

Praktica, Praktica FX & Praktiflex FX (technically comparable cameras)



Instruction for Use, 1952.

Introduction

The PRAKTICA is a one-lens reflex camera taking the perforated 35 mm cine film. The size of the picture is 24×36 mm.

The PRAKTICA possesses all the advantages of a modern precision miniature camera, e. g. shutter winder coupled with film advancement, lock against double and blank exposures, interchangeability of the lenses, and adaptability to microphotography.

Focusing is performed by means of a light-collecting lens which produces a clear, bright image.

The PRAKTICA takes all current daylight film cartridges for 36 exposures in black-and-white and color film. The PRAKTICA FX is sure to give perfect results and mechanical safety if the instructions for use are closely followed and carried out.

Explanation of signs

I. Inserting the film

The camera back is unlocked by pushing the knob No. 18 in the direction of the arrow. Open the camera back and take it off, and pull out the rewind-knob No. 6.

The film cartridge must be placed into the empty chamber with the beginning of the film projecting in the direction of the picture level. Pull the film from the cartridge and fix it into the empty spool on the right-hand side of the camera.

It is of importance that the sprocket teeth catch both perforated edges of the film.

Wind the shutter by rotating the knob No. 2.

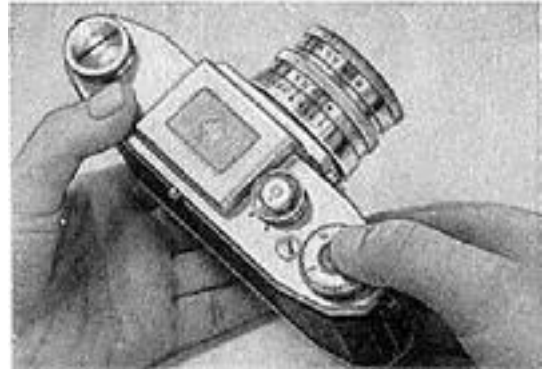
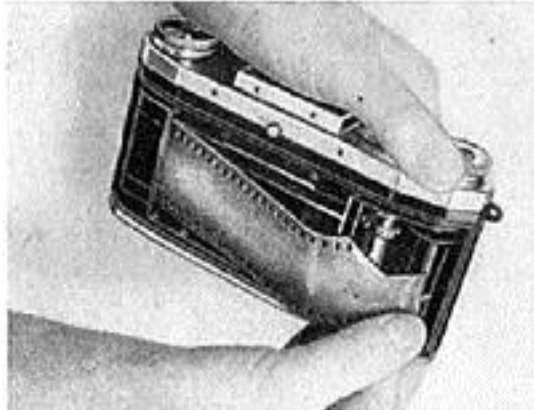
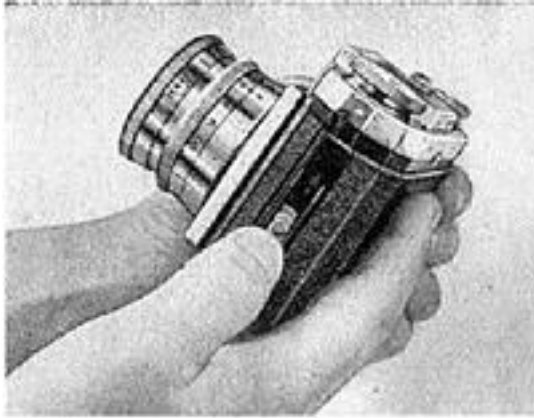
Make sure that the film lies evenly on the film guide and toothed drum, link the camera back into the right-hand groove and close it down.

The film pressure-plate must be perfectly clean before the camera back is closed.

After having bolted the camera back, make two blank exposures. The rewind-knob (6) must hereby turn in the opposite direction of the arrow mark.

When all these manipulations have been performed, the counting mechanism has to be set to stroke No. 1.

The camera is now ready for the first exposure.



II. Changing the film

36 exposures having been made, a certain resistance will be noticed in winding the shutter – a sign that the whole film is exposed and has to be rewound into the cartridge.

This is done by pressing down the little button No. 13 and at the same time turning the rewind-knob No. 6 in the direction of the arrow.

The beginning of the film will audibly slip out of the cartridge, and the rewinding procedure is completed.

The camera back must now be opened and the exposed film taken out.

Do not change the film in bright sunlight, but if possible in the shade. It is advisable to deposit the film in light-tight paper or in metal box after has been removed from the camera.



