



LEICA M9/M9-P

Technical data.



Product	LEICA M9	steel-gray paint finish	black paint finish	LEICA M9-P	silver chrome	black paint finish
Order no.		10 705	10 704		10 716	10 703
Camera type	Compact digital view and rangefinder system camera.					
Lens attachment	Leica M bayonet with additional sensor for 6-bit coding.					
Lens system	Leica M-Lenses from 16 to 135 mm.					
Picture format/ image sensor	5270 x 3516 pixels (18.5 megapixel) CCD chip, active area approx. 23.9 x 35.8 mm; 5212 x 3472 pixels (18 megapixel) (corresponding to usable format of analog Leica M models).					
Resolution	Adjustable, DNG™: 5212 x 3472 (18 megapixel), JPEG: 5212 x 3472 (18 megapixel), 3840 x 2592 (10 megapixel), 2592 x 1728 (4.5 megapixel), 1728 x 1152 (2 megapixel), 1280 x 846 pixels (1 megapixel).					
Data formats	DNG™ (raw data), choice of uncompressed or slightly compressed (by non-linear reduction of color depth), 2 JPEG compression levels.					
File size	DNG: 18 MB (compressed)/36 MB (uncompressed), JPEG: approx. 2-10 MB.					
Color spaces	Adobe® RGB, sRGB.					
White balance	Automatic, manual, 7 presets, color temperature selection.					
Storage medium	SD cards up to 2 GB/SDHC cards up to 32 GB.					
Menu languages	German, English, French, Spanish, Italian, Japanese, Traditional Chinese, Simplified Chinese, Russian.					
Compatibility	Windows® 7, Windows® XP, Windows® Vista®, Mac® OS X (10.6).					
Exposure metering	Exposure metering through the lens (TTL), center-weighted with working aperture. Center-weighted TTL metering for flash exposure with system-compatible SCA-3000/2 standard flash units.					
Measurement principle	Measured by light reflected by bright shutter blades on the first shutter curtain.					
Metering range	(at ISO 160/23°) At room temperature and normal humidity corresponds to EV 0 to 20 or f/1.0 and 1.2 s to f/32 and 1/1000 s. Flashing left triangular LED in viewfinder indicates values below metering range.					
Measurement cell for available light	(continuous light measurement) Silicon photodiode with condensing lens, positioned in the bottom center of the camera base.					
Sensitivity range	ISO 160/19° to ISO 2500/35°, selectable in 1/3 ISO increments in aperture priority automatic mode A or manual exposure setting, optional automatic control or manual selection, automatic control in snapshot mode. Additional ISO 80 setting available as a pull option.					
Exposure mode	Choice of automatic shutter speed control with manual aperture selection – aperture priority A – with corresponding digital display, or manual setting of shutter speed and aperture and adjustment using LED light balance with indication of correct exposure, or risk of overexposure/camera shake (with snapshot profile only).					
Flash exposure control						
Flash unit connection	Via accessory shoe with center and control contacts.					
Synchronization	Optional synchronization on first or second shutter curtain.					
Flash sync speed	✂ = 1/180 s; longer shutter speeds possible.					
Flash exposure metering	(with SCA-3501/3502 adapter or SCA-3000 standard flash unit, e.g. Leica SF 24 D/Leica SF 58). Control with center-weighted TTL pre-flash metering.					
Flash measurement cell	2 silicon photodiodes with condensing lens in camera base.					
Flash exposure compensation	±3 1/3 EV in 1/3 EV steps adjustable on the SCA-3501/3502 adapter. On Leica SF 24 D, ±3 EV in 1/3 EV steps with computer control, or from 0 to -3 EV in 1 EV steps/on Leica SF 58 adjustable in all modes ±3 EV in 1/3 EV steps.					
Displays in flash mode	Flash readiness: flash symbol LED in viewfinder constant. Correct flash exposure: LED constant or flashes rapidly after exposure. Underexposure: LED extinguished after exposure.					

