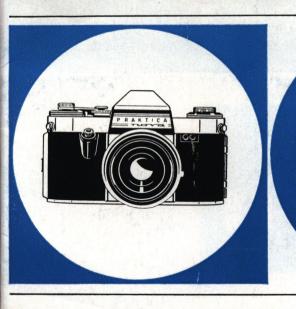
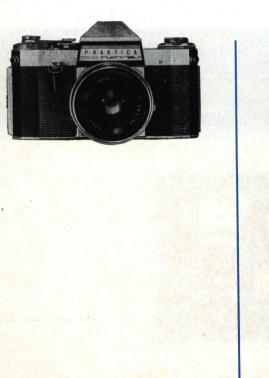
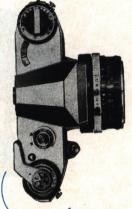
PRAKTICA nova B

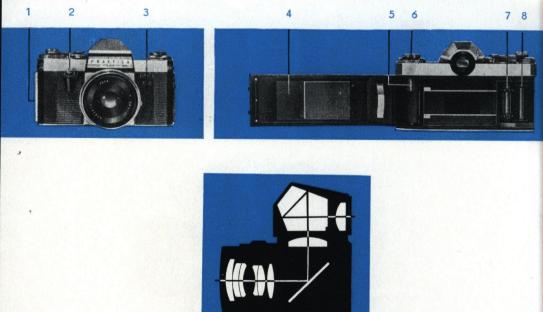


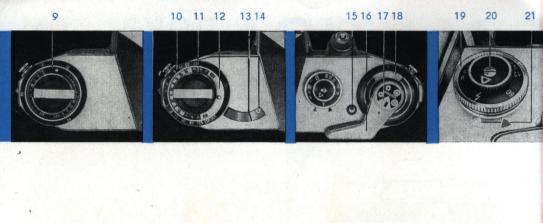


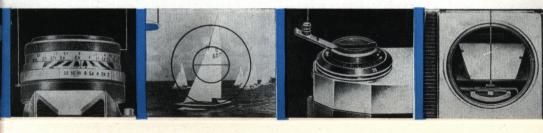












The PRAKTICA nova is a single-lens reflex camera for the 24 x 36 mm picture format. The firmly built-in pentaprism reveals an upright, parallax-free finder image with sides unreversed. The return mirror permits practically continuous viewing of the image which is blacked out only for the short moment of the exposure.

Special features of the PRAKTICA nova Return mirror
Two-way system of focusing
Convenient rapid lever wind
Smoothly working oblique shutter release with locking device,
in natural finger position
Coupling of shutter wind and film transport
Lock against double exposures and blanks





Focal-plane shutter, geometrically graduated from 1/2 sec. to 1/500 sec. and B (any length of time)

Synchronization for electronic flash and bulbs
Interchangeable lenses with focal lengths from 20 mm to 1000 mm
Automatic pressure diaphragm
Hinged camera back
Automatic exposure counter
Wide range of accessories

Subsequent model developed from the PRAKTICA nova:
PRAKTICA nova B with built-in photoelectric exposure meter.









Abridged Instructions for Use

Only for

1. Open the camera back.

2. Pull up rewind knob (6). Place full cartridge into cartridge chamber. Push rewind knob in again. Insert beginning of film into slit of take-up spool (8), bend it down and wind it up (coating outwards) until teeth of transport sprocket (7) engage in upper and lower film perforations. Film must be drawn tightly across picture gate. (For take-up spool with pilot pin note section "Inserting the film".)

3. Close the camera back.

4. Adjust film speed indicator (9) and film type setting disk (17).

4.1. Set film speed by means of stop value dial (12) in window (11).

5. Cock the shutter (winding lever 16) and actuate shutter release (2).
Repeat this until exposure counter (18) stands on 1.

