 1/1000 sec.

With settings to B and ⚡ the automatic exposure system should not be actuated.

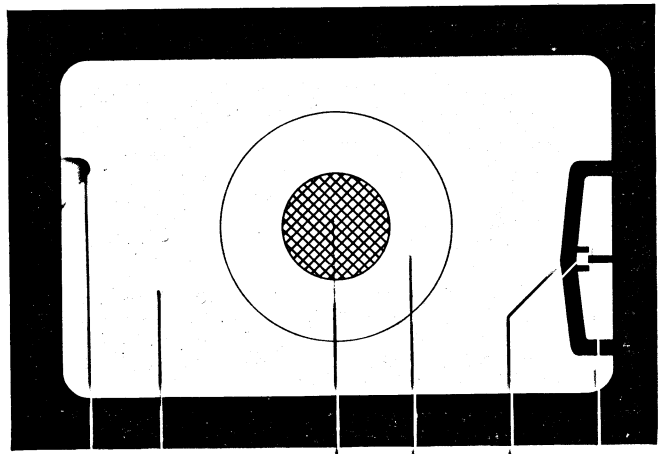
I Focusing

To brighten up the image, the viewfinder hoods are fitted with a Fresnel lens, in the centre of which are the two focusing systems:

– the microprism screen in the middle and
– the circular groundglass area surrounding it.

Focusing is performed by rotating the distance setting ring (11) on the taking lens. To achieve utmost definition when using lenses with pre-set diaphragm or plain diaphragm adjustment, it is advisable to focus with the lens set to the smallest diaphragm numeral (full aperture).

For exchanging the field lenses please cp. Section O.



Focusing on the microprism screen

The image in the microprism screen is in correct focus as soon as it appears clear and free from fuzziness. It is out of focus if it looks fuzzy and crumbles into screen elements. The microprism screen is usually employed for focusing if the subject to be photographed is in resting position or only slightly moving.

Focusing on the circular groundglass area

The groundglass area is used for focusing if there is more movement in the scene. Also this kind of setting is often most appropriate in macrophotography or photomicrography as well as on lenses with a small relative aperture (diaphragm numeral higher than 4).

The ground Fresnel section of the viewfinder is not meant to be used for focusing.

Depth-of-field indication

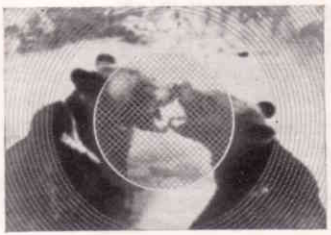
The depth of field is determined by means of the depth-of-field scale (12) arranged on the right and left of the index on the lens mount.

After having set to this camera-to-subject distance the figure stands opposite the distance mark. Above the figures of the depth-of-field scale, which are equivalent to the diaphragm numerals on the lens mount, the limits of the range of definition can be read from the distance scale.

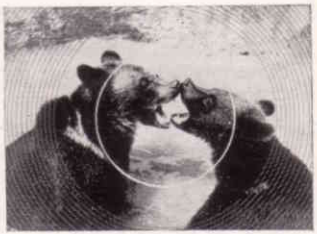
As an example, for a distance setting of 3 m and an f/8 aperture the illustration shows a range of definition between 2 m and 5 m.

When the manual stop down key is depressed or the diaphragm selection means of the 50 mm f/1.8 Pancolar is in its lowermost position, you will be able to judge depth of definition also in the finder image.

Persons with defective eyesight may work without their spectacles on by having a corrective lens corresponding to their long-distance glasses fitted into the eye cup (see Section „Accessories").



Microprism screen
is fuzzy = unsharp



Microprism screen
is clear = sharp

For infrared exposures the focusing point has to be slightly modified. By rotation of distance setting ring (11), the distance reading which, after focusing, stands opposite the distance mark, has to be moved to meet the infrared dot next to that mark. The image produced by the infrared rays is brought into correct in relation to the film.