Viewfinder

Viewfinder principle	Large, bright-line frame viewfinder with automatic parallax compensation.
Eyepiece	Adjusted to -0.5 dpt. Correction lenses from -3 to +3 dpt. available.
Image framing	By activating two bright-line frames: for 35 and 135 mm, 28 and 90 mm, or for 50 and 75 mm. Automatic activation when lens is attached. Any pair of bright-line frames can be activated using the image field selector.
Parallax compensation	The horizontal and vertical difference between the viewfinder and the lens is automatically compensated according to the relevant distance setting, i.e. the viewfinder bright-line automatically aligns with the subject detail recorded by the lens.
Matching of viewfinder and actual picture	The size of the bright-line frame corresponds exactly to the sensor size of approx. 23.9 x 35.8 mm at a setting distance of 1 meter. At infinity setting, depending on the focal length, approx. 7.3% (28 mm) to 18% (135 mm) more is recorded by the sensor than indicated by the corresponding bright-line frame and slightly less for distances shorter than 1 m.
Enlargement	(for all lenses) 0.68x.
Large basis rangefinder	Split or superimposed image rangefinder shown as a bright field in the center of the viewfinder image.
Effective rangefinder base	47.1 mm (actual rangefinder base 69.25 mm x viewfinder enlargement 0.68x).

Displays

Viewfinder	<p>(lower edge) LED symbol for flash status. Four-digit seven-segment digital display with dots above and below, display brightness adjusted for ambient brightness, for: warning of exposure compensation, display for automatically generated shutter speeds in aperture priority mode, indication of use of metering memory lock, warning that the metering or setting ranges are over- or underexposed using aperture priority and counting down exposures longer than 2s.</p> <p>LED light balance with two triangular and one central circular LED for manual exposure setting. The triangular LEDs give the direction of rotation of the aperture setting ring and shutter speed setting dial to adjust the exposure. Also as warning for over- or underexposure.</p>
On rear panel	2.5 in. monitor (color TFT LCD) with 230,000 pixels, M9-P with sapphire glass LCD monitor cover.

Shutter and release

Shutter	Microprocessor-controlled, exceptionally low-noise metal blade shutter with vertical movement.
Shutter speeds	For aperture priority (A) continuously adjustable from 32 s to 1/4000 s. For manual setting 8 s to 1/4000 s in half steps, B for long exposure times up to 240 s (in conjunction with self-timer T function, i.e. 1st release = shutter opens, 2nd release = shutter closes), ∞ (1/180 s) fastest shutter speed for flash synchronization.
Shutter cocking	Using low-noise integral motor, optionally after releasing the shutter release button.
Series exposures	Approx. 2 pictures/s, \leq 8 pictures in series.
Shutter release	Three levels: Exposure metering on – Metering memory lock (in aperture priority mode) – Shutter release. Integrated standard cable release thread.
Self-timer	Delay optionally 2 s (aperture priority and manual exposure setting) or 12 s (menu setting), indicated by flashing LED on front of camera and corresponding display on the monitor.
Switching the camera on/off	Using the main switch on the camera's top panel, selectable automatic power-off for camera electronics after about 2/5/10 minutes, reactivation by pressing the shutter release button.
Power supply	1 lithium ion battery, nominal voltage 3.7V, capacity 1900 mAh. Capacity display in monitor, when shutter held open (for sensor cleaning) additional acoustic warning when capacity is low.
Charger	Inputs: 100–240 V AC, 50/60 Hz, automatic switching, or 12/24 V DC; Output: 4.2 V DC, 800 mA.

Camera housing

Material	All-metal die cast magnesium body, KTL dip-painted, synthetic leather covering. Top deck and baseplate in brass, black, and steel-gray paint finish. M9 in black and steel-gray paint, M9-P in silver chrome and black paint. M9-P with sapphire glass LCD monitor cover.
Image field selector	Allows the bright-line pairs to be manually displayed at any time (e.g. for framing comparisons).
Tripod thread	Stainless steel, A 1/4 (1/4 in.) DIN, in baseplate.
Operating conditions	0 to +40°C.
Interface	5-pin mini-USB 2.0 High-Speed socket for fast data transfer.
Dimensions	(W x D x H) approx. 139 x 37 x 80 mm (5 ¹ / ₂ x 1 ¹ / ₂ x 3 ¹ / ₆ in.).
Weight (with battery)	M9 585 g (20.6 oz), M9-P 600 g (21.2 oz).
Included extras	Charger 100–240 V with 2 mains cables (EU, USA, different in some export markets) and 1 car charger, lithium ion battery, USB cable, carrying strap.

*Subject to changes in design, manufacture, and scope.