6. Read exposure speed and aperture from exposure meter.

Only for PRAKTICA nova B

PRAKTICA nova B

 Direct camera towards object. Turn setting ring for follow pointer (10) until follow pointer (14) coincides with meter needle (13). Having found





the required combination of shutter speed and aperture, set speed setting ring and aperture ring on lens mount accordingly.

- Lift speed setting ring (19) and rotate it until the marking point stands
 against the desired speed. Move setting knob (20) for speed groups as
 far as it will go in the direction of the color symbol for the speed adjusted.
- Set finder image to maximum sharpness with the aid of the rangefinder lens or the focusing area by rotation of focusing ring (23).
- 10. Release the shutter.
- After the last exposure depress rewind release knob (15). Swing out rewind crank (25). Rewind film in direction of arrow.
- 12. Open camera and remove the film.

Beside these items it is, of course, necessary to study the following pages of the Instructions for Use carefully.





Cross section of the PRAKTICA nova

A surface-silvered mirror diverts the lens rays so that the image appears on the ground-glass screen. When the shutter release is depressed, the reflex mirror moves out of the path of rays and masks any stray light coming on to the ground-glass screen, so that the rays may fall on to the picture gate. As soon as the mirror has reached its uppermost position, the shutter is opened for the exposure. Upon completion of the exposure, the mirror returns immediately to the 45 degree viewing position. This means that the subject is almost continuously visible and can be checked once more after the exposure has been made.





Taking lens and finder lens being one and the same, there is no danger of parallax error. The finder image is somewhat smaller than the negative format. Everything that you see in the viewfinder must necessarily appear on the film. In picture composition, therefore, the finder image can be utilized to its very edges. Thus it is possible to work with lenses of various focal lengths, and with accessory equipment, without the need for any additional viewing attachments. The upright, correct-sided finder image always gives a true reproduction of the subject.









Inserting the film

Any kind of perforated 35 mm film (black-and-white or color) in the usual cartridges may be used. Push the back lock (1) downwards and open camera back (4). Pull out rewind knob (6) as far as it will go. Place full cartridge into cartridge chamber. Push rewind knob in again, at the same time moving it to and fro to cause catch (5) to engage in core of cartridge. Insert beginning of film into slit of take-up spool (8), bend down 3 mm to 4 mm of the protruding film and draw it back to arrest the bend in the slit. Turn spool flange of take-up spool (8) to wind up the film (coating outwards) until the teeth of transport sprocket (7) engage in the perforations on both sides of the film.

When using a take-up spool with pilot pin (spool with one flange), insert beginning of film into the slit as far as it will go. Rotate milled edge of takeup spool (8) to wind up the film (coating outwards). Tighten the film by turning. rewind knob (6). Close the camera back (4) by pressing it against the body where it will snap in.





Exposure

Setting of the exposure counter (18) is not necessary. It becomes ready for operation automatically when the camera back is closed.

Setting the film speed indicator

Move the DIN or ASA value of film speed indicator (9), showing the speed of the film in the camera, against one of the numerals 12, 20 or 36 (number of exposures possible with the film).

Setting the film speed

only on PRAKTICA nova B

Rotate stop value dial (12) until in window (11) the film speed stands against the marking point.

Film type setting dial

Move the symbol (17) corresponding to the film in the camera against the marking point.









- Black-and-white
- Reversal color film for daylight
- Reversal color film for artificial light
- Negative color film for daylight
- Negative color film for artificial light

Preparing for the exposure

Swing winding lever (16) around as far as it will go and let it glide back. Release the shutter and cock it once more: the automatic exposure counter (18) now stands on number 1. The camera is ready for the exposure. The coupling of shutter wind and film transport makes double and blank exposures impossible.





Attention!

Be careful not to depress rewind release knob (15) when cocking the shutter. This would cause overlapping of pictures.

Swing cocking lever only in winding-up direction as far as it will go. Movement by force in the opposite direction would cause damage.

