

Praktica BX 20

This camera manual library is for reference
and historical purposes, all rights reserved.

This page is copyright by mike@butkus.org, M. Butkus, NJ.

This page may not be sold or distributed without
the expressed permission of the producer
I have no connection with any camera company

On-line camera manual library

If you find this manual useful, how about a donation of \$3 to:

M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701

and send your e-mail address so I can thank you.

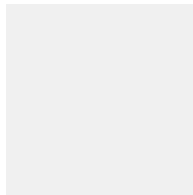
**Most other places would charge you \$7.50 for a electronic copy
or \$18.00 for a hard to read Xerox copy.**

**This will help me to continue to host this site,
buy new manuals, and pay their shipping costs.
It'll make you feel better, won't it?**

If you use PayPal.. use the link below

Venmo is [@mike-butkus-camera](#)

Donation E-Mail
Lynn@butkus.org
Or use the link below



[Click here to go to main Camera Manual site](#)



Introduction	Shutter release
Technical features	Locking the metered value
Guide to individual parts	Exposure compensation
Preparing to take pictures	Semi-automatic mode
Inserting the battery	Holding the camera
Checking the battery	Flash photography
Opening the back	Changing the lens
Inserting the film	Focusing
Closing the back	Depth-of-field indication
Preparing to shoot	Infrared photography
Setting the film speed	Release button
Taking pictures	Locking the release button
Automatic shutter speed control	Self-timer
Preselecting the aperture	Changing the film
Automatic mode, indication	Care of the camera

With the PRAKTICA BX 20 you have bought a high-quality 35 mm SLR camera that combines ease of operation with a versatility ideal for any kind of creative work.

The shutter speeds are automatically controlled within the range from 1/1000 s to 40 s.(seconds)

In addition, the camera's microelectronics permit the use of fixed shutter speeds between 1/1000s and 1s as well as unlimited shutter speeds with the B setting. TTL light metering with open aperture and, thus brightest viewfinder image is made possible by the electronic transfer of the aperture setting from the lens to the camera.

The PRAKTICA BX 20 is also equipped with a system which, if a dedicated computerized flash unit is used on the camera, measures the light coming in from the flash unit, makes a split second evaluation, and closes the shutter as soon as the right amount of light has struck the film. It goes without saying that conventional electronic flash units can be plugged onto the camera as well. Manual corrections of the automatically controlled shutter speeds are possible for the purpose of deliberate overexposures and underexposures.

LEDs on both sides of the clear and bright viewfinder image indicate the shutter speed to be expected, limits, mode of operation (automatic or semi-automatic), memory function, exposure compensation and flash readiness including the O.K. signal for dedicated computerized flash units. The bottom of the finder image provides information on the preselected aperture and whether the shutter is wound or not. The PRAKTICA BX 20 accepts an auto winder and the wide range of PRAKTICA accessories.

FEATURES

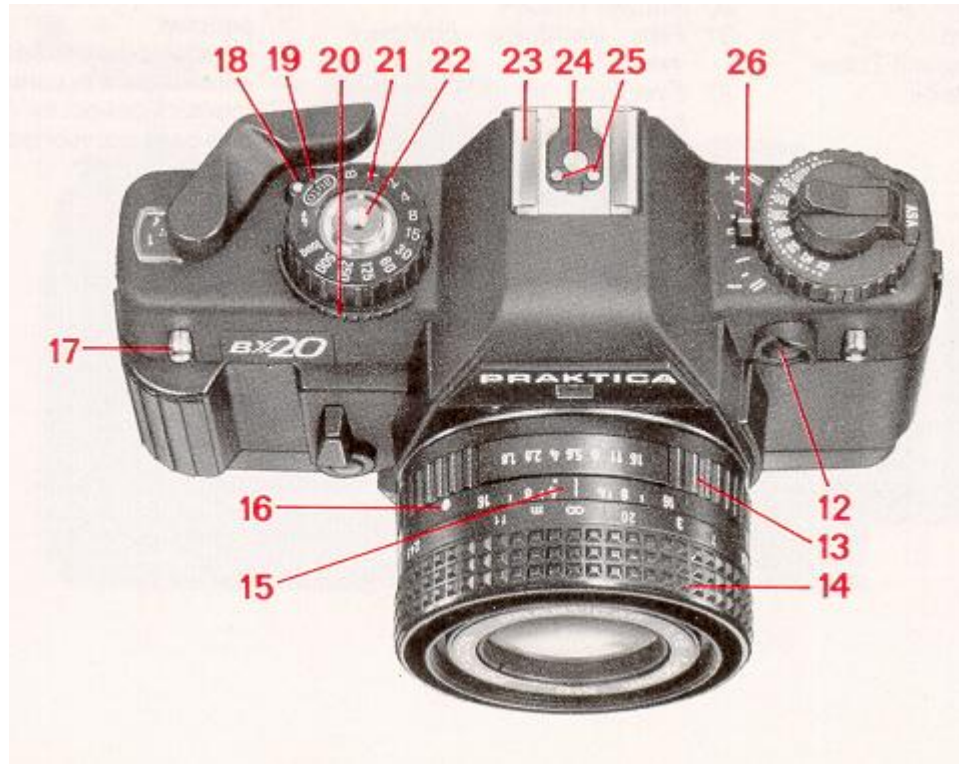
- SRL camera for a frame size of 24mm x 36mm open-aperture TTL metering system with electronic aperture setting transfer
- automatic electronic shutter speed control (stepless) in the range from 1/1000 s to 40 s
- change-over from automatic to semi-automatic mode possible; fixed speed range from 1/1000 s to 1 s
- electronic TTL metering system for flashes and correct dosage of light for dedicated computerized flash unit,
 - X synchronization (approx. 1/100s)
- flash readiness indication (and "flash O.K." signal) in viewfinder image
- LED information on expected shutter speed in viewfinder
- indication of overexposure or underexposure
- aperture setting displayed at bottom of viewfinder image
- shutter "winding" information
- manual exposure compensation of + 2 exposure factors, indication of compensation by red LED at,, + a
- locking of metered value and indication there of by green LED at "AEL" - (automatic exposure lock)
- self-timer (approx. 10 s) with starting button serves also as stop-down lever for depth-of-field checking
- focusing system comprises Fresnel lens with innovative diagonal triple wedge, microprism ring and ground glass ring
- viewfinder image shows approx. 95 per cent of picture sides

