



# LEICA M8

## Technical Data



<b>Camera</b>	<b>LEICA M8</b>
<b>Order No.</b>	silver : 10 702, black : 10 701
<b>Camera Type</b>	Compact digital viewfinder/rangefinder system camera for professional usage with Leica M lenses. Micro-processor controlled metal-blade slotted shutter.
<b>Image sensor</b>	Low-noise CCD sensor specially tailored to the requirements of the M lens system. Pixels : 10.3 million. Dimensions : 18 mm x 27 mm. Extension factor : 1.33 x. Aspect ratio 3:2. <b>Moiré-Filter</b> no, full utilization of lens performance. Moiré detection and elimination in digital signal processing.
<b>Sensor sensitivity range</b>	Manuelle Einstellung von ISO 160/23° bis ISO 2500/35°
<b>Viewfinder</b>	<b>Viewfinder principle</b> Large light bright line frame viewfinder/rangefinder with automatic parallax compensation. Viewfinder lens optimal visibility of all bright line frames whatever the lighting situation. <b>Eyepiece</b> Coordinated to -0.5 dpt. Correction lenses available from -3 to +3 dpt. <b>Image field limiter</b> By activating two bright lines each : for 24 and 35 mm/28 and 90 mm/50 and 75 mm. Automatic Automatic activation when lens is screwed in. With the <b>image field selector</b> each pair of the bright lines can be activated manually, so simulating each focal length. <b>Parallax compensation</b> The horizontal and vertical difference between the viewfinder and the lens is automatically compensated according to the focusing distance used, i.e. the viewfinder bright-line frame automatically aligns with the subject detail recorded by the lens. <b>Magnification</b> 0.68 x (with all lenses). <b>Large basis range finder</b> Combination of split and superimposed image range finder shown as a bright field in the centre of the viewfinder image. Effective measurement basis 47.1 mm (mechanical measurement basis 69.25 mm x viewfinder enlargement 0.68 x).
<b>Lenses</b>	<b>Lens connection</b> Leica M bayonet with additional optical scanning device for the identification of all 6 bit-coded lenses. <b>Lens system</b> Current 6 bit-coded Leica M lenses with a focal length of 16–90 mm. Almost all Leica M lenses with a focal length of 21–90 mm manufactured from 1954 can also be used without 6 bit-coding. 6 bit-retrofitting possible for virtually all lenses. <b>6 bit-functions</b> Lens-dependent reduction of system-specific vignetting. Identification of picture file with lens information to simplify digital archiving. Coordination of flash reflector with motor zoom flash units. Auto slow sync function with automatic mode.
<b>Exposure control</b>	<b>Automatic mode (Auto)</b> Automatic determination of correct shutter speed with manual aperture preselection with relevant viewfinder display. <b>Manual exposure</b> Independent selection of shutter speed and aperture – camera exposure check visible via LED light balance shown in the viewfinder.
<b>Picture-taking modes</b>	<b>S</b> Single frame picture-taking, for one shutter release whenever shutter is pressed <b>C</b> Continuous shooting with 2 pictures per second and 10 picture in series. Automatic release mode Selectable with either 2 s and 12 s visualization of delay time via one of the LEDs visible from front of camera in viewfinder window.
<b>Controls/ display elements</b>	<b>Front of housing</b> Lens release ; image field selector <b>Top of housing</b> Main switch and shutter release ; shutter speed setting dial, status LCD display : indication of number of frames remaining and residual battery capacity. <b>Rear of housing</b> 2.5" color monitor, setting ring for navigation in menu and magnifier function in 4 levels ; 4 x direction buttons for navigation in menu and in image details, Menu button, Play button, Delete button, Protect button, Info button <b>Bottom of housing</b> Locking base plate protects the battery and SD memory card from dust and moisture.
<b>Color monitor</b>	2.5" bright LC display with a resolution of approx. 230,000 pixels for image reproduction and menu selection. Brightness control in 5 levels. Control options after picture-taking : General quality evaluation of exposure control via RGB tone value histogram with identification of light image details without detailing (can also be used with zoom-in), control of sharpness of focus, display of quality parameters selected and display of lens focal length used (with current 6 bit-coded lenses). Image view sizes : 9 thumbnails, 4 thumbnails, single frame display as well as magnification in four levels up to 1 pixel to 1 pixel view.
<b>Picture parameters menu / Main menu</b>	Pressing the Set button allows the following parameters relevant to the picture to be changed and selected : User profile, Sensor sensitivity, Manual exposure compensation, White balance, data format, picture resolution. <b>Main menu</b> Pressing the Menu button allows settings such as color monitor contrast or selection of color space to be made in the Main menu. <b>Menu languages</b> German, English, French, Spanish, Italian, Japanese, Chinese.
<b>Picture resolution</b>	DNG : 3916 x 2634 pixels (10.31 MP), JPG : 3936 x 2630 pixels (10.35 MP), 2952 x 1972 pixels (5.8 MP), 1968 x 1315 Pixel (2.6 MP), 1312 x 876 Pixel (1.15 MP).
<b>Data formats</b>	DNG™ (Digital Negative Format not specific to any camera manufacturer), 2 different highly compressed JPEG levels. <b>DNG™ file information</b> 16 bit-color resolution, 10.2 Mbyte file size per picture
<b>Storage medium</b>	SD cards up to 4 GB The following Internet page includes a list of SD memory cards fully compatible with the LEICA M8 : <a href="http://www.leica-camera.com/photography/m_system/m8">www.leica-camera.com/photography/m_system/m8</a>
<b>White balance</b>	Automatic, 6 presettings, manual white balance, color temperature input from 2,000 K to 13,100 K.