III. Shutter and film transport

a) Winding the shutter

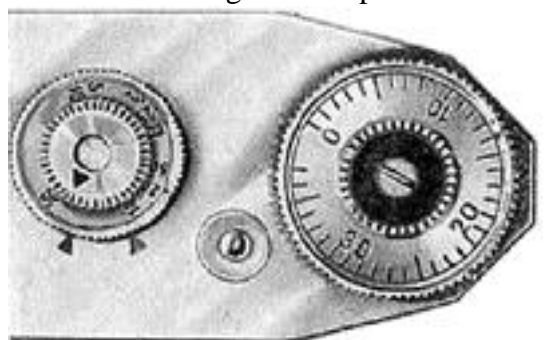
A full rotation of the knob No. 2 as far as it will go to the right (clockwise) winds the shutter, advances the film to the next picture, and swings the reflex mirror into the light-ray level of the lens. Take care that the release knob No. 1 is not pressed in while the shutter is being wound up.

b) Setting the speeds

The speeds are set by means of the adjusting knob No. 4 and the supplementary knob No. 5. The speed disc is engraved with

black figures for the short speeds from 1/500th to 1/25th second, with

red figures for the long speeds from 1/10th to 1/2 second, and with "B" setting for time exposures of any desired length.

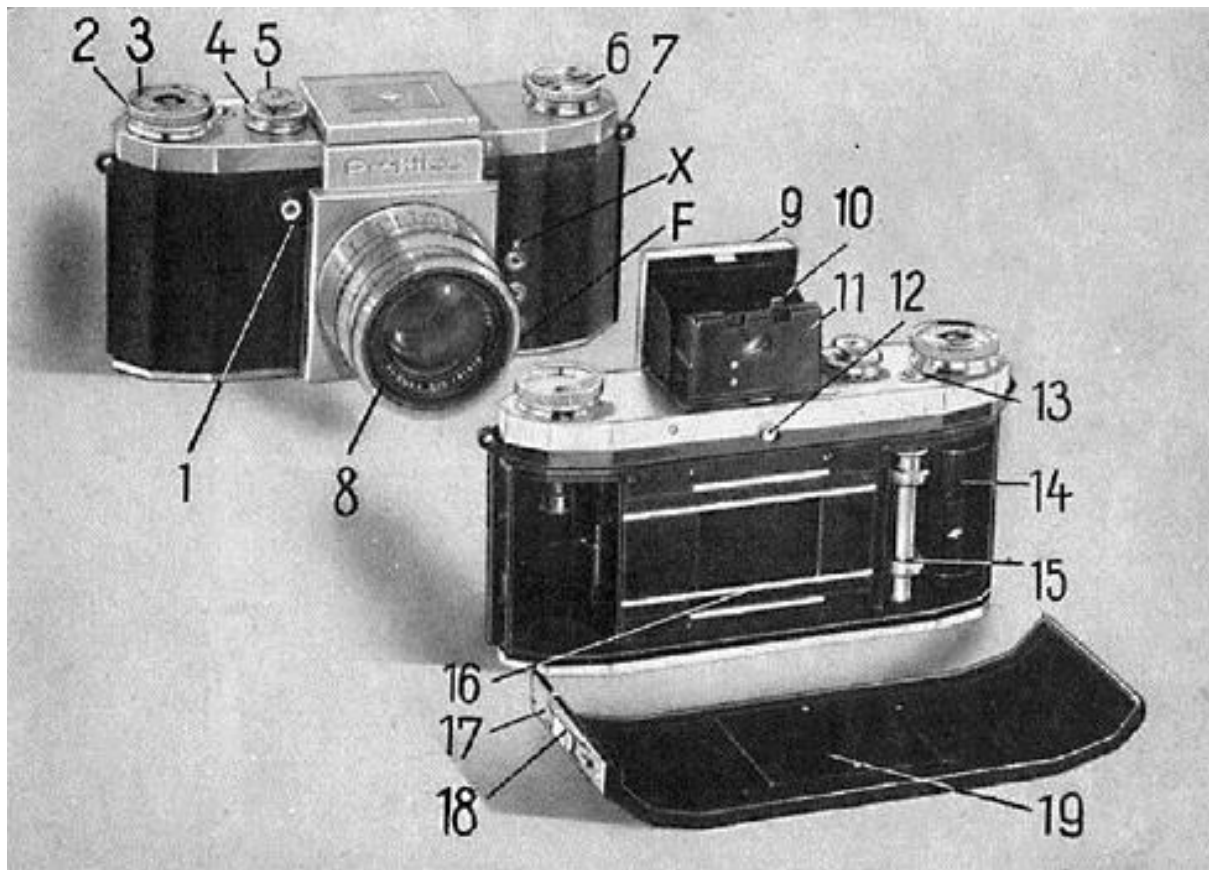


When set to the speeds of 1/500th to 1/25th second, the red triangle on the supplementary knob No. 5 must point towards the black triangle on the camera top.

