

MINOLTA XM

1973



Serial Nr.2120525
Minolta Code 0054

Characteristics and functions

Device type: 35mm reflex. SLR with electronic shutter.

Objective Attack: All objectives of the MC and MD series are allowed. Optics release button, chromed to the left of the optics coupling. Red reference point on the self-lubricating steel optics union. 54° clockwise rotation to obtain complete lens lock.

Sensitivity range allowed from 12 to 6400 ISO. The selector is placed above the viewfinder. The film sensitivity must be set by rotating the value until it coincides with the red reference. The scale is divided into 1/3 of the value with reference to the intermediate points between two integer values.

Electronically controlled focal plane shutter with horizontal sliding titanium curtains with fixed times from 16" to 1/2000". From 4" to 1/2000" seamlessly with the use of the Auto Electro Viewfinder (AE)

Times that can be set by means of the selector located to the right of the pentaprism from 1" to 1/2000" with full increments and exposure "B". Syncroflash (X) at 1/100" or

longer. Slow times that can be set using the lower selector: 2 " - 4" - 8 " - 16" and bulb.
Measurement: average with prevalence in the center by means of two Al cells (CdS) placed above the pentaprism - MINOLTA patented system (CLC).

Viewfinder supplied with the body: (AE) interchangeable at eye level. The vision system is provided by a frosted glass, Fresnel lens, with horizontal image splitting that provides a view of 98% of the area actually framed. In the viewfinder on the right you can see the shutter speeds set by means of the external selector, in the lower part there is the reference [A], which in the automatic aperture priority mode is highlighted by a green bar; the galvanometer needle; while at the top it is possible to view the effective aperture set on the lens directly. In operation in aperture-priority automatic mode, (Auto) must be set on the speed selector, a green signal appears on the letter [A] in the viewfinder and the galvanometer needle indicates the shutter speed set by the camera with shutter speeds ranging from 1/2000 " at the top up to 1" at the bottom. When the galvanometer needle indicates [1] it means that the camera sets a time between 1" and 4", if the galvanometer needle drops below [1] it means that the time set by the camera must be over 4 "for get proper exposure. When the red signal below the time scale lights up, it means that the lighting is below the lower limit for correct use of the exposure meter. In manual mode operation, the desired speed must be set by turning the time selector; in the viewfinder the galvanometer needle indicates the correct exposure for the aperture set on the lens; the deviation between the speed set on the selector and that indicated by the galvanometer in the viewfinder indicates the extent of the under / over exposure. It is possible to darken the viewfinder window by rotating the small wheel (Close) located to the right of the viewfinder by 270°. The (On-Off) switch located to the left of the viewfinder activates the exposure meter. If you hold the camera in your hand, you can still use the sensor button, rectangular in shape and with a machined surface, located on the front of the camera to the right of the self-timer activation mechanism. Pressing it activates the exposure meter even if the (On-Off) selector is in the Off position; therefore the selector is used in the On position only when the camera is used without being held as in use with a tripod. With the AE viewfinder and the Auto function set, an intentional and immediate one stop over / under exposure is possible using the selector with the knurled frame protruding into the rear of the speed dial between 1000 and 250. Moving it to the right gives a overexposure of a diaphragm; vice versa, moving it to the left results in underexposure by one aperture.

When using the camera with AE viewfinder in the manual function, rotate the speed dial to set the desired time. The selector has the end of travel therefore to pass from the Auto position to the shutter speed of 1/500 ", you have to go up passing from B to 1", to 2 ", etc Inside the viewfinder, the green bar on A disappears while the galvanometer needle indicates the time for correct exposure; the deviation between the manually set speed and that highlighted in the viewfinder by the exposure meter highlight the over / under exposure value. To set a shutter speed longer than 1 ", rotate the selector to position B and, using the lower switch, operate the chromed frame located at the base of the speed selector column near the shutter button; rotate the rear red reference to the desired times (2-4-8-16). For exposures longer than 16 seconds, the red reference must be rotated to position B. With long exposures on the tripod, the flexible release CABLE RELEASE is used.

To remove the viewfinder, press the chrome button located on the rear of the camera at the film recovery handle. To reinstall the viewfinder again, remove the lens from the camera and insert the viewfinder by simultaneously pressing the chrome button already used to remove the viewfinder.

Optional viewfinders: There are 4 optional viewfinders which can replace the automatic one sold with the body.

Viewfinder with "manual" exposure meter: the camera behaves like the SRT and in the viewfinder you can observe the galvanometer needle and the stalker needle.

Simple pentaprism viewfinder, without the exposure meter. For accurate exposure, it

requires the use of an external light meter such as the PROFESSIONAL AUTOMETER.

Cockpit viewfinder, which provides a left / right reversed image.

Viewfinder with fixed magnifying lens that provides a 6.5x image, which can be used in macro / micro photography and astrophotography.