K Cocking and releasing the shutter

Before releasing the shutter, please note the following:

1. If the signal is visible in the left side of the viewfinder, the camera is not ready for exposing. The shutter has to be cocked!
2. For exposure speeds slower than 1/30 sec. a tripod and a cable release should be used.

We advise you to hold your PRAKTICA VLC so that it lies firmly in both your hands to be able to actuate the shutter release (3) comfortably.

Depress the shutter release steadily – never with a jerk – past the soft-running limit, where the automatic exposure system is switched in, until the shutter runs down.

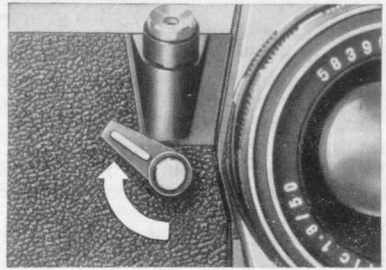
After the exposure, the signal on the left side of the viewfinder image becomes visible again, a sign that the shutter has to be cocked.

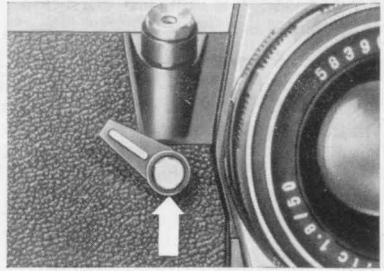
L Delayed-action release

The delayed-action mechanism is cocked by moving lever (1) upwards as far as it will go. By means of pressure on button (2) for actuating the delayed-action release it will start running, and after about 8 seconds the shutter will be released. The delayed-action mechanism may be tensioned either before or after the shutter is cocked.

When the delayed-action release is running down don't cock the shutter.

Even if the delayed-action device is tensioned, the shutter can be released in the usual manner by means of release knob (3).





M Changing the film

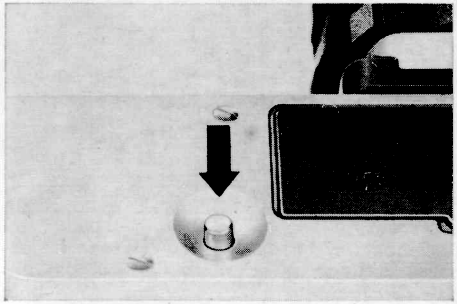
When the exposure counter (16) indicates the maximum number of frames obtainable with the film in the camera (12, 20 or 36 exposures) the film has to be rewound and taken out of the camera.

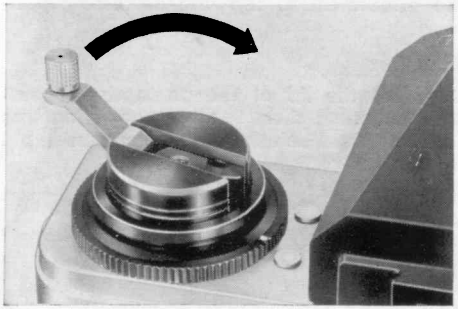
Depress rewind release button (35) to its rest position. Unfold rewind crank (7) out of rewind knob (6) and rotate it, not too quickly, in direction of the arrow. Rewinding at too great a speed may cause electrostatic charge and statics on the film.

As rewinding is completed, greater resistance becomes noticeable because the beginning of the film is disengaged from the take-up spool. After this, the crank turns quite easily.

Fold the rewind crank back into the knob (6) and pull the latter upwards as far as it will go. The camera back is thus unlocked and can be opened. Remove the cartridge containing the exposed film from the cartridge chamber. Loading a new film, and subsequent cocking of the shutter, cause the rewind knob (35) to spring back automatically out of its click-stop position. Should you have attempted to expose more frames than the number marked on your film packet, the cocking lever, at the end of the film, cannot be swung around completely. Do not, in such a case, use force, as this might cause damage to the perforation of the film or the end of the film might slip off the spool inside the cartridge. Rewinding would then be impossible.

If the cocking lever – as decribed above – has not been fully tensioned, this must be completed, and the shutter released, after rewinding and removing the exposed film and before inserting a new one.