<b>Color spaces</b>	Adobe®RGB, sRGB, ECI RGB.
<b>Viewfinder display</b>	<p>LED symbol for flash status, four-digit seven-segment LED display with dots above and below (display brightness always adjusted to ambient brightness) for : display of automatically determined exposure time with automatic mode, indication of use of metered value storage, warning of exposure compensation, warning that metering range is overshoot or undershot with automatic mode and display for counting down exposure times longer than 2 s, warning about capacity when SD card is full. LED light balance with two triangular LEDs and one center circular LED as an aid when setting exposure manually.</p> <p>LED light balance with two triangular LEDs and one center circular LED for adjusting exposure.</p> <ul style="list-style-type: none"> <li>▶ Underexposure by at least one aperture stop.</li> <li>▶● Underexposure by 1/2 aperture stop. <ul style="list-style-type: none"> <li>● Correct exposure.</li> <li>●◀ Overexposure by 1/2 aperture stop. <ul style="list-style-type: none"> <li>◀ Overexposure by at least one aperture stop.</li> </ul> </li> </ul> </li> </ul> <p>Triangular LEDs give the direction of rotation of the aperture setting ring and for the shutter speed setting dial to adjust the exposure. LEDs flash as a warning when metering range is overshoot or undershot.</p>
<b>Metering</b>	<p>TTL metering heavily center-weighted with preset working aperture. <b>Measurement principle</b> Measured by light reflected by a white blade in the middle of the metal-blade slotted shutter. <b>Metering range</b> EV 0 to EV 20 at room temperature 20° C, aperture 1.0 and ISO 160/23°. <b>Measurement cell</b> Silicon photo diode with collection lens, positioned at center lower edge, on bottom of camera.</p>
<b>Flash exposure metering and control</b>	
<b>Principle of M-TTL Flash technology</b>	An extremely short metering preflash activated immediately before the picture is taken is used to measure the output light required for the exposure.
<b>Connection</b>	M-TTL Guide Number Control with metering preflash via accessory shoe SCA 3502 (from version M4) or with flash LEICA SF24 D
<b>Flash sync time</b>	Fast 1/250 s provides for creative open aperture photography even with bright ambient light. Manual flash sync times from B (bulb) to 1/250 s <b>automatic mode</b> Auto slow sync: automated extension of longest flash exposure time to rule of thumb 1/focal length in seconds. (only with 6 bit-coded lenses). Selection of long flash sync times e.g. up to 1/8 s for balanced flash with available light shots with automatic mode.
<b>Synchronisationszeitpunkt</b>	Can be switched to either first or second shutter curtain (with appropriate flash unit, e.g. LEICA SF24D or when using SCA-3502 adapter).
<b>Flash exposure compensation</b>	±3 1/3 EV in 1/3 EV stages adjustable at SCA-3501/3502 adapter. With LEICA SF 24D ±3 EV in 1/3 EV stages or 0 to -3 EV in 1 EV stages adjustable with computer control.
<b>Shutter and shutter release</b>	
<b>Shutter</b>	Micro-processor controlled metal-blade slotted shutter with vertical movement.
<b>Shutter speeds</b>	In automatic mode (A) steplessly from 32 s to 1/8000 s. Using manual setting 4 s to 1/8000 s in half steps. <b>B</b> for long exposures of any duration.
<b>Activation of shutter</b>	Shutter action optimized for minimum noise. Driven by an electric motor with friction gear in first speed-increasing gear stage and a cam for homogeneous torque during entire activation process.
<b>Release</b>	Three-stage activation depending on pressure level : 1. Switch-on of camera electronics and activation of metering, 2. Metered value storage (with automatic mode), 3. Shutter release (standard thread for cable release included).
<b>Power supply</b>	Lithium-ion rechargeable battery with 3.7 V and 1900 mAh.
<b>Computer interface</b>	5-pin standardized mini USB port for fast USB 2.0 data transfer to computer on left side of housing. With LEICA DIGITAL CAPTURE camera can be software-controlled via USB 2.0 connection.
<b>Camera housing</b>	<p><b>Material</b> Closed solid metal housing made of a highly stable magnesium alloy for long-lasting professional usage. Black synthetic leather covering. Cover plate and base cover milled from solid brass and silver or black chrome-plated.</p> <p><b>Tripod bushing</b> DIN4503 – A1/4 (1/4") at center of base cover.</p>
<b>Dimensions (W x H x D)</b>	approx. 139 x 80 x 37 mm
<b>Weight without battery</b>	approx. 545 g
<b>Scope of supply</b>	Carrying strap with anti-slip guard (14 312), camera cover for M bayonet (14 195), lithium ion battery (14 464), charger incl. car and 3 mains plug adapters (Euro, UK, USA) (14 463), USB connecting lead, operating manual, software CD Capture One LE, software CD with LEICA DIGITAL CAPTURE and operating manual; warranty card.