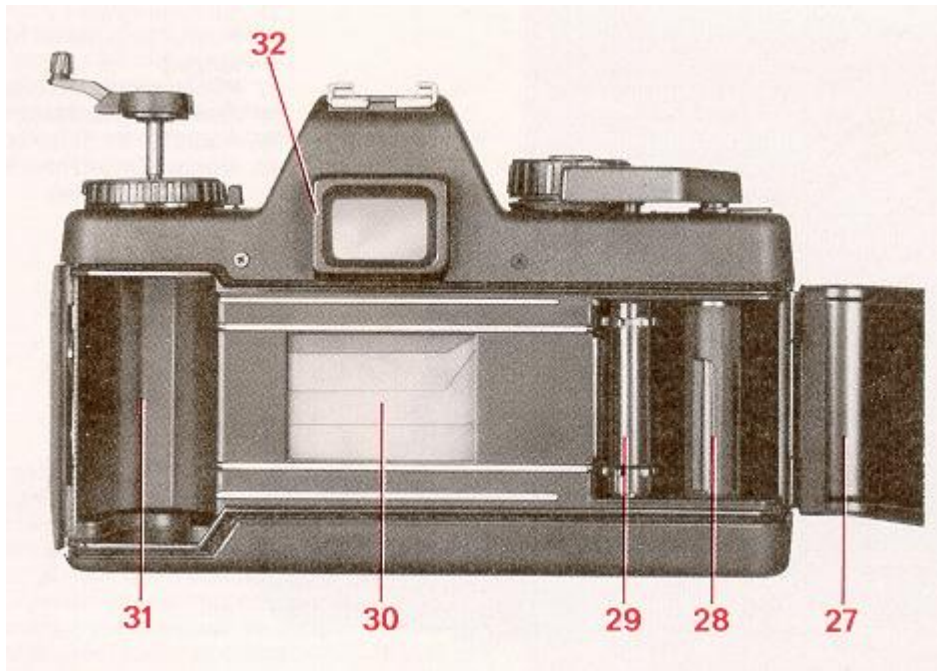
- PRAKTICA bayonet (flange focal length 44.4mm internal diameter 48.5 mm)
- connection for motor winder
- film information holder on camera back
- indication of battery condition in viewfinder
- power source: 6V primary battery (e. g. PX281Mallory) (Webmaster: a note stuck inside the manual states 4-LR44, 4-SR44 [Silver Oxide batteries - longer lasting] or PX28 battery [basically two SR-44 batteries in one cell] also a note about a new battery holder). All of these are common batteries available in large department stores or camera stores.
- silicon photo element as light sensor
- metering and control range: 0-17 EV at 100ASA and aperture 1.4
- dimensions of body: 141mm x 88mm x 49mm
- weight of body without battery: 510 g

Guide to individual of parts

	<ol style="list-style-type: none"> 1. Filter thread 2. Unlocking key 3. Self-timer release 4. Self-timer setting /ever (anticlockwise) stop-down lever for depth-of-field checking 5. Frame counter 6. Winding lever 7. Window reflecting aperture setting into viewfinder 8. Rewind crank 9. Rewind button 10. Film speed dial 11. Unlocking key for film speed dial
--	--

- 12. Memory and battery check key
- 13. Aperture setting ring
- 14. Focusing ring
- 15. Depth-of-field scale and infrared index
- 16. Lens positioning mark
- 17. Lug for carrying strap
- 18. Rewind release
- 19. Index for automatic mode
- 20. Shutter release lock
- 21. Shutter speed dial for "auto" and fixed shutter speeds
- 22. Shutter release with socket for cable release





