LEICA M-A

INSTRUCTION MANUAL

FOREWORD

Dear Customer,

We hope you enjoy taking pictures with your new Leica M-A for many years to come. Please begin by reading this manual thoroughly to familiarize yourself with the full scope of functions your camera has to offer. Complete information about Leica M-A is available at https://leica-camera.com.

Leica Camera AG

SCOPE OF DELIVERY

Before using your camera for the first time, please check that the accessories supplied are complete*.

– Leica M-A
– Camera bayonet cap
– Carry strap
– Quick Guide
– Insert (Leica Account)
– Inspection certificate

* Subject to changes in design and model type.

SPARE PARTS/ACCESSORIES

Detailed information about the latest, extensive range of spare parts/accessories for your camera can be obtained from Leica Customer Care or on the Leica Camera AG website:
https://leica-camera.com/en-int/photography/accessories

Only the accessories named and described by Leica Camera AG in this manual are to be used in combination with the camera. These accessories are to be used exclusively for this product. Use of third-party accessories can result in malfunctions and, in certain cases, may cause damage.

Please read the “Legal information”, “Safety information”, and “General information” sections before using your camera for the first time to prevent product damage, injuries, and other risks.

LEGAL INFORMATION

COPYRIGHT NOTICE

- Please carefully observe copyright laws. The recording and publication of media you have previously recorded yourself, e.g. tapes, CDs or other published or broadcast material, may violate copyright laws. This also applies to all software supplied.

LEGAL INFORMATION ABOUT THIS INSTRUCTION MANUAL

COPYRIGHT

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The brands and logos used in this document are protected trademarks. It is not permitted to use these brands or logos without the prior consent of Leica Camera AG.

LICENSE RIGHTS

Leica Camera AG aims to offer you innovative and informative documentation. However, due to creative design, we ask you to bear in mind that Leica Camera AG must protect its intellectual property, including patents, trademarks and copyrights, and that this documentation does not grant any license rights to the intellectual property of Leica Camera AG.

REGULATORY INFORMATION

The production date of your camera can be found on the stickers inside the warranty card or on the packaging.
The date format is year/month/day.

CE MARK

The CE mark on our products documents compliance with the fundamental requirements of applicable EU guidelines.

SAFETY INFORMATION

GENERAL INFORMATION

- Always store small parts as follows:
  - out of the reach of children
  - in a safe location, where they will not get lost or stolen
- State-of-the-art electronic components are sensitive to static discharge. You can easily pick up charges of several 10,000 volts by simply walking on synthetic floor coverings. A static discharge can occur when you touch the camera and especially if it is placed on a conductive surface. A static discharge on the camera housing poses no risk for the electronics. Despite built-in safety circuits, you should avoid direct contact with external camera contacts like those in the flash shoe.
- Use a cotton or linen cloth instead of a microfiber cloth from an optician's (synthetic) when cleaning the contacts. Make sure to discharge any electrostatic charge by deliberately touching a heating or water pipe (conductive, grounded material). Dirt deposits and oxidation on the contacts can be avoided by storing your camera in a dry location with the lens cap and the flash shoe/viewfinder cap attached.
- Only use accessories specified for this model to prevent faults, short circuits or electric shock.
- Do not attempt to remove parts of the housing (covers) yourself. Repairs must be done at authorized service centers only.
- Protect the camera against contact with insect sprays and other aggressive chemicals. Petroleum spirit, thinner and alcohol must not be used for cleaning. Some chemicals and liquids can damage the camera housing or the surface finish.
- Rubber and plastics are known to expel aggressive chemicals and should therefore not be kept in contact with the camera for extended periods of time.
- Prevent any sand or dust or water penetration into the camera, e.g. during snowfall or rain or on the beach. Be extra careful when changing the lens and when inserting or removing the film. Sand and dust can damage the camera and lens. Moisture can cause malfunctions and even irreparable damage.

LENS

- A camera lens can have the effect of a magnifying glass when exposed to direct frontal sunlight. The camera must therefore be protected against extended exposure to direct sunlight.
- Attaching the lens cap and keeping the camera in the shade or ideally in its camera case, will help prevent damage to the interior of the camera.