When set to the speeds of 1/10th to 1/2 second, the red triangle on the supplementary knob must point to the red triangle on the camera top.

The "B" setting can be employed in both positions.

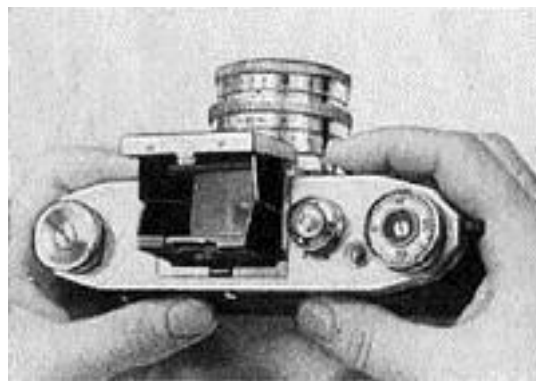
To set the speeds, lift the outer ring No. 4, turn it to the desired number and click it in. There is only one rest-hole for 1/2 and 1/25th second, marked by a dot between the speed numbers 1/2 and 1/25.



- | | |
|---|--|
| 1 – Release knob; | 9 – Light-hood; |
| 2 – Knob for winding the shutter and transporting the film; | 10 – Magnifying lens; |
| 3 – Picture-counting disc; | 11 – Rear flap of the light-hood; |
| 4 – Knob for setting the shutter speeds; | 12 – Latch button for light-hood; |
| 5 – Knob for setting the speed groups; | 13 – Release knob for rewind mechanism; |
| 6 – Film rewind-knob; | 14 – Film spool; |
| 7 – Loops to hold the neck-strap; | 15 – Sprocket wheel for transporting the film; |
| 8 – Interchangeable lens with rotatable rings for setting distance and diaphragm, and with distance, diaphragm and depth-of focus scales; | 16 – Picture level; |
| | 17 – Camera back; |
| | 18 – Catch for camera back; |
| | 19 – Film pressure-plate |

c) Releasing the shutter

The exposure is made by gently pressing in the button No. 1. In order to avoid blurring the picture, the knob should not be let loose until the shutter has run down. When set at "B", the shutter must be pressed as long as the exposure is to last. For the use of a wire release, the knob is provided with a thread into which the release can be screwed. A special wire release is supplied with the camera for long time exposures in the T-setting (e. g. in night photography).



IV. Lens and Shutter

a) Press the button No. 12, and the light-hood will spring up, uncovering the finder lens. When the shutter is wound up, a bright, clear picture will appear on the ground-glass surface of the finder. By turning the distance meter ring on the lens mount, the lens is focused to the greatest possible sharpness. Focusing should be performed with the diaphragm set to the widest aperture, and the lens stopped down to the desired aperture immediately before making the exposure.

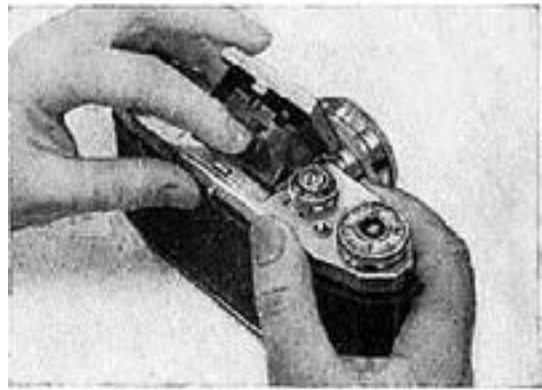
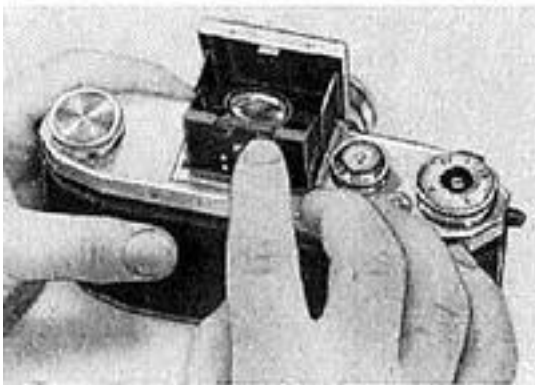
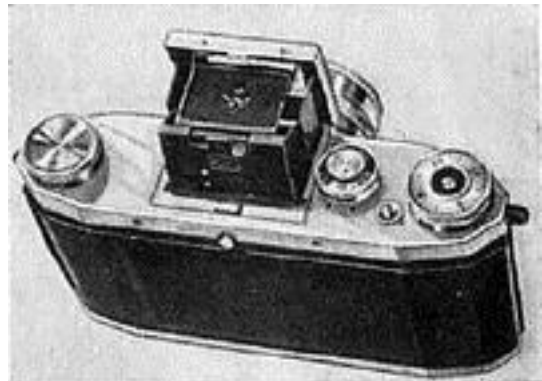
The camera is equipped with a magnifying lens for easier focusing. It is swung into operating position by means of the lever No. 10.

