

# MINOLTA X-500

## 1983



Serial Nr.6082743  
Minolta Code 2024-200

### Characteristics and functions

Device type: 35mm SLR SLR with aperture priority automatic exposure or manual exposure with active independent exposure meter and electronic quartz control.

Exposure control modes: aperture priority automatism (A), manual with independent active exposure meter (M).

Exposure control with low voltage and low current circuit.

Lens attachment: self-lubricating steel bayonet coupling. All objectives of the MC and MD series are allowed. Optics release button on the left side of the optics union. Red indicator placed in the upper part of the union for the correct coupling of the bayonet. The complete locking of the bayonet occurs after a clockwise rotation of 54°.

Sensitivity range allowed from 12 to 3200 Asa. The sensitivity can be set using the large knurled ring coaxial to the crank for film recovery: to set the correct sensitivity, press the black button located in the rear position between the main switch and the film recovery crank, and rotate the knurled ring; the values in Asa appear in the rear window, have subdivisions of 1/3 represented by two white dots between the integer values and refer to a small dash engraved on the upper casing at the base of the window.

Shutter: on the focal plane of mechanical type with horizontally sliding rubber cloth curtains and electromagnetic shutter release.

Shutter speeds from 4" to 1/1000" and B. Sincroflash at 1/60".

Working range: from VL 1 to VL 18 (from 1" with f/1.4 to 1/1000" with f/16) with 100Asa film and f/1.4 lens.

Automatic exposure: aperture priority with the selector in position [A]. Once an aperture is set on the lens, the camera adjusts the time from 4" to 1/1000" seamlessly.

The simultaneous lighting of two LEDs indicates that the camera is working with an intermediate time between the two speeds highlighted by the LEDs.

Manual exposure: turning the selector to shutter speeds, the working times are set from 1" to 1/1000" with whole values and bulb. To unlock the selector from position [A], press the black button next to the selector itself. . The reference is placed between the selector and the right side of the pentaprism. The set speed is indicated in the viewfinder with the intermittent lighting of the reference LED. The light meter remains active and suggests the correct exposure with the lighting of 1 LED, or 2 if the suggested speed is an intermediate value. The difference between the suggested exposure speed and that actually set on the shutter selector highlights the under / over exposure value. Times that can be set using the selector located to the right of the pentaprism from 1" to 1/1000" with full increments and exposure (B). Syncroflash at 1/60" or longer.

Measurement: Full aperture TTL with integrated average reading, using a silicon cell mounted in the rear of the pentaprism for ambient light measurement. For TTL measurement with flash light there is another silicon cell, mounted with an optical unit next to the mirror compartment.

Mirror: with multiple coatings that improve the degree of reflection by 11%, with rapid return, oversized, mounted on a system that allows it to absorb vibrations during the movement of the mirror.

Viewfinder: pentaprism fixed at eye level. Focusing Fresnel screen with horizontal image split center and microprism circular crown. The focusing screen is worked with the Acute Matte system (Minolta patent) which allows exceptional sharpness. There are 2,500,000 microscopic cells of regular shape. The viewfinder provides 95% view of the 24x36mm format. and 0.9x magnification with 50mm lens. focused on infinity. On the right side of the viewfinder you can see the shutter speeds from [1000] to [1] and the corresponding 11 red bar-shaped LEDs. Two triangular-shaped LEDs placed beyond the shutter speeds indicate over / under exposure. In the lower part a [B] indicates the setting of the prolonged exposure function. And at the top a red [A] lights up in aperture priority mode or a red [M] when manual exposure is set. When using the flash, with Minolta dedicated flashes (for example AUTO 360PX, AUTO 280PX, Auto 132PX, Auto 80PX), the red led of the [60] flashes at low frequency (2 Hz.) To indicate the "flash ready", While blinking with a faster frequency (8 Hz.) After shooting to indicate the correct exposure. In the lower part, in the center, the working aperture actually set on the lens is visible.

Shutter button: located in the center of the shutter speed dial. Double function electromagnetic: by simply touching the light meter is activated, which remains active for 15 seconds even after removing your finger from the button, while lowering it by about one millimeter the shutter is released.

Main switch This is located to the left of the pentaprism on the top cover. It is made up of a slider in knurled black plastic; if backward you have [Off], if partially advanced you will find [On] and if fully advanced, in [A] mode, you have the [On])) function. The On))) position activates the function of an acoustic signal when the shutter speed drops below 1/30" or when the self-timer is activated.

Advancement of the film: by means of the loading lever located on the upper carter at the extreme right between the speed selector and the exposure counter. The advancement of the film is obtained with a rotation of the loading lever of about 130° with a dead stroke of about 30°. The complete advancement of the film also involves arming the shutter and increasing the numbering of the exposure counter. The AUTO WINDER G and the MOTOR DRIVE 1 are available as optional accessories, which allow the advancement of the film respectively with a maximum cadence of 2 and 3.5 frames per second.