CARRY STRAP

- A carry strap is usually made of very robust material. You should therefore keep it out of the reach of children. A carry strap is not a toy and poses a strangulation risk.
- Use the carry strap only for its intended purpose on a camera or on binoculars. Any other use poses the risk of injury and may possibly result in damage to the carry strap and is therefore not permitted.
- Carry straps should also not be used for cameras/binoculars during sports activities that pose a risk of entanglement (e.g., when mountain climbing and similar outdoor activities).

TRIPOD

- When using a tripod, check its stability and turn the camera by repositioning the tripod rather than turning the camera itself. When using a tripod, also ensure that you do not overtighten the tripod screw, use excessive force etc. Avoid transporting the camera with the tripod attached. This could cause injury to yourself or others or damage the camera.

FLASH

- Use of an incompatible flash unit with the Leica M-A can, in a worst case scenario, lead to irreparable damage to the camera and/or the flash unit.

GENERAL INFORMATION

For more information about what to do if problems arise, refer to the "Care/Storage" section.

CAMERA/LENS

- Note the serial number of your camera and lenses, as this is extremely important in the event of loss.
- Depending on the model, the serial number of your camera is engraved on the flash shoe or on the underside of the camera.
- A lens or the camera bayonet cap should always be fitted to prevent dust, etc. from entering the interior of the camera.
- For the same reason, lenses should be changed quickly and in as dust-free an environment as possible.
- Camera bayonet caps or rear lens caps should not be kept in your trouser pocket, as they attract dust which can get inside the camera when you put them back on.

FILM

- Make sure that the film ISO value is set correctly on the ISO reminder dial.
- Have exposed film developed directly.

WARRANTY

In addition to your statutory warranty rights regarding your dealer, you will receive an additional Leica Camera AG product warranty valid from the date of purchase at an authorized Leica retailer. Previously, the product warranty was included with the product in the packaging. From now on, the product warranty will only be available online as a new service. You will be able to review the warranty conditions for your product at any time, without having to search for the document. Please note that this new policy applies only for products that are no longer delivered with a hardcopy product warranty included in the packaging. Any products still delivered with the warranty document in the packaging remain governed exclusively by that document. For more information regarding the warranty scope, warranty services and limitations, please visit: https://warranty.leica-camera.com

TABLE OF CONTENTS

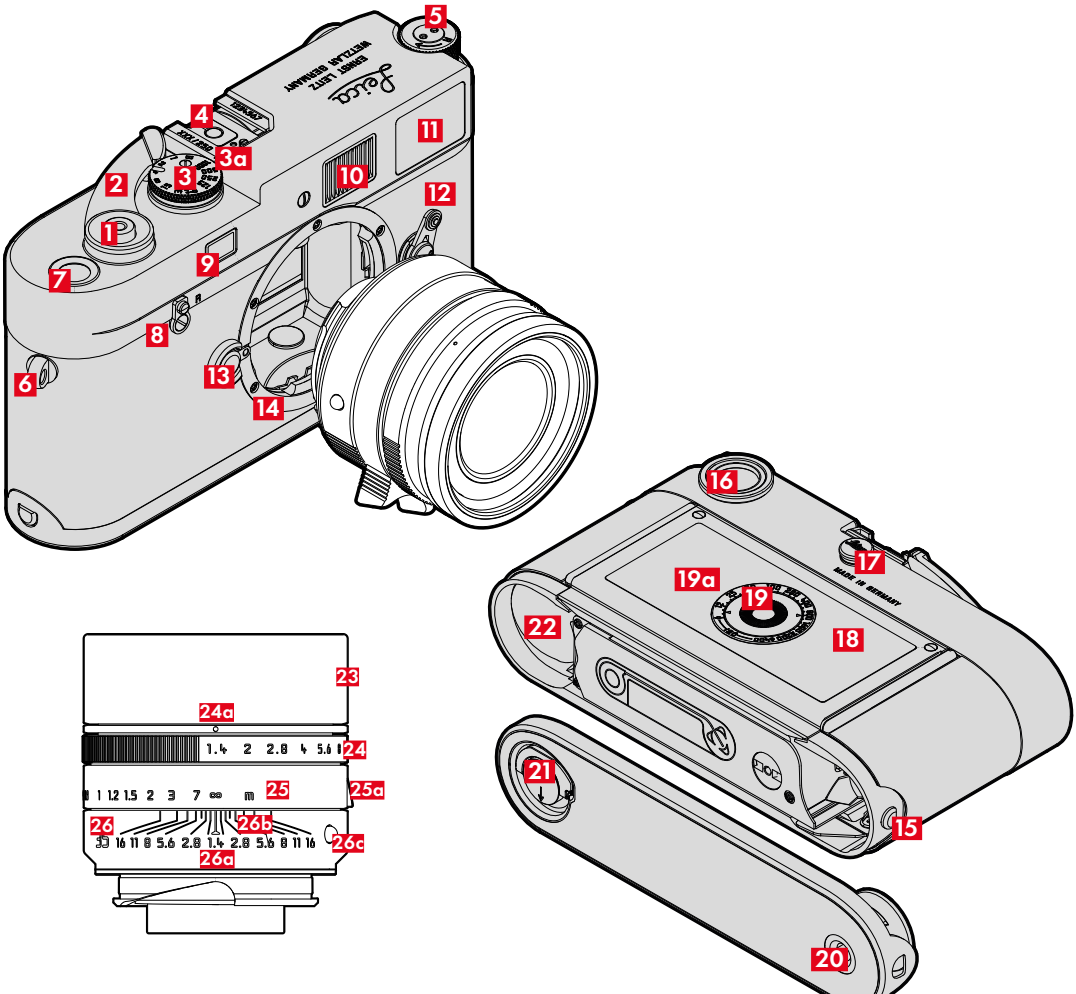
Meaning of the different categories of information in this instruction manual