23. Hot shoe with center contact

24. Center contact

25. Coupling point for computerized flash unit

26. Indicator of exposure compensation with index

27. Camera back

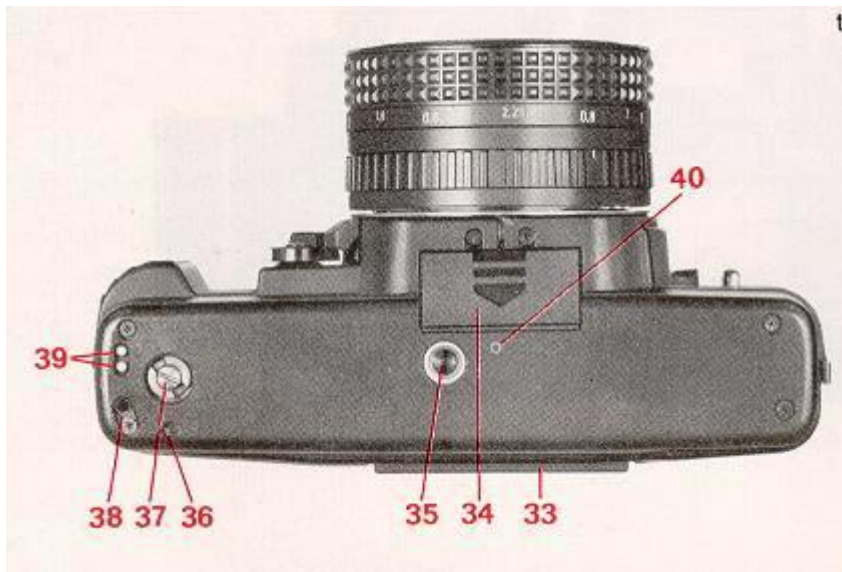
28. Film take-up spool

29. Film sprocket

30. Shutter blades

31. Film cartridge compartment

32. Eyepiece with accessory holder



33. Memo holder

34. Lid of battery compartment

35. Tripod socket

36. Guide way for motor winder

37. Coupling for motor winder

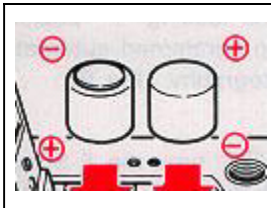
38. Catch for motor winder

39. Contacts for motor winder

40. Mark (for insertion of battery compartment lid)

Inserting the batteries

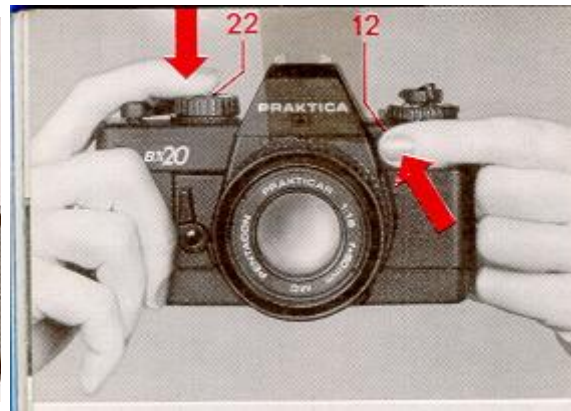
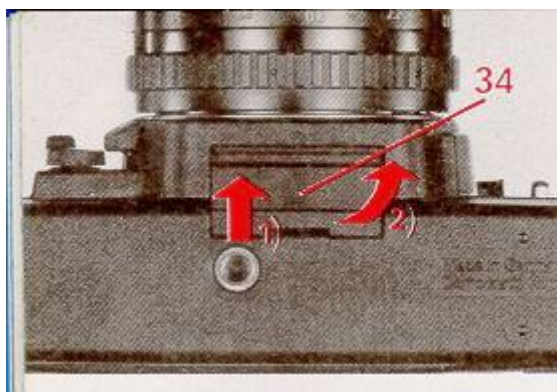
A 6 V source is required to power the whole electronic system. It may be an alkali-manganese, silver oxide (SR) or lithium battery.



Webmaster: On the left is an example of two PX-28 batteries from a Ricoh manual. This is how the batteries should go looking down at the camera. Not sure where the positive marks are on the body so this could be backwards. If using 4-SR44 batteries you should have two bumps going in one direction and two in the opposite.

Four button cells (e. g. LR 44) in a battery case (order no. 961 363) will also do. (the bumps on the batteries are the negative sides, the two bumps should go in the same direction)


Under normal conditions, a fresh battery lasts for about 2 years. To insert the battery, push the battery compartment lid (34) in the direction of the arrow and swivel it out. Wipe the contacts in the battery compartment and those of the fresh battery with a dry cloth. Press the plus pole of the battery against the spring contact (polarity marks in the battery compartment) and tip the battery in. Close the lid and let it click in.

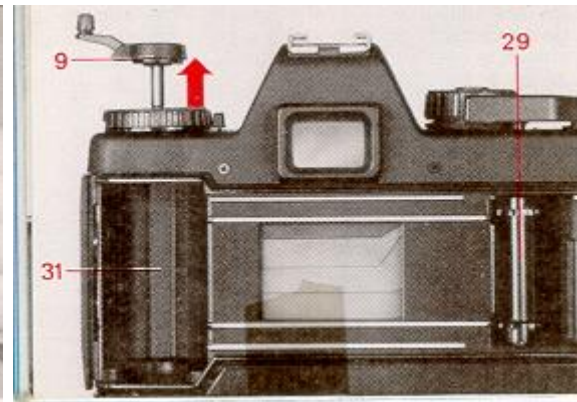
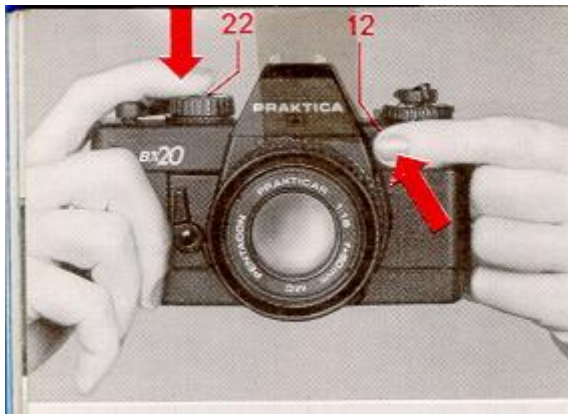


The contacts of the battery and in the compartment should be checked from time to time, and cleaned if necessary. Low temperatures have an adverse effect on the battery; it should therefore be suitably protected in cold weather.