When using the magnifying lens, a distance of 15 to 25 mm between the eye and the glass should be observed. Only then will the image on the ground glass be perfectly clear.

The direct-vision view finder in the light-hood is very handy for sports snapshots.

In order to disengage this finder, the flap in the front of the light-hood must be swung in, whereupon the magnifying lens is brought into working position. In this way the flap is held level, and the sports finder can be used.

To close the light-hood, first swing in the magnifying lens. Then push in the rear flap with the forefinger and close down the light-hood.



b) The lens scales

The front ring on the lens mount is engraved with the diaphragm scale and the index point, the middle ring with the distance scale in meters or feet, and the back ring with a diaphragm scale showing the depth-of-focus.

According to this scale, for instance, the Biotar lens f/2 with a focal length of 5,8 cm (2 1/4"), at a distance setting of 12 ft. (4 meters) and an f/11 aperture, gives a sharpness reaching from 7'6" to 30' (2,5 to 10 meters).



c) Changing the lens

The lens in the camera body is interchangeable within its threaded flange. By being turned to the left (anti-clockwise) the lens can be removed from the camera body. Should the camera be loaded when the lens is being screwed out, take care to shield the aperture from glaring light.



d) The mirror

The mirror is a very sensitive element in the camera, and it must be protected even from the slightest damage. It is advisable, before exchanging the lenses, to swing the mirror up. Only use a very soft haired brush to remove any possible uncleanliness from the mirror.

e) Lenses with the diaphragm-presetting device

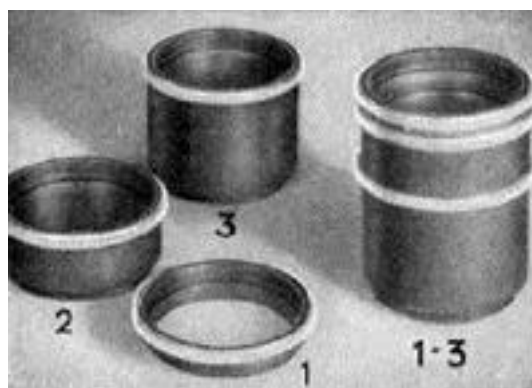
To preset the aperture desired for the exposure, draw the milled ring directly behind the diaphragm scale backward, holding the diaphragm ring – which has before been adjusted to the desired number – with the other hand and setting the red index dot against the diaphragm number chosen. The milled ring, when springing back into position, will get coupled with the diaphragm ring. For focusing, the diaphragm ring can now be set to the full aperture and, without changing the position of the camera, turned back until it stops at the preset diaphragm number.



V. Close-up Tubes (Macro-photography)

The lenses in the Praktica make it possible for you to approach your object up to about 70 cm (28 in.). For exposures at shorter distances you will have to use intermediate tubes.

The table below shows the numbers and lengths of the intermediate tubes, the distance of the object, measured from the rim of the lens and the size of the object, also the proportionate time of exposure.

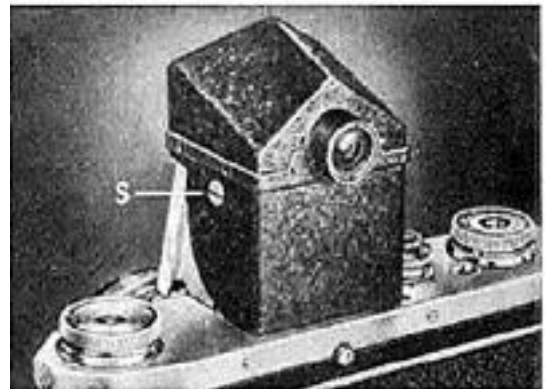
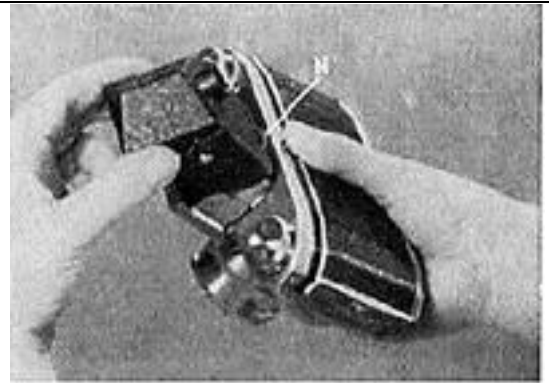