Self-timer: by moving the dual-function switch that is present, on the front, above the red self-timer LED, in the ST [Self Timer] position, the self-timer setting is activated which is activated by pressing the shutter button. The delay is 10" and is highlighted by

the switching on of the large rectangular red LED located on the front to the right of the optics union. The LED flashes in 3 different phases: with a frequency of 1/2 second for the first 5 seconds to become faster in the following 3 and remain lit in the last 2 before the shot. If the [On]] function is also set, the acoustic signal is heard at the same time. The self-timer can be canceled by lowering the ST / AEL switch back to its rest position or repositioning the main switch in the [Off] position. After shooting with ST, to return to normal mode, the ST / AEL switch must be lowered back to the rest position.

**Accessories** The dual function switch located at the front to the right of the optics union allows, by lowering it, the exposure lock function (AEL). To maintain exposure lock, you must keep it pressed even during shooting. The accessory rail with hot contact and two additional contacts for the use of dedicated MINOLTA flashes is placed above the upper casing, above the pentaprism; the crank for rewinding the film, located on the left of the upper casing, also has the function of unlocking and opening the back, pulling it up to the end of its travel; the automatic exposure counter, with additive counting and automatic reset when the back is opened, is located next to the loading lever in a rectangular window with a triangular red reference; The smooth sliding of the film can be seen by observing a red tab appear in the special window that is located on the upper side of the camera, just above the loading lever; the selector (in plastic) for coupling "MC" with the exposure meter is placed around the lens union, it moves around and above it. On the left side of the optics filler there are from top to bottom the lens release button, the threaded socket for flexible release and the knurled black plastic button for manual closing of the diaphragm (Stop-Down). To the right of the optics nozzle, in the lower part there is the socket for the X contact for use with electronic or bulb flashes with 1/60" synchronization or slower times. A black plastic handle worked like small pyramids and a recess on the back allow for a firmer grip even when holding the camera with one hand. The attachment of the film to the receiving spool is facilitated by the presence of 4 gray plastic supports for anchoring the tail of the film. The shoulder strap attachment system consists of two triangular-shaped rings placed in the chromed supports located at the end of the front. The memo pocket, with Asa / Din conversion table is located on the back. The QUARTZ DATA BACK 1 date back is available to record the day, month and year on the negative and the MULTI FUNCION BACK back with multiple programmable functions. Opening the back, you can see the 3 golden contacts in the lower part that are used precisely when using the optional backs. The tripod mount and the screw cap for the battery compartment (2x 1.5v silver oxide batteries) in metal, are placed on the back together with the coupling for the MOTOR DRIVE 1 and the AUTO WINDER G, the guide and the electrical contacts for the same and the release button of the clutch for the recovery of the film. The eyepiece frame, made of plastic, allows the adaptation of a rubber lens hood (EH-7) to be inserted into the special lateral grooves; inside the eyepiece frame there is space for corrective lenses, which must be placed under pressure. The viewfinder eyepiece cap is available which is inserted into the grooves of the viewfinder to replace the EH-7 lens hood. Electric remote control cables are available: CABLE RELEASE 50L and 50S with a length of 5 meters respectively. and 50cm. and the mechanical flexible release, with lock, CABLE RELEASE II. The IR-1 wireless remote control unit is also available. The position of the film surface is highlighted by the special symbol, which is colorless and in relief, and which is located on the upper casing hidden under the loading lever when this is brought to the rest position. There are 4 MINOLTA electronic flashes from the Auto PX series: the AUTO 360PX, the AUTO 280PX, the AUTO 132PX and the annular AUTO 80PX. The 360PX and 280PX models can be used in conjunction with the AUTO WINDER G or the MOTOR DRIVE 1 up to a speed of 2 frames per second. The presence of two shutter buttons on the Motor Drive 1 allow an easy grip even with vertical shots. The POWER GRIP 2 handle in the power supply of the AUTO 280PX flash allows light sequences up to 3.5 frames per second when used in conjunction with the MOTOR DRIVE 1. There is no system for checking the efficiency of the batteries, but the camera locks up when the voltage is

not enough for proper operation. With batteries running low, there is a partial functionality: the camera works but the LEDs in the viewfinder do not light up.

Shooting with flash light and slow shutter speeds is possible using the dedicated Minolta PX series flashes. Pressing the AE Look [AEL] button locks the exposure in ambient light, keeping the button pressed triggers the flash and during shooting the camera sets the shutter speed appropriate to the ambient light and the flash emphasizes the foreground more without the background being particularly dark. This is thanks to the TTL reading of the flash light.

There are eight other types of focusing patterns available, in addition to the one fitted as standard (PM). The replacement of the screens must be performed by an Authorized Minolta Technical Assistance Laboratory as a new calibration of the exposure meter is required. Horizontal split-image P1 type for general photography; P2 type split image for general shooting with f/2.8 or larger aperture lenses; Pd type with diagonally broken image for general shooting; type M with central area with microprisms, without image splitting for general shooting; type G with the entire frosted area suitable for photographs with strong telephoto lenses or at close range; type L with entire frosted area and with grating to facilitate the composition of the frame; type S with graduated orthogonal scales suitable for macrophotography, microphotography and astrophotography; type H with transparent central area and double central cross suitable for micrography, macrography and astronomical photography.

Power supply: by means of 2x 1.5v silver oxide batteries. type S-76 or EPX-76. A container for 2 spare batteries to be applied to the camera strap is supplied.

Dimensions and weight: length 137mm.; height 89mm.; width 51.5mm.

Body weight only, without battery: 483g.