If the camera is not used for an extended period, the battery should be removed.

Checking the battery

The shutter must be wound. Press shutter release (22) and then memory key (12). If the LED indication is bright the battery still has a sufficient power reserve. When the battery is spent, the LEDs on the right side of the viewfinder image will go out. The battery condition can not be checked in the B and  setting.

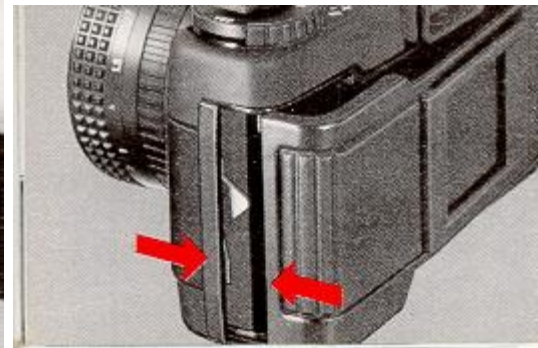
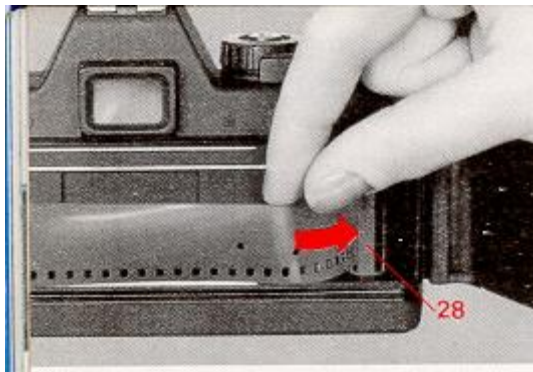


Opening the back

Pull the rewind button (18) up as far as it will go to unlock the back. Open the back completely the frame counter (5) will automatically return to the starting position.

Inserting the film

Before the film is inserted the shutter speed dial should be set to a fast fixed shutter as otherwise a slow shutter speed may be formed in the "auto" mode. The winding lever is blocked until the shutter has completed operation. Do not use force! An undesired slow shutter speed that may have formed in the "auto" mode can be cut short by changing from "auto" to B. Such a slow speed is also obtained in the "auto" mode when the shutter is released without a lens being connected to the camera.



Put the film cartridge into the cartridge compartment (31). Press the rewind button (9) back in all the way; turning it if necessary. Insert the film leader at least 1 cm into the slit in the take-up spool (28). Carefully operate the winding lever until the teeth of the film sprocket (29) engage in the film perforation.. Swing the winding lever fully out and let it return. Release the shutter.

Closing the back

Press the middle of the lock side of the back against the camera body until the lock is heard to engage.

Preparing to shoot

The winding lever (6) may be swung out a little way without starting the winding procedure. This readiness position increases the handling reliability when taking rapid picture sequences. Swing the winding lever as far as it will go, return and press the shutter release (22). Repeat the procedure and continue to do so until the automatic frame counter (5) indicates frame 1.

Information on whether the shutter is wound or not is given at the bottom of the viewfinder image:

* aperture reflected into viewfinder appears red -shutter is not wound

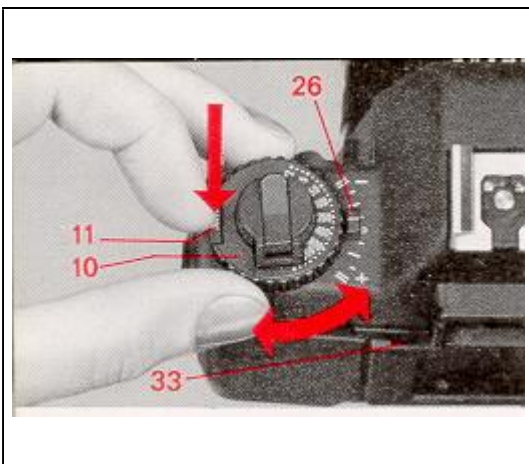
* aperture reflected into viewfinder is colorless -shutter is wound

Proper film advance can be checked by making sure the rewind button (9) rotates as the winding lever (6) is moved.

If you shoot with a winder attached to the camera refer to the instructions for use of the **PRAKTICA winder** made by VEB PENTAGON DRESDEM We shall not be liable to you for damage caused by using a winder of different make.

Setting the film speed

Press the unlocking key (11) and turn the film speed dial (10) until the film speed given on the pack (ASA value) matches the index of the compensation indicator (26). The flap from the film pack can be put into the memo holder (33) as an additional aid to the memory.



Automatic shutter speed control

In the "auto" mode, the PRAKTICA BX20 operates automatically in a stepless shutter speed range from 1/1000 s to 40s. The shutter speed is electronically controlled in consideration of the lighting conditions, the preselected aperture and the film speed.

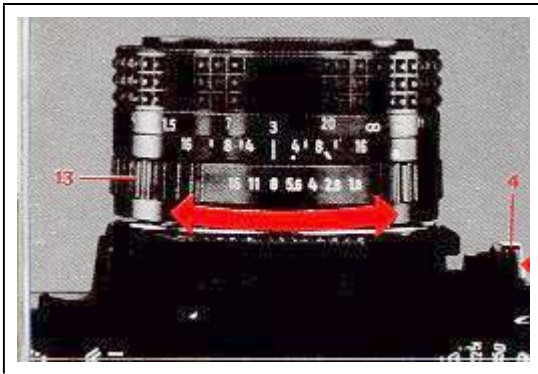
LEDs at the edge of the viewfinder indicate the controlled shutter speed. Should the shutter speed range be exceeded, OVER or UNDER is indicated.