Advancement of the film by means of the loading lever located on the upper casing to the right of the pentaprism, coaxial to the shutter release button. The advancement of the film takes place with the 110° rotation of the lever (20° of dead stroke) in a single stroke or with small additive strokes. With the complete advancement of the film, the shutter is simultaneously armed.

Synchronization with the flash: 1) by means of the socket (FP / X) located to the left of the optics union that allows synchronization at all times, usable with bulb flashes (single-use bulbs) and with electronic flashes that can be used with times of 1/100" or slower. A switch is placed under the socket itself. 2) by means of the hot contact of the optional foot which is applied on the slide placed around the crank for the recovery of the film. Mechanical self-timer that can be set by means of the lever on the front to the right of the lens filler with 10" delay. The start button is located under the self-timer lever when it is in the rest position.

Focusing Screens: There are 7 interchangeable focusing screens.

Type P, frosted Fresnel glass with a 4mm center. The horizontal split image comes standard with the general photography camera. Type M, frosted Fresnel glass with a 4mm center. with microprisms for generic photography. PM type, frosted Fresnel glass with a 2.5mm center. horizontal split image surrounded by a 1.5mm crown. with microprisms for generic photography. Type G, Fresnel frosted glass with uniform ground only throughout the field for general photography. Type C1, C2, C3, with clear Fresnel glass and 6mm center. microprime available in three different versions suitable for use with specific objectives. Type H, Fresnel frosted glass with 8mm center. of transparent glass with central cross incision suitable for astronomical photography, microphotography and macrophotography in the presence of very high magnifications. Type S, transparent Fresnel glass with two graduated orthogonal scales, suitable for micro/macro photography and all those photographic shots that require precise measurements. To remove the frosted glass from its seat, after removing the pentaprism, press the chrome button located to the left of the viewfinder (the same one used to unlock the pentaprism), and lift the frosted glass using the rear flap on its mount, and remove it. Insert the new frosted glass first from the front and then, keeping the chrome button pressed, lower the rear part as well until the frame is fully locked into the compartment, release the chrome button.

Accessories: accessory holder with hot shoe for flash sync that can be applied above the film recovery handle, using the special rail. A chromed button for unlocking the accessory holder is located to the left of the pentaprism, in the rear position in the immediate vicinity of the red symbol of the position of the film surface; crank (left) for rewinding the film with the release and opening function of the back, pulling it up to the end of its travel; automatic exposure counter, additive with automatic reset when the back is opened, placed on the far right on the upper casing in a circular window with a magnifying glass for better vision; control to manually bring the mirror to the high position, located to the right of the optics filler, chrome button for depth of field control located on the right under the optics filler, which in rest position remains inserted inside the body (protrudes for 3-4mm.), while when it is pressed once it comes out for about 9-10mm. and at the same time the diaphragm closes to the actual working diaphragm. To return to the rest position, press the button once again; coupling selector "MC" with the exposure meter is placed inside the prism and slides on one of its rail which is located above the optics union; shoulder strap attachment system consists of two triangular rings placed in the chromed supports located at the ends of the front; Asa / Din conversion table placed on the back; on the back there is the selector that allows memorizing the type of film inserted (Negatives; Slides; Day Light; For interiors), with

indices (12-20-36) and white reference dots, on the left; tripod mount in the center; battery compartment cover (2 S-76 batteries or 1.5v silver oxide equivalent) in metal with groove for inserting an object such as a coin, placed on the back in the immediate vicinity of the tripod attachment. The positions O = open and C = close are shown on the back and refer to the red dot on the battery compartment cover; release button for rewinding the film located on the back on the right side; flexible release attachment (Cable Release) by means of the thread in the center of the release button which is coaxial to the loading lever; eyepiece frame, made of plastic that allows the adaptation of a rubber lens hood (EH-7) to be inserted into the special lateral grooves and the insertion of corrective lenses.

Battery check: it is possible to check the efficiency of the batteries using the control dial located on the left side of the camera near the chrome ring for the shoulder strap. Using the black flap protruding from the rear, turn the selector in the direction time by lowering the lever itself; if the red LED in the center of the frame lights up, it means that the batteries are efficient.

Corrective lenses: they are available in 9 powers with diopters from -4.00 to +3.00 (in the powers: -4.00; -3.00; - 2.00; -1.00; -0.50; + 0.50; +1.00; +2.00; +3.00). The corrective lenses must be pressed into the eyepiece frame.

Double exposures: these are possible by pressing the lower button before resetting the shutter using the loading lever which in this use does not advance the film.

Dimensions: length 147.5mm.; height 84mm.; width 48mm. of the body alone without the pentaprism.

Length 147.5mm.; height 118.5mm. Width 60mm.

Full body with automatic pentaprism (AE).

Body weight only, without pentaprism, without batteries: 668gr.

Weight of the body complete with automatic pentaprism (AE), without batteries: 895gr.