Finding the exposure speed

Read exposure speed and aperture from a photoelectric light meter or a chart. Set speed by movement of ring (19) and aperture by movement of ring on lens mount.

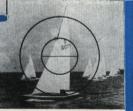
Only for PRAKTICA nova B

Direct camera towards object. Turn setting ring for follow pointer (10) until yellow follow pointer (14) coincides with meter needle (13).

The speed values on the setting ring stand opposite the aperture numerals on stop value dial (12). The speed values are arranged in groups of different colors as follows:











Red numerals = long exposure time White numerals = short exposure time

Coincide in color with the values next to speed setting ring (19)

Green numerals = exposure speeds in seconds

Not marked next to speed setting ring (19)

Control exposures at "B" setting by second-hand of a watch (use tripod and cable release)

Having found the combination of shutter speed and aperture required for the exposure, adjust speed setting ring (19) and aperture ring on lens accordingly.

Setting the shutter speed

Lift speed setting ring (19) and rotate it until the red marking point stands against the desired speed. Ring snaps in when released.





White numerals = short speeds $30 = \frac{1}{30}$ sec., $60 = \frac{1}{60}$ sec., $125 = \frac{1}{125}$ sec., $250 = \frac{1}{250}$ sec., $500 = \frac{1}{500}$ sec. Red numerals = long speeds $2 = \frac{1}{2}$ sec., $4 = \frac{1}{4}$ sec., $8 = \frac{1}{8}$ sec.

Each stop indicates one half of the next longer speed or double the next shorter speed on the scale.

Setting knob (20) for speed groups

Short exposure speeds (white numerals)

Turn indicator of knob to white mark (21) as far as it will go

Long exposure speeds (red numerals)

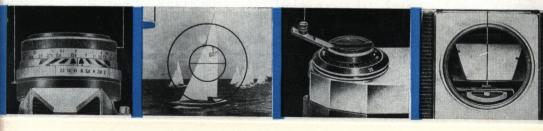
Turn indicator of knob to red mark (21) as far as it will go

When using electronic flash (symbol 4)

Turn indicator of knob to white mark (21) as far as it will go

Exposure speeds in seconds ("B" setting)

Turn indicator of knob to white mark (21) as far as it will go



The exposure speeds may be set either before or after the shutter has been cocked.

Setting the aperture

The modern lenses of the PRAKTICA nova/nova B, equipped with automatic pressure diaphragm, are set simply by clicking the aperture setting ring in at the desired diaphragm numeral. On actuation of the shutter release, the diaphragm closes down automatically.

For checking depth of field, these lenses may be closed down to the pre-set value before the exposure is made. This is performed on the Jena lenses by means of a hand lever (22) and on the Meyer lenses by a selector ring.

Attention

When using lenses with pre-set diaphragm please refer to section on "Automatic diaphragm release".





Focusing

The viewfinder of the PRAKTICA nova includes a Fresnel lens. In the center of the lens is the split image rangefinder which is surrounded by a circular focusing screen.

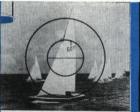
1st method

The split-image rangefinder is used when the subject reveals conspicuous upright lines in the horizontal or conspicuous horizontal lines in the vertical image. On rotation of distance setting ring (23) the two part images move towards or away from each other. As soon as the vertical or horizontal lines, as the case may be, of the two part images meet and form one complete picture, maximum sharpness has been achieved.

2nd method

The circular focusing screen is used for objects in motion or without distinct lines. Focusing here is performed in the same manner as on the usual ground-glass screen. The Fresnel lens around the focusing area serves to brighten up the image but is not to be used for focusing.









Taking lens and viewfinder lens being one and the same, there is no danger of parallax error. Persons with faulty eyesight may insert correcting lenses in special mounts into the eyepiece of the viewfinder, which also accepts other special finder attachments.

