Praktisix II Manual

Instructions for use

The Praktisix II is a single lens reflex camera with focal plane shutter for the 6 X 6-cm (21/4 X 21/a) picture format. It possesses all the advantages of a modern precision camera, as there are: Automatic diaphragm Focal plane shutter with speeds from 1 second to 1/1,000 second and B Rapid wind lever Interchangeable finder elements Interchangeable field lenses Shutter wind coupled to film transport Lock against double exposures and blanks Synchronization (X-socket) for flash tubes and flash bulbs Built-in delayed action Interchangeable lenses.

Important parts of the camera

1. finder hood
2. rapid wind lever
3. shutter release with cable release connection
4. lever for setting delayed action mechanism
5. flash socket

The following items deserve special attention (abridged instructions)

1. Place film into the left-hand spool chamber.
2. Remove the gumstrip completely, pull the paper leader across the picture gate and insert it into the longer slit of the receiving spool.
3. Swing rapid lever (2) around once as far as it will go, then continue operating it by rocking movements to advance the film up to the point where the index mark on the paper leader stands against the white dot on the picture gate. At the same time keep the spring support of the left-hand spool under slight pressure to assure taut and even winding of the film. Move the rapid lever back to its initial position.
4. Depress set-back knob (9); a red dot becomes visible in the window of exposure counter (13).
5. Adjust film speed indicator (8) on the inner side of the camera back.
6. Release the shutter and cock it began four times. The rapid wind lever (2) must be swung around completely each time as far as it will go and then moved back again. The exposure counter (13) now stands at number 1.
7. View and focus your image on the ground glass field. A magnifier may be swung in for critical focusing.
8. After the 12th exposure (an "E" appears in the counter window) the paper backing has to be wound up to the end by one full stroke of the rapid wind lever followed by short rocking movements.
Not only of these items of course, but the complete instructions for use must be studied carefully.

6. Latch for camera back
7. Knob for opening the finder hood
8. Film speed indicator
9. Set back knob for exposure counter
10. Frame finder (sports finder)
A surface coated mirror reflects the image designed by the lens onto the ground glass screen. At the moment of the exposure the mirror is swung out of the path of rays and, forming a light tight cover over the ground glass, allows the light rays to pass freely on to the image plane. As soon as the mirror has reached its topmost position, the shutter is opened for the exposure.

Taking lens and finder lens being one and the same, there is no danger of parallax error. Everything that you see in the viewfinder must necessarily appear on the film, even in extreme close-ups. This renders it possible to use lenses of various focal lengths and intermediate rings for close-up work without the need for any extra finder attachments.

**Inserting the film**

You may use any kind of commercially available 120 roll film. Fort 12 exposures 6 X 6 cm (21/ X 21/".). Undo latch (6) and open the camera back. Place empty spool into the right hand spool chamber and make sure that the driving mechanism catches the spool core. The bottom spring support has to be slightly pulled away. The full spool is inserted into the left-hand chamber in the same manner.

The leader of the protective paper backing must point in the traveling direction of film. Do not loosen the gumstrip and remove it completely before the film is held fast in the spool chamber. Pull the paper leader across the picture gate (printed side outwards) and fix it into the longer slit of the receiving spool.

Swing the rapid wind lever (2) around as far as it will go and continue advancing the film leader by small rocking movements until the arrow mark stands against the white dot on the picture gate. Now move the rapid wind lever back to its initial position. Tight and even winding of the film is absolutely necessary to avoid faulty film feed periods. The spring support of the full spool should, therefore, be kept under slight pressure as a means of checking the wind-off movement of the film. Close the camera back and lock it. Depress set back knob (9) to bring exposure counter (13) to its starting point. A red dot appears in the counter window (13). Release the shutter and cock it again four times. The number 1 now stands in the counter window.

At every subsequent cocking of the shutter, the counting mechanism advances to the next number. After the twelfth exposure an "E" becomes visible. Actuate the wind lever smoothly and without interruption as far as it will go; move it back to its original position. Do not let it jump back.

**Setting the film speed indicator**

A film speed indicator (8) is built into the camera back. It is adjusted from the interior before the camera is closed.