The TTL metering system automatically takes into account all factors influencing the exposure such as focal length of the lens, filters and extensions.

If lenses with the 42x1 PRAKTICA thread are used with an adapter, light metering is automatic at working aperture.

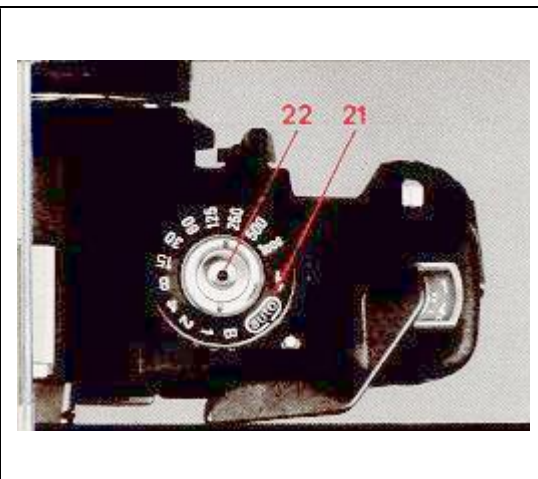
Preselecting the aperture

The desired aperture is set against the mark on the lens by turning the aperture setting ring (13). The set aperture is displayed at the bottom of the viewfinder image.

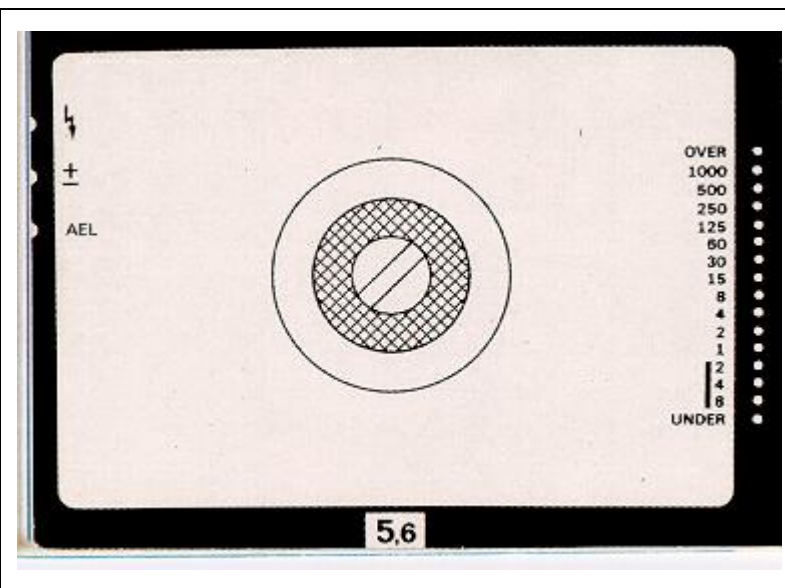


If lever (4) is moved in the direction of the arrow, the diaphragm is stopped down to the aperture set, and the depth of field can be assessed in the viewfinder.

Automatic mode, indication

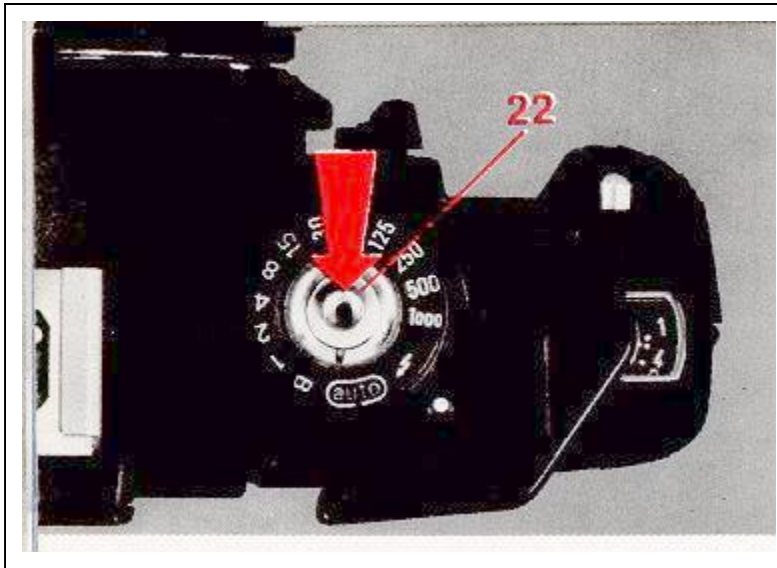


Set the shutter speed dial (21) to "auto". The electronics are switched on by slight pressure on the shutter release (22). In the viewfinder image the shutter speed calculated by the automatic system is shown by an LED display. If it appears unsuitable for the subject, it can be corrected by selecting another aperture. LEDs are allotted to selected speeds between 1/1000 s and 8 s, with intermediate values being indicated by the simultaneous lighting of two adjacent diodes.



Shutter speeds between 8s and 40s are indicated by the permanent lighting of the UNDER LED, while speeds outside the 1/1000 s to 40 s range are indicated by the flashing of the LED at OVER or UNDER. In this case the shutter is set for 1/1000 s or 40 s. If shutter speeds of 1/15 s and slower are formed, the use of a tripod or other steady surface is recommended.