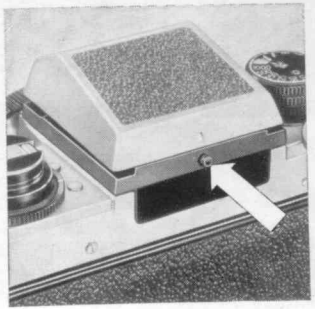


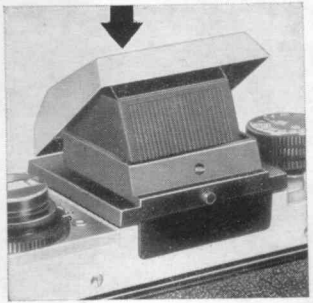
N Exchanging the finder hood attachments

The finder hood attachments of the PRAKTICA VLC can be exchanged. For removing such an attachment, depress the unlocking button (9) by simultaneously lifting upwards the unit. For mounting, depress the unlocking button, too, by simultaneously allowing the attachment to slip into its resting position.

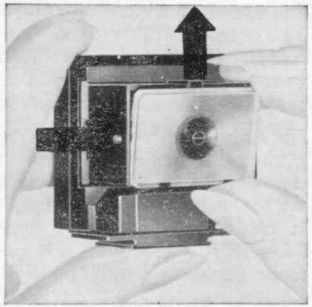
Using the pentaprism

By depressing button (26) the lid of the pentaprism opens. For closing it, tilt the lid until it clicks in. The magnifying lens (25) can be swivelled off the beam of rays, if required, but don't do this for the purpose of light metering.





O Exchanging field lenses



Field lenses comprised in the finder hood attachments can be replaced by special field lenses. Additionally to the focusing system mentioned under Section I, five special field lenses are available.

For the purpose of exchanging field lenses, remove the finder hood attachment from the camera. Hold the field lens at its long edges and press against both retaining springs until, on the opposite side, it can be disengaged from the single retaining spring. Don't touch the upper surface!

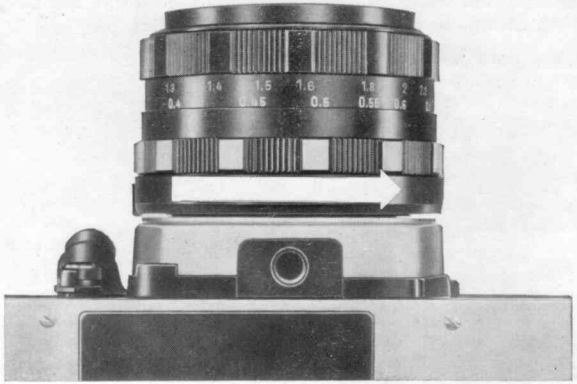
Insert the field lens in reverse order.

P Exchanging lenses

The standard lens of the PRAKTICA VLC can easily be replaced by lenses of other focal lengths. You take hold of the lens body, as shown in the illustration below, turn it to left and unscrew it. The exchangable lens is inserted accordingly and screwed tight.

For full-aperture light metering with the PRAKTICA VLC, lenses permitting the electric transmission of the diaphragm values are employed which are recognoscible by three contact pins on the rear of the barrel. The name of the PENTACON-lenses is added by "electric". But you may also use the ordinary PRAKTICA lenses with this camera, in which case metering has to be performed with the lens stopped down to taking aperture.

Because of their structural design, some of the older types of lenses which are not provided with electric diaphragm control cannot be used with the PRAKTICA VLC. (For details please refer to Section H).



