

After focusing, the distance setting is marked by the red triangle or stroke

**Black numerals** = meters

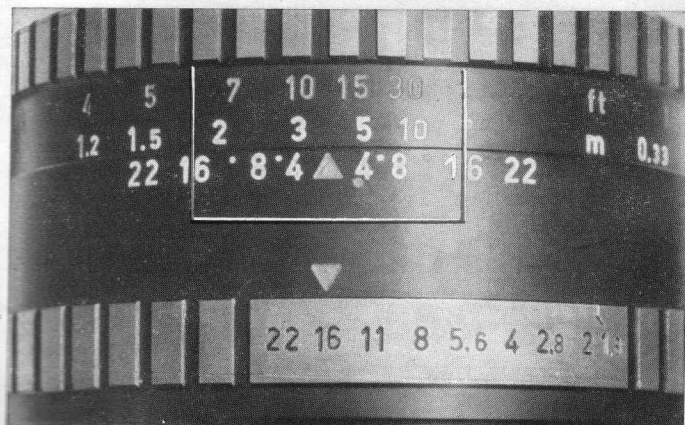
**Red numerals** = feet

### Automatic depth-of-field indication

These are the figures on the right and left of the red focusing index. The exposure distance is set against the red mark. On the left of the mark, next to the desired diaphragm numeral, you read on the distance scale where the depth of definition begins, and on the right, where it ends.

**For the 50 mm ZEISS Pancolar f/1.8:** In accordance with the aperture setting, the two black marks refer to the depth of field. The distance figure stands against the red index. On its left you see where the depth of definition begins and on the right, where it ends: You move forward from the marks on the white or black rim surfaces toward the distance scale.

For infra-red exposures the distance setting has to be slightly modified. By rotation of distance setting ring (17) the distance reading (in meters or feet, or the infinity mark  $\infty$ ), which after focusing stands next to the red indicator, has to be moved to meet the red dot (infra-red dot) on the right of the indicator. Thus, the image produced by the invisible infra-red rays, which is somewhat further away from the lens than the one designed by the visible light, is brought into the image plane and will appear sharp on the negative.



Distance 4 m (13 ft.) — Aperture f/16 — Depth of field from 1.80 m (6 ft.) to  $\infty$



Distance 5 m (15 ft.) Aperture f/8  
Depth of field from 3 m to 15 m (10 ft. to 50 ft.)

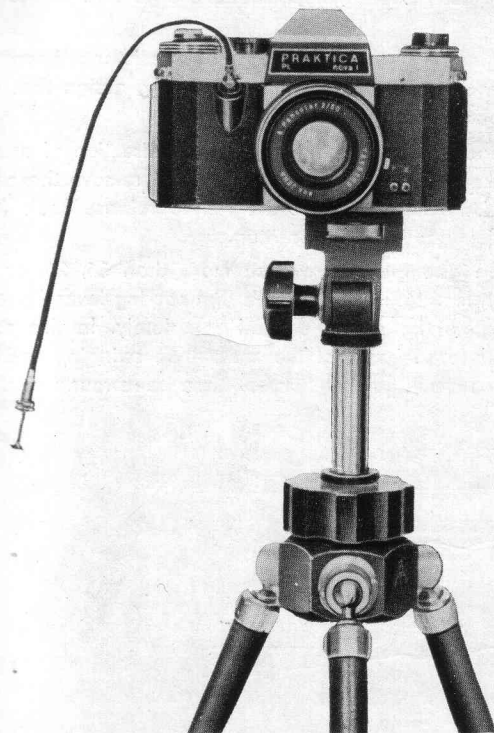
Before releasing the shutter, please note the following:

1. Make sure that the shutter release of your PRAKTIKA nova I is unlocked (see Section F, page 12)
2. If your exposure is to be longer than  $\frac{1}{30}$  sec. it is advisable to use a tripod and a cable release.
3. If signal is visible in viewfinder, camera is not ready for exposing! Cock the shutter! (see Section F, page 12)



The shutter release (2) has to be depressed smoothly and evenly — by no means with a jerk — as far as it will go, until the shutter has run down. Do not leave hold of the body release, or cable release, before the shutter closes completely, otherwise the diaphragm will open before its time. (Danger of overexposure)

When once released the shutter cannot be released a second time. (Lock against double exposure).