Shutter release



After shutter speed has been checked in the viewfinder the shutter is operated by fully depressing the shutter release (22). When pressure is removed from the shutter release the electronics are automatically switched off.

With slow shutter speeds the removal of pressure from the shutter release does not affect the exposure procedure. In this case the electronics are switched off when the shutter cycle has been completed.

If the cycle needs to be broken off prematurely with a very long shutter speed (e. g. after an accidental shutter release), the shutter speed dial (21) should briefly be turned to B.

Locking the metered value (exposure lock - AEL)

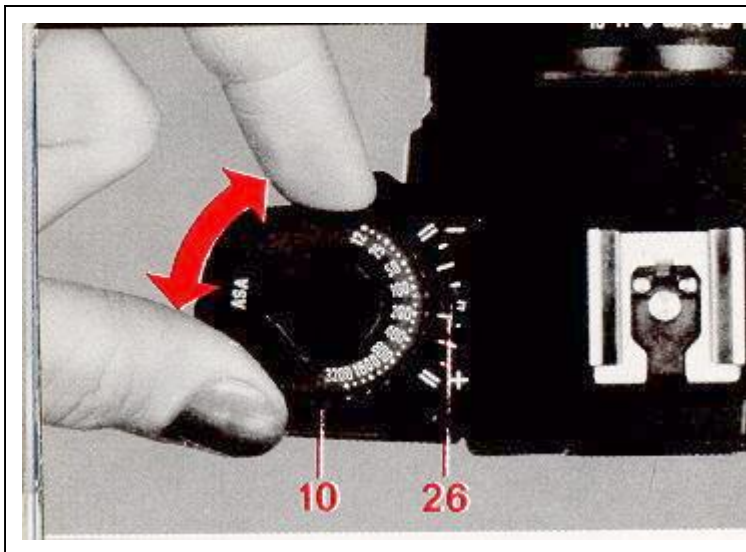


If the subject features extreme contrasts (e. g. people wearing dark clothes in sunlit snow or a light-colored object in front of a dark background), the exposure value can be determined by individual metering of the most important element in the picture from close up. The value obtained in the close-up measurement is stored, and the image section can then be changed without another shutter speed being set.

To store the metered value first depress the shutter release (22) slightly (camera is wound) to initiate the metering process, and then briefly press the memory button (12) to lock in the metered value (LED at "AEL" is lit).

No new measurement is made before the shutter is released, and the shutter speed will correspond to the locked value. The locked value is erased when pressure is removed from the shutter release and the electronics are switched off.

Exposure compensation



Another way of influencing the exposure individually is by using the exposure compensation system (10, 26). Such compensation is necessary when the character of the object varies greatly the norm, e. g. with dark objects in front of a light background (+1, +2) and with bright objects in front of a very dark background (-1, -2).

Lift the film speed dial (10) and turn the exposure compensation indicator (26) to the desired value.

An LED (+/-) on the left side of the viewfinder image indicates that the shutter speed is overridden. Starting from the initial position the shutter speed is reduced in the „auto" mode by 1 or 2 exposure factors when the dial is set to +1 or +2, respectively. The speed is correspondingly increased when the dial is set to -1 or -2. The dial can be set to half factors. At the limits of the film speed range - 12 ASA and 3200 ASA compensation by two factors is also possible.

However, the compensation cannot extend the shutter speed range beyond the speeds of 1/1000 s and 40 s. Remember to return the dial to the neutral initial position after exposure-compensated shots. The LED (+) will then go out.

Semi-automatic mode

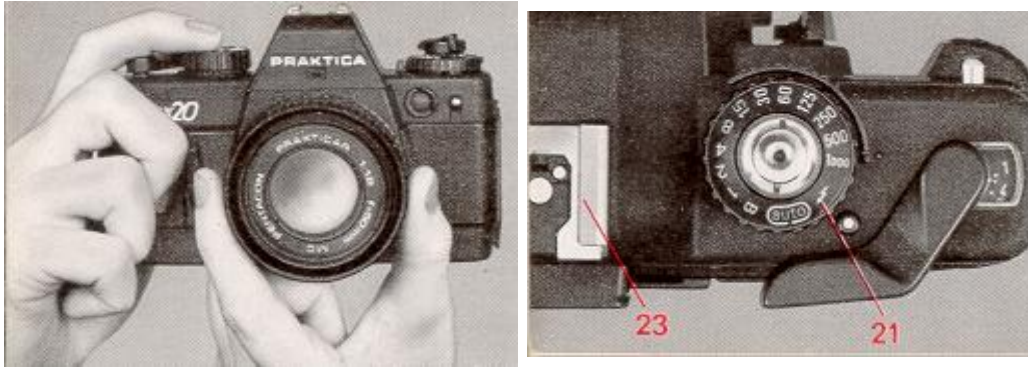
If you want to shoot at a particular shutter speed, for reproductions or scientific work for example, set the PRAKTICA BX 20 to semi-automatic mode. Fixed shutter speeds from 1 s to 1/1000 s and the B setting for any length of time are available. Select the speed you want using the shutter speed dial (21) this automatically changes the camera operation to semi-automat/c mode. As with automatic shutter speed control, the camera's electronics are switched on by gentle pressure on the shutter release.

The shutter speed can again be checked using the LEDs in the viewfinder: While the LED corresponding to the set shutter speed flashes, the shutter speed required by the lighting conditions, the film speed and the selected aperture is shown at the same time by a steadily lit LED (two adjacent LEDs light up for intermediate speeds).