List of interchangeable lenses:

1. Lenses permitting electric transmission of diaphragm values

PENTACON electric	50 mm f/1.8	APD
ZEISS PANCOLAR	50 mm f/1.8	APD
PENTACON electric	29 mm f/2.8	APD
PENTACON electric	100 mm f/2.8	APD
PENTACON electric	135 mm f/2.8	APD

2. Lenses not permitting electric transmission of diaphragm values

ZEISS FLEKTOGON	20 mm f/4	APD
PENTACON	30 mm f/3.5	CStD
ZEISS FLEKTOGON	35 mm f/2.8	APD
PENTACON auto	135 mm f/2.8	APD
PENTACON	135 mm f/2.8	PD
ZEISS S	135 mm f/3.5	APD
ZEISS S	180 mm f/2.8	SD
PENTACON	200 mm f/4	PD
ZEISS S	300 mm f/4	SD
PENTACON	300 mm f/4	PD
PENTACON	500 mm f/5.6	PD
ZEISS Mirror Lens	1000 mm f/5.6	

APD = Automatic pressure diaphragm
SD = Spring diaphragm
PD = Preset diaphragm
CStD = Click stop diaphragm

Q Flash exposures

The shutter of the PRAKTICA VLC is designed for synchronization with flash bulbs and electronic flash units.

The cable of a commercially available flash lamp or electronic flash unit is connected with the flash contact (8). By means of an accessory shoe which must be pushed beneath the knob of the rewind crank (7) flash units can be fastened directly to the camera.

This accessory shoe is also provided for flash units with centre contact. In such a case the flash contacts on camera body and accessory shoe are connected by the special cable.

The use of flash lamps

With lamps for short flash duration, the shutter has to be set for a speed of 1/30 sec. – marked by the lamp symbol ♀ – or slower. The ignition circuit is closed only as long as the shutter runs down. It is open after the shutter has terminated running down and during the tensioning procedure, so that flash lamps can be exchanged also before the shutter is cocked.

The use of electronic flash units

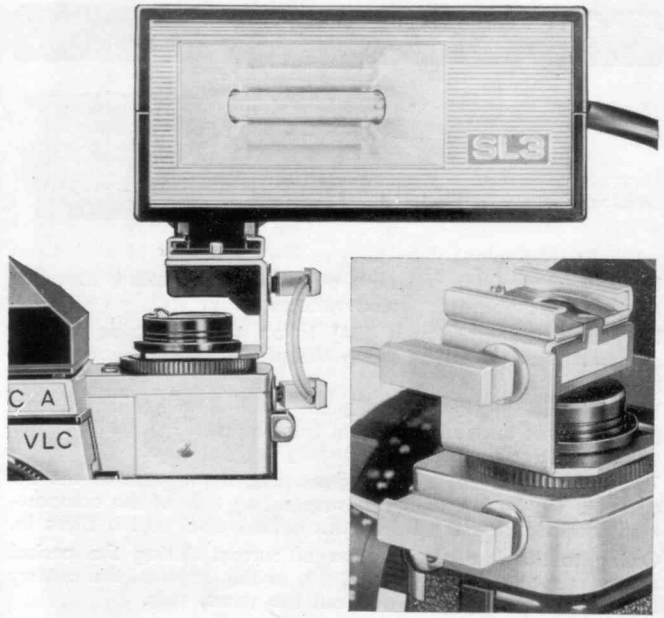
Owing to the extremely rapid travel of the curtains in the metal-blade focal-plane shutter, synchronization up to a shutter speed of about 1/125 sec. is made possible. The knob for setting the shutter speed has to be moved to the flash symbol setting ⚡ next to "B".

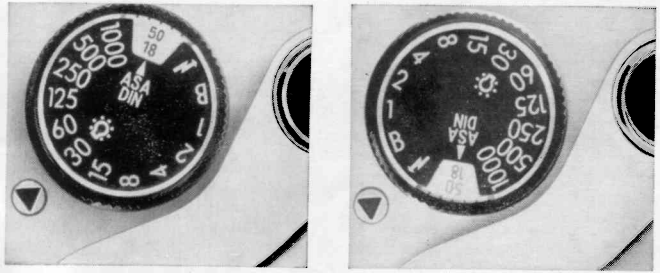
The guide number

The diaphragm numeral to be set on the lens mount for flash exposures can be found with the aid of the "guide number". Manufacturers of flash lamps and electronic flash units give these guide numbers on the wrapping or in the instructions for use as required for the various sensitivity grades of the negative material.