Note
Additional information

Important
Failure to observe may result in damage to the camera, accessories or photos

Caution
Failure to observe may result in personal injuries

PART DESIGNATIONS



LEICA M-A

1 Shutter button
2 Film advance lever
3 Shutter speed dial
- **1000**–**1**: Fixed shutter speeds of 1/1000 s to 1 s
- **B**: Long-term exposure (bulb)

a Index for shutter speed dial
4 Accessory shoe
5 Rewind knob
6 Strap lugs
7 Automatic exposure counter
8 Rewind release lever
9 Rangefinder window
10 Illumination window for bright-line frames
11 Viewfinder window
12 Image field selector
13 Lens release button
14 Leica M bayonet
15 Bottom cover locking pin
16 Viewfinder eyepiece
17 Flash sync socket
18 Rear panel (hinged)
19 ISO reminder dial
a Scale
20 Tripod thread A ¼, DIN 4503 (¼")
21 Locking toggle for bottom cover
22 Film chamber

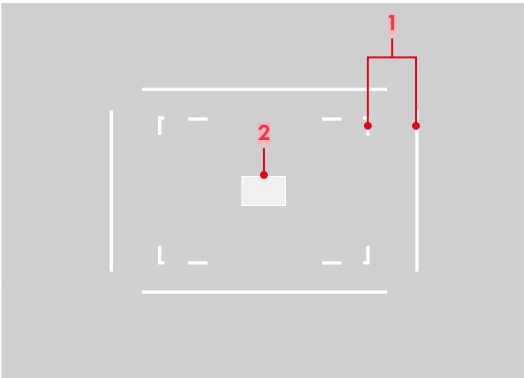
LENS*

23 Lens hood
24 Aperture setting ring with scale
a Index for aperture values
25 Focus ring
a Finger grip
26 Fixed ring
a Index for focusing
b Depth of field scale
c Index button for lens change

*Not included in the scope of delivery. Figure is symbolic. Technical model types may vary depending on the equipment.

DISPLAY

VIEWFINDER

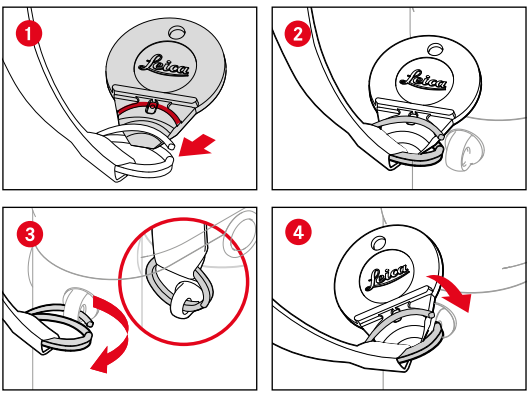


1 Bright-line frame (ex. 50 mm + 75 mm)
2 Metering field for focusing

PREPARATORY TASKS

Please read the "Legal information", "Safety information", and "General information" sections before using your camera for the first time to prevent product damage, injuries, and other risks.