When exposure counter (14) shows the figure indicating the number of frames marked on the film packet (12, 20 or 36), the film has to be exchanged.

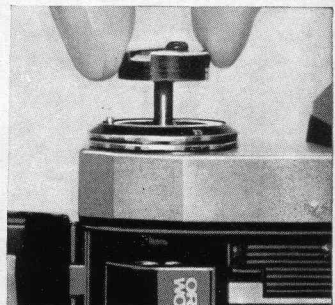
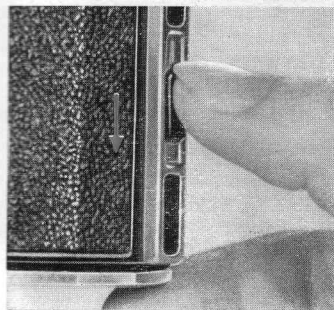
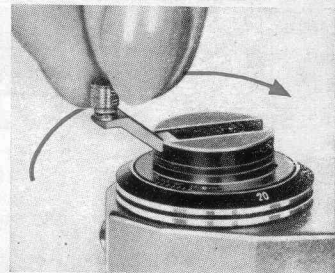
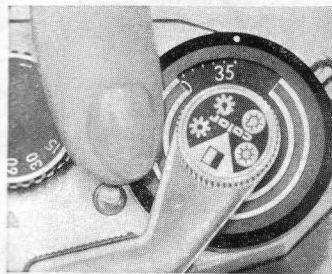
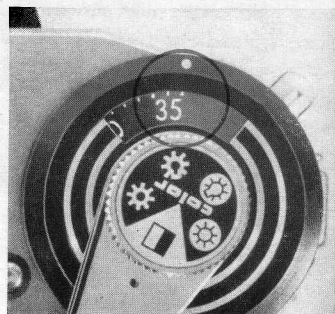
Depress rewind release knob (16). Knob remains locked in this position! Swing out rewind crank (19) on rewind knob (3). Rotate rewind knob (not too quickly) in the direction of the arrow.

Rewinding too quickly causes electrostatic charge and statics on the film.

Towards the beginning of the film strip greater resistance becomes noticeable. After this, the crank turns more easily, a sign that the film is fully rewound. Fold the crank down again.

Open camera back (5) by pushing latch (1) in direction of arrow. Pull up rewind knob (3) as far as it will go and remove the cartridge. On recocking of the shutter the rewind release knob (16) returns automatically to its initial position.

Should you have attempted to expose more than 36, 20, or 12 frames on your film strip, it may happen that cocking lever (6) gets jammed and cannot be swung around completely. In this case depress rewind release knob, at the same time swinging cocking lever (6) as far as it will go. The film can then be rewound as described above.



Take hold of the lens mount and rotate it in anti-clockwise direction. The exchange lens is inserted by clockwise rotation. The camera accepts any lens with the M 42×1 screw fitting, with focal lengths from 20 mm to 1000 mm.

High performance anastigmats of various focal lengths and speeds are available for the PRAKTICA nova I, thus opening up pictorial possibilities under every working condition.

Name of lens	Focal length and f number	Diaphragm
aus Jena Flektogon	20 mm f/4	APD
Meyer Orestegon	29 mm f/2,8	APD
Meyer Lydith	30 mm f/3,5	PD
aus Jena Flektogon	35 mm f/2,8	APD
aus Jena Pancolar	50 mm f/1,8	APD
Meyer Oreston	50 mm f/1,8	APD
Meyer Domiplan	50 mm f/2,8	APD
aus Jena T	50 mm f/2,8	APD
aus Jena Pancolar	55 mm f/1,4	APD
aus Jena Pancolar	75 mm f/1,4	APD
Meyer Orestor	100 mm f/2,8	APD/PD
aus Jena S	135 mm f/3,5	APD
Meyer Orestor	135 mm f/2,8	PD
aus Jena S	180 mm f/2,8	APD
Meyer Orestegor	200 mm f/4	PD
aus Jena S	300 mm f/4	APD
Meyer Orestegor	300 mm f/4	PD
Meyer Orestegor	500 mm f/5,6	PD
aus Jena Mirror Lens	500 mm f/4	—
aus Jena Mirror Lens	1000 mm f/5,6	—