To match the two, alter the aperture or shutter speed until the LED is lit steadily. There is no LED display for the B setting. The fixed shutter speeds will not be changed by the described correction procedure.

Holding the camera

The illustration shows the best position in which to hold the camera. It should be held steadily and tightly, the elbows should be supported against the body. In this way blur free pictures will be achieved.



Flash photography

If the available light is insufficient for handheld shots (e. g. indoors) or if the subject has to be additionally brightened up, flash should be used. All fitting electronic flash units can be used, computerized or not. Just push the flash unit onto the hot shoe (23); the electrical connection is thus made.

For electronic flash without computer control set the shutter speed dial (21) to ⚡. The speed will then be 1/100s.

If a dedicated computerized flash unit is pushed onto the hot shoe and the shutter speed dial (21) set to "auto", an LED at the viewfinder edge (⚡) will signal flash readiness, and the "auto" indication will go out. Flash readiness will also be indicated in the case of a computerized flash unit when the dial is set to ⚡..

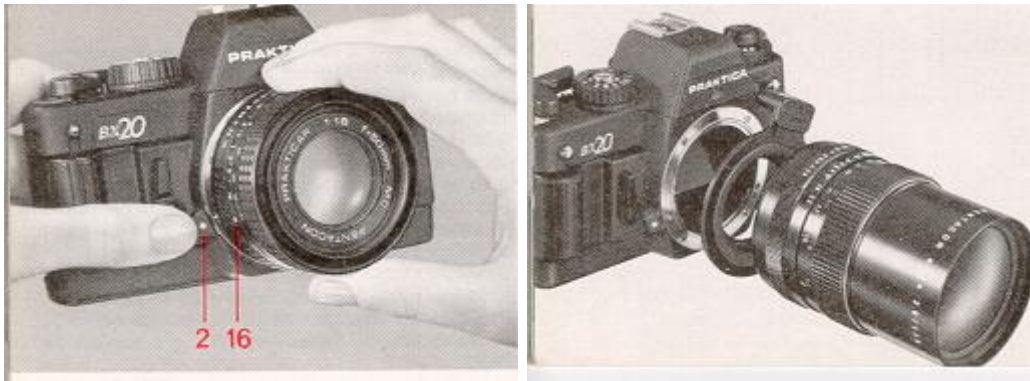
Correct exposure is guaranteed by the camera's TTL light metering system: the reflected flash light passes through the lens, is evaluated by the camera computer, and the flash is cut short at the right moment via the cableless hot shoe connection - genuine automatic TTL metering also for flashes.

The "flash O.K." signal (film is correctly exposed) is derived from the flash readiness indication. If the LED at ⚡ lights up again immediately after exposure, the correct amount of light has struck the film. The O.K. signal of the flash unit should be observed in cases deviating from the norm. Flash readiness is retained even if the memory key is pressed and the green LED at "AEL" signals the locking of the metered value. Exposure compensation signaled by the LED at (+ / -), is taken into account by the automatic flash system.

To avoid incorrect exposures with flash when the surrounding light is bright, check by switching off the computerized flash unit that the shutter speed corresponding to the surrounding light is slower than 1/125 s. See also the operating instructions for the flash unit for detailed information. **Changing the lens**

Press the unlocking key (2) and turn the lens anticlockwise as far as it will go. Remove the lens from the camera.

Insert the PRAKTICA lens in such a way that the red marks (16 and 2) on the camera and lens are opposite each other. Press the lens against the camera body and turn clockwise until the locking pin is heard to engage.

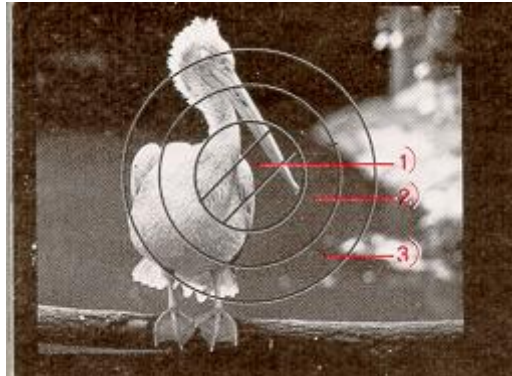


By using the PRAKTICA adapter all original PRAKTICA lenses with the M 42x 1 thread can be connected. Lenses of other makes with the M 42x 1 thread must be suitable for PRAKTICA cameras and equipped for metering at working aperture.

The PRAKTICA BX 20 also works automatically with screw-thread lenses, the only difference being that the light metering is made at working aperture.

Focusing

Focusing is possible with the triple wedge system, the microprism ring or the ground glass ring.



1. Triple wedge

The wedge system allows highly accurate focusing. Optimum sharpness is achieved when the contours and lines flow naturally. Incorrectly aligned edges indicate that the image is out of focus.

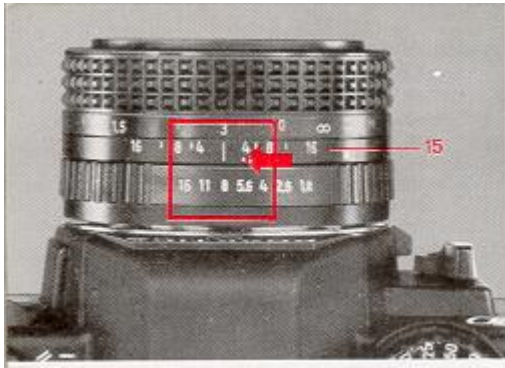
2. Microprism ring

The image is correctly focused when the image inside the grid is clear and flicker free.