The correct aperture is determined by dividing the guide number for the flash in use by the flash-to-subject distance figure (in meters). Formula for the flash unit attached to the accessory shoe of the camera:

$$\text{Diaphragm numeral} = \frac{\text{guide number}}{\text{flash-to-subject distance}}$$





R Exchanging the power source

The exposure meter system is powered by a battery used for photographic purposes; rated voltage 4.5 V.

The camera compartment (34) is on the underside of the camera. It is opened by lifting the plastic lid by means of its handle piece.

When inserting the battery, press its bottom plate (positive pole) against the spring contact (also marked +), while at the same time tipping it into the battery compartment.

To close the battery compartment, attach the side of the lid opposite the handle to the corresponding side of the compartment and depress the lid on the handle side until it clicks in.

Owing to the low consumption of current during the period of meter reading, with normal use of the camera, the battery should be exchanged after about two years, only.

S Maintaining the camera

The PRAKTICA VLC is a high quality precision instrument. Perfect functioning of the camera depends very largely on proper handling and careful maintenance.

The camera must, above all, be protected against shock and impact, dust and moisture. That is why the everready case should be used wherever possible.

From time to time the cartridge chamber and spool chamber, also the film track and camera back with film pressure plate must be cleaned with a soft brush. But be careful not to exert pressure on the steel blades of the shutter nor to touch them with your fingers.

Neither should the optical parts (lens, field lens, eyepiece of viewfinder, mirror) be touched with the fingers. Should this have happened accidentally, any fingerprints must be removed immediately with a soft cotton cloth after a soft brush has been used to remove any possible dust. The mirror should be dusted only in urgent cases with a very soft brush.

Never clean, or by any means apply abrasives to the precious-metal pins on the lenses, the means of electrically transmitting the diaphragm values, or to the three precious-metal coated contact paths in the camera. The contact points are automatically cleaned in the process of exchanging lenses. But also here, any dust which may have accumulated has to be removed with a soft brush.

If due to the battery on the contact points in the battery chamber a thin white layer has deposited, the latter can be removed with a soft cloth.

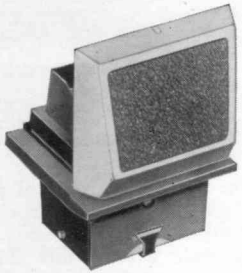
Do not interfere with the mechanism of the camera. Repair work should be carried out only by one of our special Repair Workshops.

Accessories

The various accessories make the single-lens reflex camera universally applicable and help to open up many new fields of activity.

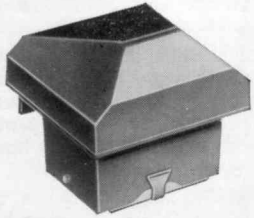
Magnifying Lens Attachment

This attachment is used for increasing the focusing accuracy particularly in close-up work. 5-fold magnification of the groundglass image: Dioptre adjustment + 2 . . . – 4.



Prism Attachment

The prism attachment represents an upright and true-sided viewfinder image, both of horizontal and vertical formats. Of high advantage for all moving subjects.



Finder Hood Attachment

The viewfinder image is viewed vertically to taking position; it is represented reverse-sided and upright. Mainly, this attachment is used for taking resting or slightly moving subjects.

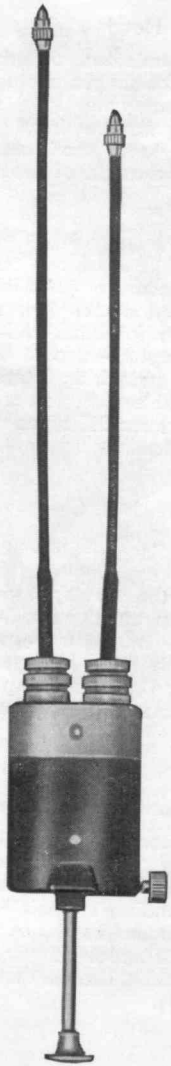
◀

Cable release

For longer exposure periods involving the use of a tripod and also in photomicrography it is indispensable. For long time exposures we advise you to work with a cable release provided with locking device.