APD = automatic pressure diaphragm,

PD = pre-set diaphragm





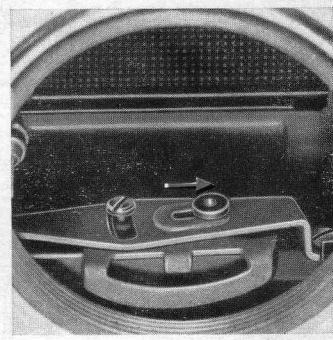
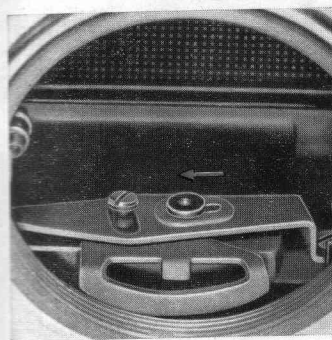
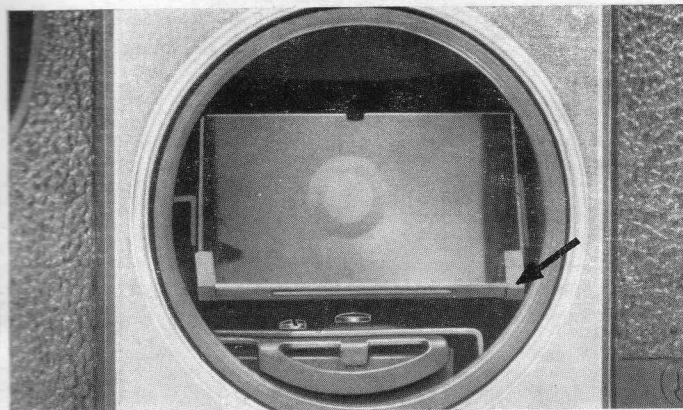
Regardless of the lens in the camera the distance is always set in accordance with the reflex image in the prism finder of the PRAK-TICA nova I.

Since the taking lens also acts as finder lens you obtain, at any focal length, a finder image coinciding, free from parallax, with the picture you will get on your film.

For the use of older interchangeable lenses, without automatic diaphragm, the diaphragm mechanism in the camera, underneath the instant return mirror, has to be disconnected.

Lift the mirror carefully by its frame (do not touch the coated surface with your fingers) and move the red-marked knob to the right as far as it will go; then let the mirror return to its 45° position.

Proceed in reverse order when using lenses with automatic diaphragm — red-marked knob must be moved to the left. Should the mirror be accidentally pushed up too far while the shutter is cocked it will remain in a horizontal position. One blank exposure will bring the mirror back to 45°.



4 PRAKTICA nova I pictures taken from the same view point:



1st picture 20 mm



2nd picture 50 mm



3rd picture 135 mm



4th picture 180 mm



## Flash exposures

are made not only at night in the family circle or at social and festive gatherings. On dull days, too, you may use effect lighting to brighten up your outdoor portraits.

With black-and-white film flash can be employed as the sole light source, but it can also be combined with daylight or incandescent lamps.

When making your exposures on color film for daylight or artificial light, please read the instructions for use given with the film. In case of uncertainty, your photo dealer will be ready to help you.

There are two ways of synchronizing flash light to the PRAKTIKA nova I. The cable of the flash equipment has to be connected to the corresponding socket (4) in the camera.

