

MINOLTA X-700

1981



Serial Nr.2054069
Minolta Code 2017-100

Characteristics and functions

Type of device: 35mm SLR SLR with programmed exposure control.

Exposure control modes: Fully programmed [P], aperture priority automatism (A), manual with independent active exposure meter (M).

Objective Attack: 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°. To use the [P] function, it is essential to use the MD series optics.

Sensitivity range allowed from 25 to 1600 Asa. The sensitivity can be set using the large knurled ring coaxial to the crank for recovering the film: to set the correct sensitivity you need to raise the ring and rotate it, then lower it again. The values in Asa have subdivisions of 1/3 represented by two white dots between the integer values and appear in the small window that is present in a rear position with respect to the film recovery handle.

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".

Programmed exposure: by means of a low voltage, low current computerized circuit - comprising a quartz crystal for sequential control with 1 / 30000th of a second accuracy, large scale integrated circuit, samariocobalt pulse magnets and linear resistance inputs - which continuously adjusts both the exposure time and the aperture according to a special program called "for rapid times". For a correct use of the [P] program, the objectives of the MD series with use at maximum aperture are required. A new generation of MD lenses has the ability to lock the maximum aperture by moving a small knurled plastic slider back towards the camera just in front of the aperture ring. Moving the cursor is highlighted with the appearance of a small green area, the same green with which the figures of the last available aperture are painted. Then the programmed exposure is set with "3 green movements": [P] on the selector, minimum

aperture (for example 16) and aperture lock (appearance of the green area).

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 full values and bulb. The exposure 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.

Working range: from VL1 to VL 18 with 100Asa film and f./1.4 lens.

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.

Intentional variation of exposure: correction of up to +/- 2 EV is possible, which is obtained by pressing the black button to the left of the pentaprism and turning the variation selector [+2. +1. 0. -1. -2], which is coaxial to the film recovery handle, positioning it with settings of +/- 1/2 stop with respect to the white reference line located above the release button just mentioned.

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 micropism 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. And at the top of the scale a green [P] lights up in programmed mode, or a red [A] 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 a low frequency (2 Hz.) To indicate "flash ready" , while blinking with a faster frequency (8 Hz.) after shooting to indicate the correct exposure. In the lower part there is a red led in the shape of an asterisk (*) which flashes when the intentional variation of the exposure (+/-) is set. 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, while lowering it by about one millimeter the shutter releases.

Main switch The knurled black plastic part that protrudes from the speed selector at the front allows you to activate the camera circuit. Moving it to the left from the center position [Off] gives [On])). Moving it to the right from the center position [Off] displays [On]. The On))) position activates the function of an acoustic signal when the shutter speed drops below 1/30" or when the self-timer is in operation. The acoustic signal is emitted from the grid window on the prism.

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. The metal "MD" coupling selector is placed a little more to the right in a slot that allows a movement of a few millimeters. The main switch, in knurled black plastic, with 3 functions is placed, at the front, under the speed selector and the indications appear in a window located in the rear position, near the pentaprism. 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 flash sequences up to 3.5 frames per second when used in conjunction with the MOTOR DRIVE 1.

The front plate [MPS] located on the front to the left of the optics union indicates the presence of a programmed automatic shooting circuit (MPS: Multi Program System). There is no system for checking the efficiency of the batteries, but the camera locks up when the voltage is not sufficient for correct operation. With batteries running low, there is a partial functionality: the camera works but the LEDs in the viewfinder do not light up. 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 slipped into the camera strap is supplied.

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

Body weight only, without battery: 507g.

