



LEICA M7

Technical Data



Camera	LEICA M7
Order No.	Silver : 10 503 , Black : 10 504
Camera type	Compact 35mm rangefinder system camera with electronically controlled shutter and two mechanically controlled shutter speeds.
Lenses	Leica M bayonet mount. Lens system Leica M lenses from 21-135 mm.
Viewfinder	Viewfinder principle Large, bright line frame viewfinder with automatic parallax compensation. Viewfinder optical system with reduced stray light sensitivity and optimum visibility of all bright line frames. Eyepiece Calibrated to -0.5 dpt. Correction lenses from -3 to +3 diopter available. Bright line frames activated in pairs: for 28 and 90 mm, 35 and 135 mm or 50 and 75 mm. Automatically displayed when the lens is mounted. The preview selector can be used to display each of the pairs of frames. Alternative bright line frame configurations are available as part of the Leica a la carte range.* Parallax compensation The horizontal and vertical difference between the viewfinder and the lens is automatically compensated in line with the current distance setting, i.e. the bright line frame in the viewfinder automatically covers the section of the subject that will be captured by the lens. Correlation between viewfinder and film images At the shortest possible distance setting for each focal length, the bright line frame size corresponds to an image size of approx. 23 x 35 mm. When set to infinity, depending on the focal length between 9% (28mm) and 23% (135 mm) more is captured by the film than is shown in the corresponding bright line frame. Magnification 0.72x (for all lenses). Alternative viewfinder magnifications of 0.85x and 0.58x are available as part of the Leica a la carte range.* Wide-base rangefinder Split and superposed-image rangefinder displayed as a bright field in the centre of the viewfinder image. Effective measuring basis 49.9 mm (mechanical measuring basis 69.25 mm x viewfinder magnification 0.72x). For the alternative viewfinder magnifications of 0.85x and 0.58x available as part of the Leica a la carte range, it is 58.9 mm (mechanical measuring basis 69.25 mm x viewfinder magnification 0.85x) and 40.2 mm (mechanical measuring basis 69.25 mm x viewfinder magnification 0.58x) respectively.
Exposure metering	Exposure metering through the lens (TTL), selectively with working aperture. Metering principle The light reflected by a metering spot in the center of the first shutter curtain. The metering spot has a diameter of 12 mm and thus corresponds to approx. 13% of the full film format or approx. 2/3 of the short side of the applicable bright line frame in the viewfinder. Metering range (for ISO 100/21°) From 0.03 to 125000 cd/m ² at room temperature, normal humidity and f/1.0. For ISO 100/21° this corresponds to EV-2 to 20 or f/1 and 4s to f/32 and 1/1000s. Flashing of the left-hand triangular LED in the viewfinder indicates that the brightness reflected is below the metering range. Metering cell Silicon photodiode with focusing lens to the top left behind the bayonet.
Exposure control	Choice of automatic control of shutter speed – with corresponding digital display – with manual aperture selection (automatic mode) or manual shutter speed and aperture setting with adjustment using LED light balance.
Film speed range	Choice of automatic setting from ISO 25/15° to ISO 5000/38° for DX coded films or manual setting from ISO 6/9° to ISO 6400/39°. Setting an additional exposure compensation (±/ 2EV) allows speeds of ISO 1.5/3° to ISO 25000/45° to be used.
Viewfinder displays (at lower edge)	LED symbol for flash status, four-digit, seven segment LED digital display with points above and below (display brightness adapted to outside brightness) for: Film speed information, exposure correction warnings, automatically set shutter speed in automatic mode, indication of use of stored exposure setting, indication of brightness readings above or below the metering range in automatic mode and progress of shutter speeds slower than 2s. LED light balance with two triangular LEDs and a central circular LED to adjust the exposure (for manual setting only) <ul style="list-style-type: none"> ▶ Underexposure of at least one stop ▶● Underexposure of 1/2 stop ● Correct exposure ●◀ Overexposure of 1/2 stop ◀ Overexposure of at least one stop Triangular LEDs give the required direction to rotate the aperture dial and the shutter speed dial to adjust the exposure. The LEDs flash to warn that the brightness reading is above or below the metering range.
Flash exposure metering and control	
Flash unit connection	Using accessory hotshoe with center contacts or standard flash connector socket.
Flash synchronisation speed	1/50s; slower shutter speeds can be used (with manual setting only) Automatic setting in AUTO mode; faster shutter speeds (1/250s, 1/500s, 1/1000s) available with manual setting if the connected flash unit has the “High Speed Synchronisation” function and an SCA-3502 adapter is used.
Synchronisation time	Optionally with 1st or 2nd shutter curtain (with appropriate flash unit and SCA-3502 adapter)
Exposure metering / metering characteristics	(With SCA-3501/3502 adapter or SCA-3000 standard flash unit, e.g. LEICA SF 20 / SF 24D) TTL control with center-weighted integral metering.
Metering cell	Silicon photodiode with focusing lens at lower right behind bayonet.

Film speed range for TTL flash exposure metering	ISO 12/12° to 3200/36°
Flash exposure compensation	± 3 1/3 EV in 1/3 EV increments on SCA-3501/3502 adapter. On LEICA SF 20 / SF 24D, +/- 3EV in 1/3 EV increments or from 0 to -3 EV in 1EV increments with computer control.
Displays in flash mode	Ready: Constant illumination of flash symbol LED in viewfinder. Confirmation: Continued illumination or brief rapid flashing of LED after exposure. Underexposure indicated by LED temporarily going out.
Shutter and shutter release	
Shutter	Rubberized cloth focal plane shutter with horizontal movement; extremely quiet. Electronically controlled with two mechanically controlled shutter speeds, 1/60 s and 1/125 s.
Shutter speeds	In automatic mode (AUTO) continuous from 32s to 1/1000s. With manual setting 4s to 1/1000s in whole increments. B for very long exposures of any duration, 1/4 (1/50s) for flash synchronisation.
Shutter release	Three stage: Power up – Exposure value storage (in automatic mode) – Release Standard thread for cable release integrated.
Film transport	Loading Manual film loading after opening base plate and rear panel. Advance Manually with quick wind lever or LEICAVIT M or motorized using LEICA MOTOR M, LEICA WINDER-M, LEICA WINDER M4-P or LEICA WINDER M4-2 (from serial no. 10350). Rewind Rewind crank (LEICA M7) after turning R lever on front of camera. Frame counter On top of camera. Automatic reset after removing base plate.
Camera body	Material Enclosed all metal body with hinged rear panel. Brass top and base plate. Silver or black chrome finish. Tripod thread A 1/4 (1/4") DIN in base plate.
Power supply	6V from 2 lithium cells, type DL 1/3 N. Battery monitoring by flashing of LEDs in digital display or light balance or by illumination of bc display or all LEDs going out.
Dimensions (W x H x D)	Approx. 138 mm x 79,5 mm x 38 mm
Weight (without batteries)	Approx. 610 g
Items supplied	Carrying strap with non-slip pad (14 312), camera cover with M bayonet (14 195), flash contact shoe connector (14 348) and batteries.

*For the possible combinations, the bright line frames (pairs) displayed in each case and further details of the equipment options in the Leica a la carte range, please refer to our homepage: www.leica-a-la-carte.com