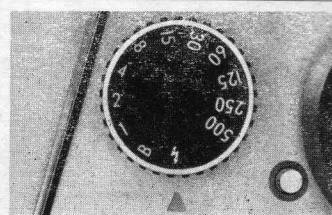
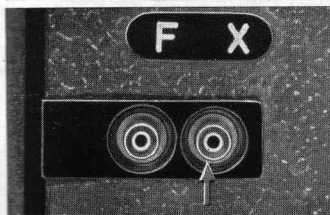
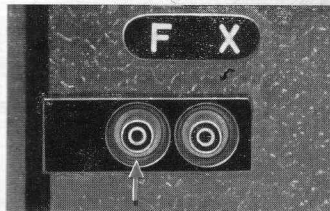
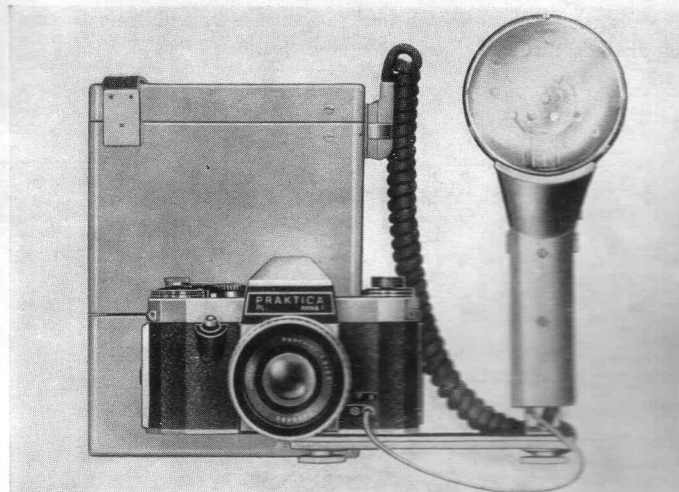
### F synchronization

The F switch releases the flash about 10 ms before the image gate is completely uncovered by the shutter. It is used for short-burning flash bulbs and has the advantage of allowing for a shorter exposure time. For flash bulbs of the F or M class (e.g. AG 1, XM 1, XM 5, PF 1, PF 5) the exposure speed to be set by means of knob (7) may be  $\frac{1}{30}$  sec.

### X synchronization

With the X synchronization the electronic flash, that flares up practically without delay, is released when the focal-plane shutter has completely uncovered the image gate.

When using electronic flash equipment, adjust speed setting knob (7) to the flash symbol. This is equal to  $\frac{1}{40}$  second, the shortest possible exposure speed to be employed with electronic flash. Insert flash cable into the right-hand (X) socket!



Regarding aperture settings you will also find directions, in form of so-called "guide numbers", given on the wrappings or in the literature coming with the bulbs and units. The aperture of the lens and the distance between flash and subject are brought into harmony by dividing the guide number by the distance number:

Diaphragm number = guide number : flash-to-subject distance

## P

### Maintenance of camera and lens

Perfect pictorial performance and lasting service of your PRAKTICA nova I depend very largely on careful maintenance and proper handling of the camera.

Your camera is a valuable precision instrument, so protect your PRAKTICA nova I from shock and dust by using an everready case. Never use force when operating the mechanism. Make it a rule to work with "delicacy of feeling".

## Q

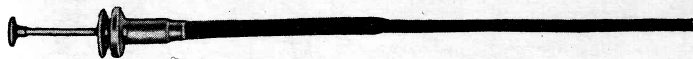
### Accessories

Avail yourself of the "small" accessories of this great camera. They will help you to obtain interesting results in picture composition.

#### Cable Release

The indispensable accessory for longer exposure time and for many special activities.

From time to time dust and film emulsion deposits have to be removed with a soft brush from cartridge chamber, spool chamber and film track. Do not touch the optical parts — lens, eyepiece of prism viewfinder, and mirror — with your fingers. Should you have done so accidentally, any finger marks may be removed with a piece of cotton wool dipped in pure alcohol or ether.





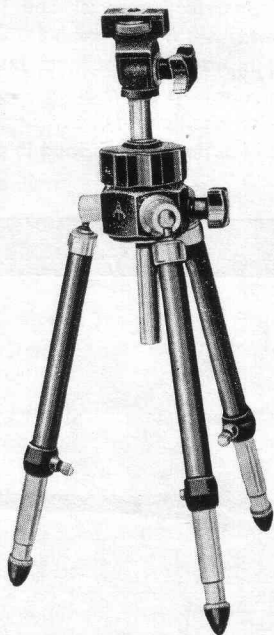
### Everready Case

It protects your valuable PRAKTICA nova I from shock and dust.