**The finder hood**

Push the little knob (7) is on the finder hood housing in the direction of the arrow, thus causing the finder hood (1) to spring into operating position.

**The magnifier**

For critical focusing and to facilitate picture composition, a magnifying lens (12) yielding a fourfold enlargement may be swung into parallel position with the field lens.
The sports finder

Lift the inner part of the finder hood cover from the outside. Pull out the little eyepiece frame at the back of the finder hood. Close the finder hood by fingertip pressure on the cover.

To remove the finder hood from the camera, push it towards the back and lift it off.

The pentaprism

For focusing at eye level the finder hood is interchangeable with a pentaprism. The prism reveals the image enlarged approximately four times and with sides unreversed. Persons with faulty eyesight may insert a corrective lens into the eyepiece of the viewfinder to replace their spectacles.

Pull the two latches on the sides of the pentaprism towards the back and place the prism onto the four connecting pins on top of the camera. Release the catches, and the pentaprism snaps in. Removing the prism from the camera is performed accordingly.

Focusing

With the mirror swung into viewing position (shutter cocked), rotate focusing ring (20) on the lens mount until the image on the field lens appears sharp. The distance may also be set by the scale (19) is on the lens mount, in which case the field lens image serves only for determining picture composition.

Also the depth of definition can be read from the focusing ring. To the left and right of the red indicator are diaphragm numerals. The distance figures standing against the diaphragm numeral required for the exposure show the range of definition.

For example:

For a distance setting of five meters (16 feet 8 inches) and an f8 aperture that depth of definition reaches from approximately 3.5 meters to 10 meters (11 feet 8 inches to 33 feet 4 inches).

When using the sports finder you may either determine the sharpness on the field lens beforehand or adjust the focusing scale on the lens mount to the distance estimated or measured.

The rangefinder lens

The two part images in the rangefinder lens are moved towards or away from each other by rotation of the focusing ring (20). If the outlines join precisely where the two sections meet, the image is in correct focus. This can be observed best on straight vertical lines.

Exchanging field lenses

Remove the finder element from the camera and then loosen the screws on the three remaining springs with a screwdriver. Swing the springs aside, take out the spring ring and tip out the lens. Fixing any one of the other field lenses is performed in reverse order. The thinner part of the lens must lie towards the back of the camera.

Setting the diaphragm

Turn diaphragm setting ring (17) is to bring the diaphragm numeral required for the exposure against the red mark. Lenses with automatic spring diaphragm and automatic pressure diaphragm allow for focusing with the aperture full open. On release of the shutter the diaphragm closes to the pre-set aperture.

The shutter

The focal plane shutter gives exposure speeds ranging from one second to 1/1,000 of a second and "B" (any desired length of time). For exposure speeds longer than 1 second it advisable to use a special wire release with locking device.

The speeds are graduated so that each figure indicates double or one half of the speed marked by the next figure on the scale. The diaphragm scale works in a similar manner. If the light value is to be maintained, the next smaller aperture has to be employed for twice the exposure time, or vice versa.
Setting the shutter speeds

Rotate speed setting disk (11) in either direction, before after the shutter has been cocked, to bring the desired exposure speed to click in next to the red triangular mark.

The rapid wind lever

Swing the rapid wind lever around to its stop and move back to its original position. The shutter is thus cocked, the film is advanced by one frame, the diaphragm set to its widest aperture, the exposure counter switched to the next number and, the mirror having been set, the path is open for the light rays to reach the image field lens.

The delayed action

Swing winding lever (4) of the delayed-action mechanism through 90 degrees and actuate release knob (3). The mechanism runs for approximately 10 seconds and may be employed with all shutter speeds.

The delayed-action lever remains in end the position only if the shutter has been cocked beforehand.

Locking the release nut

Lock the release mechanism by turning the lower milled ring (14) on shutter release (3) anticlockwise as far as it will go. (The red dot must be at the top.) Inadvertent tripping of the shutter is thus impossible. The shutter release mechanism is freed by turning the ring back again.