Lenses with pre-set diaphragm are set to the desired stop by means of the adjustable aperture setting ring. You may now focus with the lens at full aperture and return to the preselected diaphragm stop without removing the camera from your eye. The depth of field can be read from the depth-of-field scale on the lens mount. To the left and right of the triangular mark are diaphragm numbers, and the distance figures below these diaphragm numbers show the limits of the range of sharpness.





Releasing the shutter

Depress shutter release (2) steadily until the shutter has run down. Rotation of milled ring on shutter release in anti-clockwise direction (red dots meet) locks release mechanism against inadvertent triggering. Unlocking is performed accordingly. For exposures longer than $^{1}/_{30}$ sec. tripod and cable release should be used.

Body shutter release accepts cable release.

Warning signal

After the exposure a signal (24) appears in the upper left corner of the finder image, meaning that the shutter has to be cocked for the next picture.

Removing the film

When the exposure counter indicates that the number of frames marked on the film roll has been exposed, depress rewind release knob (15), swing out rewind crank (25) and rewind the film in the direction of the arrow. Resistance becomes noticeable as winding is completed.

A new film may be inserted as described before.









Exchanging lenses

Catch hold of the lens mount and turn it out anti-clockwise. The exchange lens is inserted accordingly.

All interchangeable lenses having a metric thread 42 x 1 mm and any focal length from 20 mm to 1000 mm may be used in the PRAKTICA nova. Mind the push-on or screw-in measurements for the use of filters.

For the use of interchangeable lenses without automatic diaphragm control the mechanism for the automatic diaphragm release (26) inside the camera underneath the return mirror, has to be disconnected. Lift the return mirror carefully by its frame (do not touch the mirror surface) and move knob (26) with the red mark to the right as far as it will go. Leave hold of the mirror frame, mirror returns to the 45° position. The automatic mechanism is put back into working position by moving red-marked knob (26) to the left. Should the mirror be pushed up too far accidentally while the shutter is cocked, it will remain up, and a blank exposure has to be made to bring it back to 45°.





Flash synchronization

There are two possibilities of using flashlight sources with the PRAKTICA nova. The cable cord of the flash unit is connected to the flash socket (3) corresponding to the flash unit.

F synchronization The F contact releases the flash about 10 ms before the picture gate is completely opened by the shutter. This socket is used for short-burning flash bulbs and is of advantage since a shorter exposure speed may be selected than is possible in connection with the synchronizing contact X. We would advise setting an exposure speed of 1/30 sec. with flash bulbs of the F class.

X synchronization The X contact releases the flash when the picture gate is completely opened by the shutter. The shortest exposure speed for this flash socket is $^{1}/_{40}$ sec. (4). The X contact is employed with electronic flash but can also be used with flash bulbs. Directions regarding exposure speeds are given by the bulb manufacturers.









Maintenance and care

The PRAKTICA nova and PRAKTICA nova B, as high-class precision instruments, must be protected against shock and dust. From time to time dust and film deposits have to be removed from cartridge- and spool-chamber and from the picture gate with a soft lens brush.

Do not touch the optical parts (lens, viewfinder, mirror) with your fingers, Should this, however, have happened, the finger marks must immediately be removed with care. Clean the parts with a soft brush or a soft, smooth piece of linen.

Accessories for PRAKTICA nova/nova B

Everready Case Cable Release Filters Lens Hoods Carrying Strap, adjustable Intermediate Rings





Special Intermediate Ring with Double Cable Release
Intermediate Rings with Plunger
Close-up Bellows Attachment
Focusing Slide
Focusing Telescope
Angle Finder
Rubber Eye Cup
Universal Tripod
Copying Stand
Connecting Piece for Microscope
Accessory Clip

The details given in this booklet are subject to alterations which may result from further development in the manufacturing process.

Please read these Instructions for Use carefully since we can accept no liability for damage caused by improper handling of the equipment.

VEB PENTACON DRESDEN

Kamera- und Kinowerke