### Universal Tripod

Extremely rigid, permits varying position of camera from close to ground up to approximately eye level; adjustable column serves as camera support.



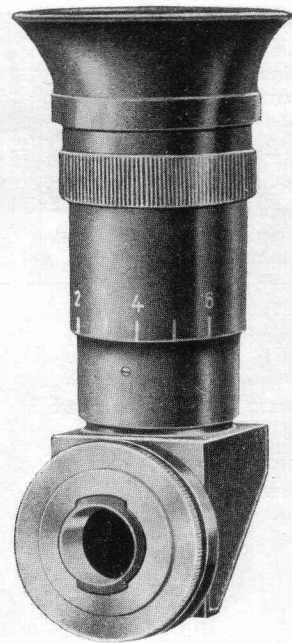
### Focusing Telescope

An indispensable piece of focusing equipment yielding a 2.7-fold magnification of part of the image.



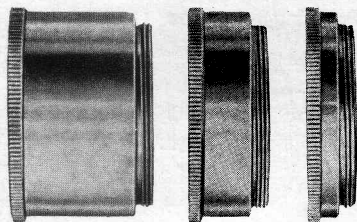
### Angle finder

This, too, is a useful focusing aid in working at worm's eye view on subjects difficult to approach. It may be fixed to the eye-piece of the viewfinder and adapted to faulty eyesight by means of a diopter scale.



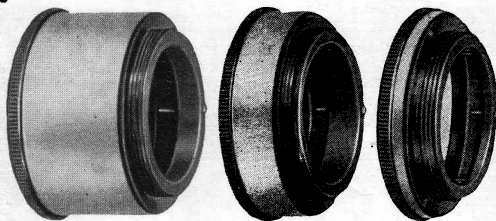
### Intermediate Rings

A means of increasing extension when photographing tiny objects and living creatures, also for copying illustrations and printed matter.



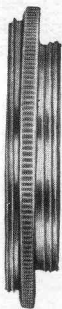
### Intermediate Rings with Plunger

permit maintaining operation of the automatic pressure diaphragm without the need for a special intermediate ring



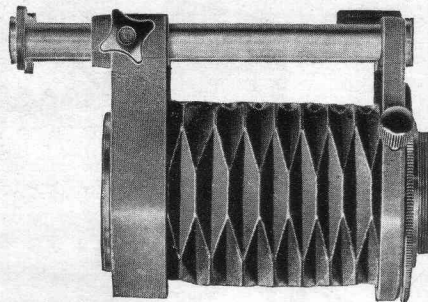
### Reversing Ring

to attach the lens to the camera by its filter thread and to achieve utmost sharpness of the image exceeding a ratio of 1.5.



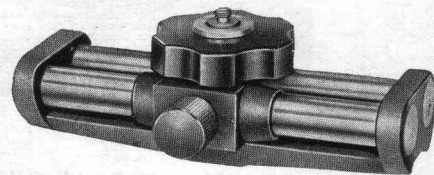
### Close-up Bellows Attachment

For an infinitely variable increase of extension, giving scales of reproduction from approx. 0,7 to 2.2. In PRAKTICA nova I B a 7 mm intermediate ring has to be inserted between camera and bellows attachment.



### Focusing slide

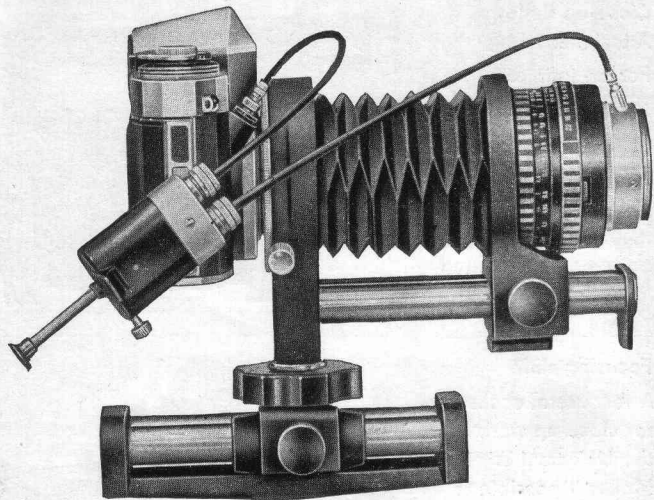
A very useful accessory for close-up work on the Universal Tripod. Makes it possible to adjust the distance between camera and object without having to move the tripod.