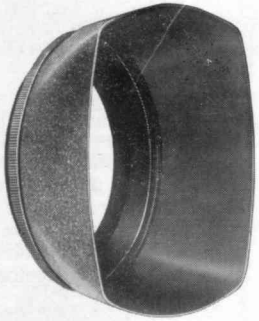
Double Cable Release ▶

Intended for special extension tubes with cable and cable release socket for allowing to utilize the electric diaphragm mechanism in connection with bellows attachments, too.



Lens Hood

It eliminates disturbing flares in counterlight photography and protects the lens surface in rainy weather from getting wet. The lens hood must fit the image angle of the lens.

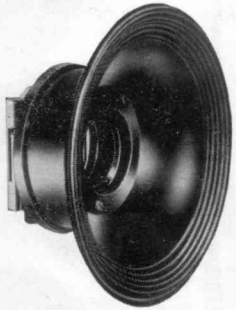


Filters

These are screwed into the filter thread of the lens mount. The filters for black-and-white photography – except of UV filters and polarizing filters – are not suitable for colour work, for which special types of filters are available.

Eye Cup

The eye cup can be attached to the ocular mount of the prism attachment. When focusing it protects against off-angle light. The eye cup is provided for receiving the mount of the correcting lens.



Mount for Correcting Lens

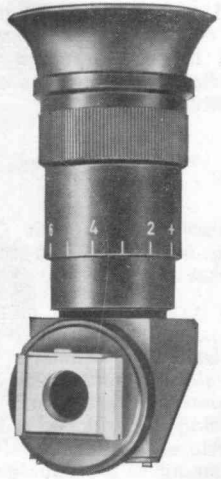
Persons with defective eyesight may have a correcting glass fitted into this mount corresponding to their long-distance glasses in order to work without their spectacles on. This mount can be used with the eye cup, only.

Focusing Telescope

The focusing telescope can be attached to the ocular mount of the prism attachment. It yields an additional 2.7-fold magnification of a finder image section. It is adjustable to faulty eyesight by means of a dioptre focusing mount.

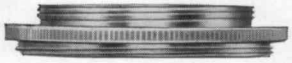
Angle Finder

This finder is also attached to the ocular mount of the prism attachment. It is rotatable and permits a convenient choice of any viewing direction. The angle finder reveals the complete finder image and is equipped with a dioptre scale.



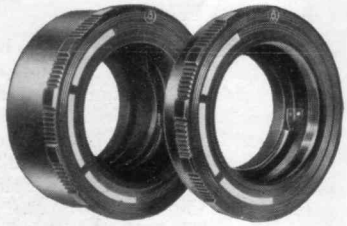
Reversing Ring

To screw the lens into the camera by its filter thread for extreme close-ups with an image ratio exceeding 1.5.



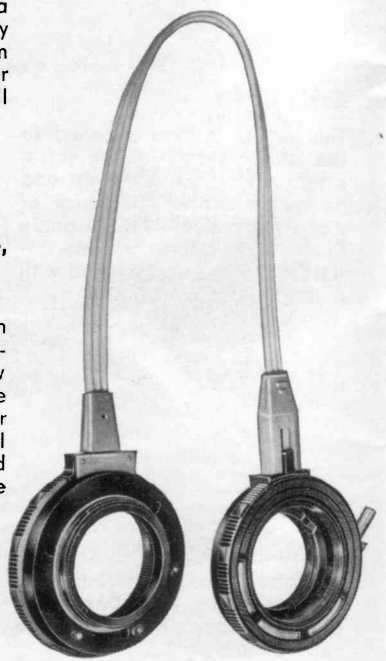
Extension Tubes

These tubes are screwed in between camera and lens as a means of increasing the picture ratio in close-up work. The extension tubes for the PRAKTICA VLC are provided with plunger pins to keep the automatic diaphragm mechanism operative, and with contacts for the electric transmission of the diaphragm values. This makes it possible, also in the field of close-up photography and even at a 1 : 1 picture ratio, to employ the automatic exposure system and to take exposure meter readings with the lens at full aperture.