Tube No.	Length of Tube	Scale of Reproduction	Distance of Objekt	Size of Object	Proportionate Time of exposure
1	5,8 mm 0,23 in.	0,1 to 0,174	622 to 374 mm 249 to 15 in.	240×260 to 138×207 mm 9,6×10,4 to 5,5×8,3 in.	1,2
2	17,4 mm 0,7 in.	0,3 to 0,374	234 to 198 mm 94 to 79 in.	80×120 to 64×96 mm 3,2×4,8 to 2,56×3,84 in.	1,7
1 + 2	23,2 mm 0,93 in.	0,4 to 0,474	187 to 165 mm 75 to 66 in.	60×90 to 50×76 mm 2,4×3,6 to 2×3 in.	1,96
3	34,8 mm 1,4 in.	0,6 to 0,674	139 to 128 mm 55 to 51 in.	40×60 to 35×53 mm 1,6×2,4 to 1,4×2,1 in.	2,6
1 + 3	40,6 mm 1,6 in.	0,7 to 0,774	125 to 117 mm 50 to 47 in.	34×51 to 31×46 mm 1,36×2 to 1,24×1,84 in.	2,9
2 + 3	52,2 mm 2,09 in.	0,9 to 0,974	107 to 103 mm 43 to 41 in.	26×40 to 24×36 mm 1,04×1,6 to 0,96×1,44 in.	3,6
1 + 2 + 3	58,0 mm 2,3 in.	1,0 to 10,74	100 to 96 mm 40 to 38 in.	24×36 to 22×33 mm 0,96×1,44 to 0,88×1,32 in.	4,0

VI. The Prismatic Finder

A Prismatic Finder is available as an accessory to the Praktica. At eye-level, this finder gives a ground glass view of the image – upright, correct-sided, and free from parallax error.

The Prismatic Finder is attached to the top of the camera light-hood by fixing the nose marked “N” into the spring catch (12) of the light hood (9) and pushing the two spring tacks marked “S” underneath the light hood cover (9).



VII. Electronic and Regular Flash Connection

On the front of the camera are three contact sockets. The socket marked “X” takes electronic flashes, whereas the “F” mark is for regular flash synchronization.

a) Electronic flashes (X synchronization)

To be employed for all kinds of electronic devices acting without delay. Synchronization allows for exposures up to 1/50 th second.

b) Flash guns (F synchronization)

When using suitable flash guns, shutter speeds up to 1/500th second can be synchronized.

The central socket is the mass contact for both flash and strobe.

The following chart gives the shortest shutter speeds in connection with the most popular flash lamps.

The flash bulb must never be put into the flash unit before the shutter has been wound up.



Manufacturers	Type of Lamp	F-Contact Speed	Guide Number	X-Contact Speed	Guide Number
Osram	S 0	1/50	40	1/10	56
	S 1	1/200	28	1/10	70
	S 2	1/100	65	1/10	100
Philips	PF 3	---	---	1/10	20
	PF 14	(1/200)	28	1/10	48
	PF 24	1/25	48	---	---
	PF 25	(1/500)	28	1/10	56
	PF 45	1/25	80	1/10	88
	PF 56	1/200	32	1/10	80
	PF 110	1/50	38	1/10	110
Gen.-Elektrik	SM	---	---	1/25	---
	No. 5	(1/200)	---	1/10	---
	No. 6	1/50	---	1/10	---

Sylvania	No. 11	(1/200)	---	1/10	---
	No. 22	(1/500)	---	1/10	---
	No. 31	1/10	---	1/10	---
	No. 50	1/50	---	1/10	---
	Press 40	(1/200)	---	1/10	The guide number is the product out of the distance and diaphragm numbers.
	No. 0	1/500	---	1/25	
	No. 25	(1/500)	---	1/25	
	SF	---	---	1/25	
	FP 26	1/50	---	1/10	

The figures in parentheses signify that synchronization is possible, but that a certain diminution of light on one, or both, of the narrow edges of the film has to be taken into account. This is caused by the differences existing in the ignition and pre-ignition times.