### Accessory Shoe

For attaching accessory equipment, e.g. a flash unit, to the camera.





### **Special Intermediate Ring with Double Cable Release**

Keeps automatic diaphragm mechanism operative in connection with close-up bellows and intermediate rings.

### **Lens Hood**

Eliminates disturbing flares and protects the front element of the lens from rain and snow.

### **Filters**

For correct rendition of color values and striking effects in black-and-white photography.

Color filters yellow, green and orange are applicable only in combination with black-and-white film, whereas the UV filter and the polarizing filter may also be used with color material.

### **Carrying Strap, adjustable**

To be recommended if you are using your PRACTICA nova I without the everready case — connected to a flash unit.

### **Rubber Eye Cup**

Keeps out stray light during focusing.

### **Mount for Correcting Lenses**

For persons with faulty eyesight, to replace their spectacles.

### **Micro Attachment Piece**

for connecting camera and microscope.

Special literature on the above only briefly mentioned accessories for PRACTICA nova I/nova I B will be sent on request.

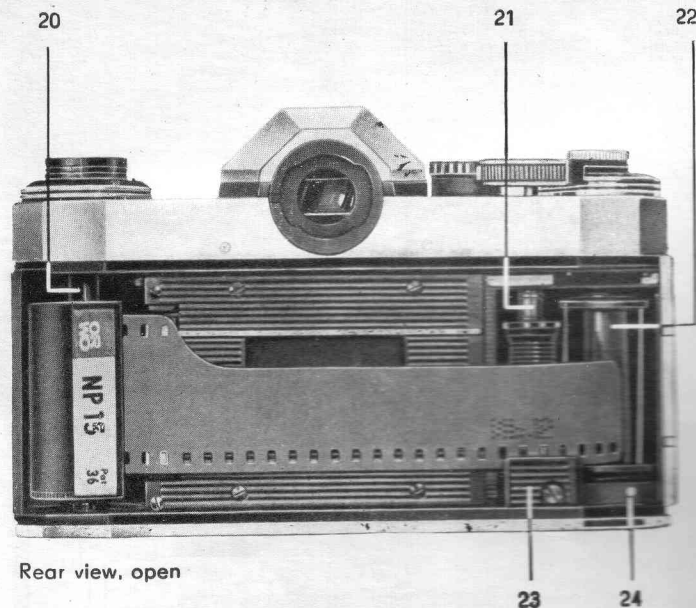
Please write and let us know your particular wishes.

Further development of the PRACTICA nova I/I B may lead to slight alterations of the details given in this booklet.

Finally, we ask you once more to read these Instructions for Use carefully, since we can accept no liability for any damage which may be caused by improper handling of the equipment.

KOMBINAT

VEB PENTACON DRESDEN



Bottom of camera





## Cross section of PRAKTICA nova I

A surface-coated mirror deflects the light rays coming through the lens on to the focusing system. The moment the shutter is depressed the mirror is swung out of the path of rays and, forming a light-tight cover over the focusing system, allows the light rays to pass freely on to the image plane, whereupon the shutter runs down. Immediately after the exposure the mirror returns to its viewfinder position (45 degrees). Thus, the finder image is almost permanently visible, showing what is going to appear on the negative.

**No parallax error, since taking lens and finder lens are one and the same**

The finder image is slightly smaller than the picture format. Everything visible in the viewfinder will appear on the film, regardless of distance or focal length. In picture composition, therefore, the finder image can be utilized to its very edges. This renders it possible to use lenses of various focal lengths as well as accessory equipment without the need for any extra finder attachments. There are also the advantages of the Fresnel lens. You always have the upright, unreversed, parallax-free reflex finder image to show you what your picture will be like.