3. Ground glass ring

Especially useful in photomacrography and photomicrography and when using lenses with a small relative aperture (greater than 4). The image must appear clear and sharp in the ground glass ring.

Depth-of-field indication



The limits of the depth of field for the selected aperture can be read off from the depth-of-field scale (15) on the lens. Example: distance 3 m, aperture 8 - depth of field ranges from around 2 m to 5 m.

Infrared photography

Infrared photography requires a slight correction to the focusing: match the distance determined in focusing with the infrared index (see arrow) on the lens. **Release button**



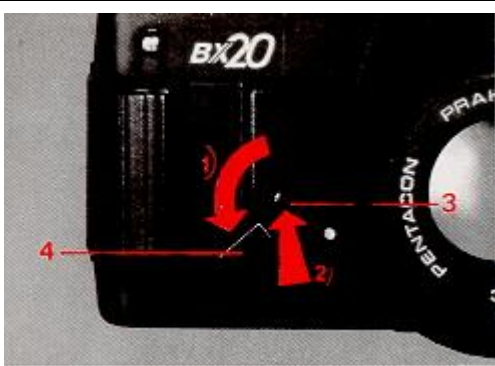
For ease of operation several functions have been combined in the shutter release (22). When the camera is wound, gentle depression of the shutter release until pressure is felt switches on the automatic system and the LEDs for shutter speeds or flash readiness (with special flash units). Further pressure will release the shutter.

Locking the release button

Accidental shutter release and unnecessary use of power as a result of unintentional pressing of the shutter release button when the camera is wound or not can be avoided by locking the release button.

To this end, the lock (20) below the shutter speed dial is fumed in the direction of the arrow. To unlock turn in the opposite direction.

Self-timer



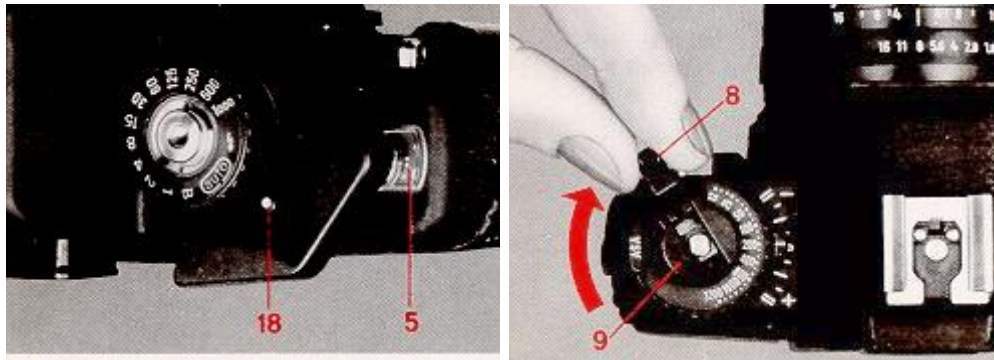
Advance the shutter, swing the self-timer winding lever (4) in the direction of the arrow 1 as far as it will go, and release by pressing starting button (3) as shown by arrow 2. The delay period is approximately 10 s. Do not wind the shutter while the delay mechanism is running.

If a motor winder is attached to the camera and switched on, several frames can be exposed during the delay period with fast shutter speeds. If this is not desired, the motor winder should be switched off.

To avoid incorrect metering in the automatic mode the eyepiece should be covered with the eyepiece cover supplied.

Changing the film

The frame counter (5) indicates the number of frames which have already been exposed on a film. If all the frames on a film have been exposed (red mark at 20 or 36), change the film.



Press in the rewind release (18) until it locks, fold out the rewind crank (8) and turn in the direction of the arrow until increased resistance followed by easy movement indicate that the film has been fully rewound. Pull the rewind button (9) all the way up to unlock the back. The film cartridge can now be removed. Do not change the film in bright sunlight

Attention! If more frames are exposed than are indicated on the film pack, it is possible that the winding lever cannot be swung all the way. Do not use force. Rewind the film as described above, then swing the winding lever fully out.

CARE OF THE CAMERA

- Protect the camera from impact, dust and moisture.
- Clean the cartridge and spool compartments, the film track and the back from time to time with a soft brush.
- Do not use organic solvents such as spirit or varnish thinner to clean the camera.
- Do not expose the camera or lens to aggressive vapors.
- Remove fingerprints from the lens and eyepiece surfaces with lens cleaning paper.
- Do not touch the mirror, field lens or shutter blades. Such contamination can only be removed by a service workshop.
- Use an optical brush for dust removal, or blow out
- Do not expose the camera to very high or low temperatures for lengthy periods. Avoid, for example, placing the camera in a car window in direct sunlight
- The camera should be suitably protected from extreme cold.
- When using the camera near the sea or on the beach, protect it from salt water, spray and sand.
- Avoid sudden changes in temperature. These may lead to the formation of condensation and thus to corrosion damage.
- Never attempt to make your own repairs to the camera. Consult a service workshop where necessary.

THIS IS NOTED ON AN EXTRA PAGE ADDED TO THE MANUAL Your PRAKTICA BX 20 has an improved battery compartment lid.

Please note the following when inserting the battery:

Push the lid (34) in the (changed) direction of the arrow and open it.

Close the lid after battery insertion and lock it.

Please note carefully all the instructions contained in this booklet. Incorrect handling of your camera can lead to damage not covered by our guarantee.

Further development of the PRAKTICA BX 20 may result in some aspects of the camera deviating slightly from those given here.