Flash synchronization

Synchronization for electronic flash and bulbs is effected by means of an X-contact. The flash socket is on the under side of the camera front.
When using electronic flash, set exposure speed on the flash arrow; for short burning bulbs set a shutter speed of 1/15 of a second: for bulbs of a longer flash duration 1/8 of a second.

Finding the diaphragm numeral

Divide the guide number of the flash by the flash-to-subject distance figure.

Removing the film

Swing the rapid wind lever around once as far as it will go and continue winding up the paper backing by small rocking movements until actuating the lever becomes noticeably easier. Only then open the camera back. Fasten the gumstrip and remove the spool with the exposed film. Films can be exchanged in daylight.

Exchanging lenses

Turn milled ring (15) of the bayonet fitting anti-clockwise until it stops. The lens is now unlocked and can be removed from the camera. The red mark on the scale of the lens to be inserted must be at the top, and the screw, or pin, on the inner edge of the lens mount has to engage in the recess of the lens seat in the camera (see arrow in illustration). To fix the lens tighten milled ring (15) by clockwise movement.
Interchangeable lenses

Standard lenses

- Jena Bm 80mm, f2.8 automatic diaphragm
- Meyer Primotar E 80mm, f2.8 pressure diaphragm

Supplementary lenses

- Jena Flektogon 50mm, f4 automatic diaphragm
- Jena Flektogon 65mm, f2.8 automatic diaphragm
- Jena Bm 120mm, f2.8 automatic diaphragm
- Jena S 180mm, f2.8 automatic diaphragm
- Meyer Telemegor 300mm, f4.5 manual pre-set diaphragm
- Jena Mirror lens 1000mm, f5.6

Standard lenses

The standard Jena Bm lens is equipped with automatic spring diaphragm, and the Meyer Primotar E with a pressure diaphragm. The mechanical performance of these two lenses is somewhat different. To check the depth of field on the image field lens with the Jena Bm lens you exert continuous pressure on lever (16) at the right hand side of the lens mount. With the Meyer Primotar E on the other hand, the diaphragm setting ring has to be moved from the red mark to the black mark. The diaphragm thus closes to the pre-set value. As long as the red dot stands against the red diaphragm index mark the automatic diaphragm mechanism is in operation and the widest aperture will always be set when the shutter is cocked. When the black dot on the front setting ring stands opposite the diaphragm index mark, the field lens image may be viewed with the diaphragm on pre-set stop. For the purpose of brightening up to finder image the focusing aperture of the Primotar E is somewhat larger than f3.5, whereas the exposure is made at the actual pre-set opening.

Supplementary lenses

On supplementary lenses not equipped with an automatic diaphragm as, for instance, the 300 mm Telemegor f 4.5, you press the setting ring directly behind the diaphragm scale backwards and adjust it so that its mark stands opposite the desired diaphragm numeral, where it clicks in.
Preview your image at full aperture and immediately before making the exposure turn the diaphragm ring back to the pre-selected spot.

When using supplementary lenses with automatic diaphragm you actuate lever (16) is to check the depth of field in the same manner as described above for the standard lenses. On release of the lever the diaphragm jumps back to its widest opening. With lenses of a longer focal length the automatic diaphragm lever in the camera may project into the path of rays and can, therefore, be moved away from its normal position towards the camera body. To achieve this remove the lens from the camera and swing the lever, which becomes visible on the left side inside the opening, just far enough that it will not touch the camera body when the shutter is cocked. Swing the lever back into operating position when automatic or pressure diaphragm lenses are to be used.

### Accessories for close-up work

- Prism Finder
- Focusing Telescope
- Angle Finder
- Rubber Eye Cup
- Focusing magnifier
- 5 special type image field lenses
- Set of intermediate rings with special intermediate ring and double cable release
- Set of intermediate rings with plunger
- Close-up bellows attachment
- Focusing Slide
- Accessory Clip
- Special pressure plate (for working with glass plates)

On delivery, these accessories are accompanied by a special instruction booklet -- Equipment for Close-up Photography.

Please read these instructions carefully since we can accept no liability for damage caused by improper handling of the equipment. The details given in this booklet are subject to slight alterations which may result for further development in the manufacturing process.