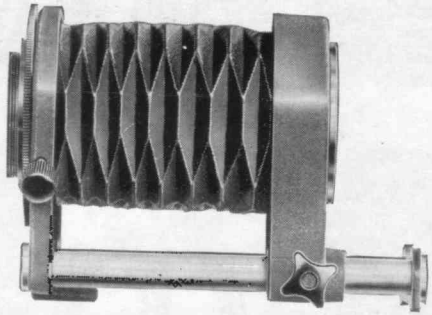
Extension Tubes with Cable, Plug, and Cable Release Socket

The use of these extension tubes in connection with close-up bellows attachments allow the electric transmission of the diaphragm values even if meter reading is performed with full aperture. Shutter is released by means of the double cable release.



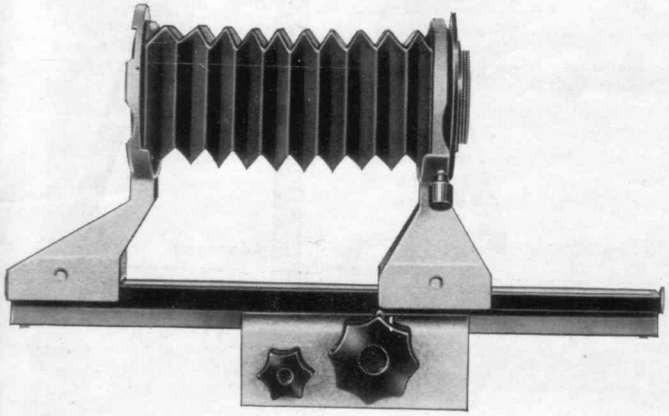
Miniature Close-up Bellows Attachment

This equipment permits an infinite variation of the image ratio in close-up work within a range of about 0.7 to 2.5 in combination with the standard lens.



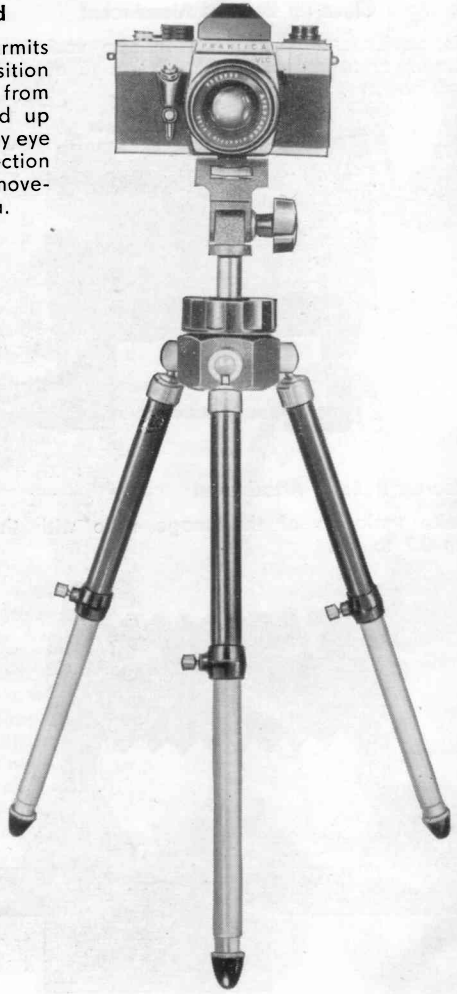
Close-up Bellows Attachment

Infinite variation of the image ratio with the 50 mm lens from 0.7 to 4.4.



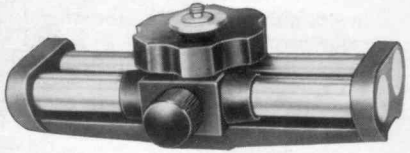
Universal Tripod

Highly rigid, permits varying the position of the camera from close to ground up to approximately eye level. All-direction pan and tilt movement of camera.



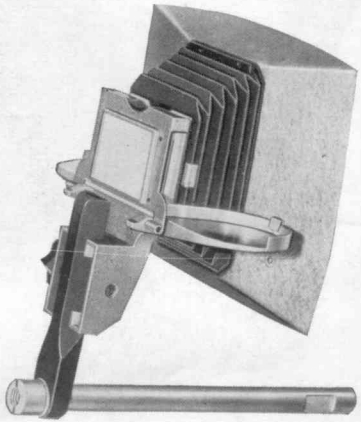
Focusing Slide

Of advantage in close-up work with a tripod, e. g. the Universal Tripod. Makes it possible to change the camera-to-subject distance without having to change the position of the tripod.



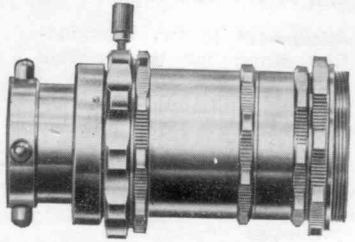
Slide Copier

Accessory for the close-up bellows attachment. Allows you to make diapositives and intermediate negatives from negatives or from reversal-type slides of the 24 mm × 36 mm size.



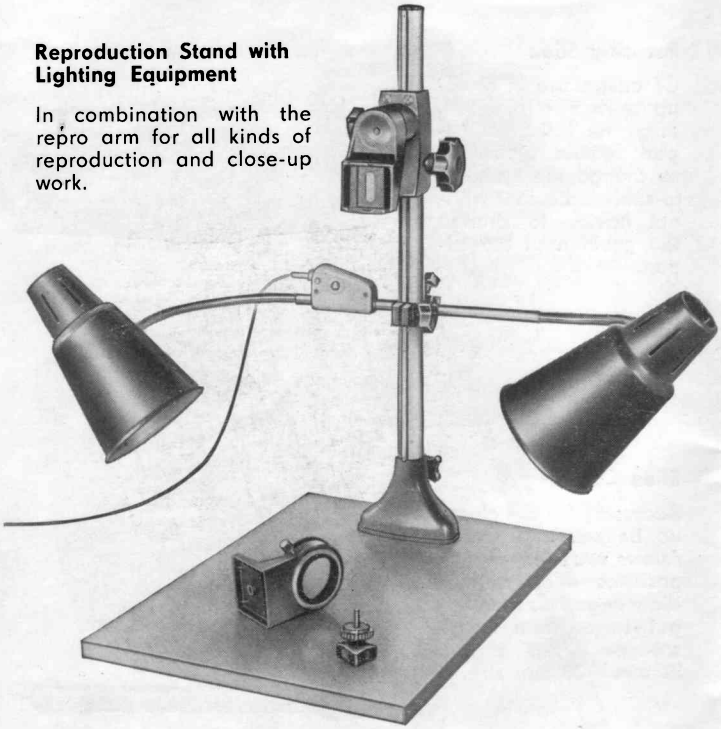
Microscope Attachment Piece

For the firm connection of camera and microscope.



Reproduction Stand with Lighting Equipment

In combination with the repro arm for all kinds of reproduction and close-up work.



Repro Arm with M 49 × 0.75 Thread

Attachment to the reproduction stand for the reliable connection between any type of single-lens reflex camera up to the 6 × 6 size and the filter thread of the lens.

Adapter ring for the M 58 × 0.75 filter thread available.

Everready Case

It protects the camera against shock and dirt.

Please follow these Instructions for Use carefully. Improper handling of the camera may cause damage for which we can accept no liability.

Kombinat
VEB PENTACON DRESDEN

Further development of the PRAKTICA VLC and its accessories may lead to slight alterations of the details given in this manual.