ATTACHING THE CARRY STRAP



Caution

- Once you have attached the carry strap, please make sure that the clips are mounted correctly to prevent the camera from falling.

LENS

COMPATIBLE LENSES

LEICA M LENSES

Most Leica M lenses can be used irrespective of the lens equipment (with or without 6-bit encoding in the bayonet).

For details on the few exceptions and restrictions, please refer to the following sections.

Notes

- Leica M lenses are equipped with a control curve that mechanically transfers the set distance to the camera and thus enables manual focusing with the Leica M camera rangefinder. Please note the following when using the rangefinder with wide-aperture lenses (≤1.4):
  - The focusing mechanism of every camera and every lens is adjusted individually at the Leica Camera AG factory in Wetzlar with the greatest possible precision. Extremely tight tolerances are adhered to in this process, which allow precise focusing of every camera/lens combination in photography.
  - If wide-aperture lenses (≤1.4) are used with an open aperture, the very low depth of field and inaccuracies in focusing with the rangefinder that sometimes result may lead to setting errors resulting from the (added) overall tolerance of the camera and lens. Therefore, when viewed critically in such cases, it cannot be ruled out that a specific camera/lens combination may result in systematic deviations.
  - We recommend having the lens and camera checked by Leica Customer Care if you notice a general deviation of the focal position in a specific direction. Here you can once again ensure that both products are adjusted within the permissible overall tolerance. However, a 100% match of the focal position cannot be achieved for all pairings of cameras and lenses.

LEICA R LENS (WITH ADAPTER)

In addition to Leica M lenses, Leica R lenses can also be used with the Leica R adapter M, which is available as an accessory. Further details about these accessories can be found on the Leica Camera AG website.

LENSES WITH LIMITED COMPATIBILITY

COMPATIBLE, BUT MAY POSE RISK OF DAMAGE TO THE CAMERA AND/OR LENS

- Lenses with retractable tube must only be used with the tube extended, i.e., never retract the tube into the camera. This does not apply to the current Makro-Elmar-M 1:4/90 model, as its tube does not protrude into the camera even when retracted and can therefore be used without restriction.
- When using heavy lenses attached to a tripod-mounted camera, e.g., Noctilux 1:0.95/50 or Leica R lenses with an adapter: Make sure that the tilt of the tripod head cannot move inadvertently when the camera is not held. A sudden tilt and impact could result in damage to the lower edge of the camera bayonet. For the same reason, the tripod mount should always be used with appropriately equipped lenses.

COMPATIBLE, BUT EXACT FOCUSING MAY BE LIMITED

- Although the camera rangefinder is extremely precise, exact focusing with 135 mm lenses with an open aperture cannot be guaranteed due to the very low depth of field. We therefore recommend stopping down by at least two steps. On the other hand, Live View mode and the various adjustment aids allow unrestricted use of these lenses.

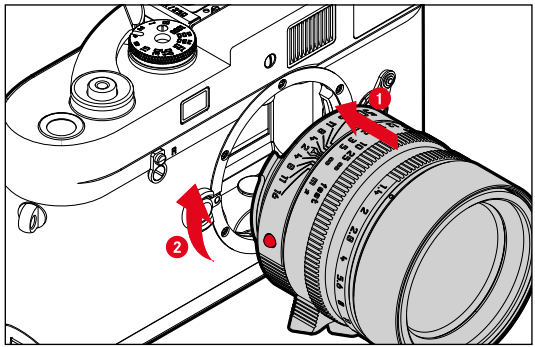
INCOMPATIBLE LENSES

- Hologon 1:8/15
- Summicron 1:2/50 with close-up function
- Elmar 1:4/90 with retractable tube (manufactured 1954–1968)
- Some examples of the Summilux-M 1:1.4/35 (non-aspherical, manufactured 1961–1995, made in Canada) cannot be attached to the camera or cannot focus infinitely. Leica Customer Care can modify these lenses for use with this camera.

CHANGING THE LENS

LEICA M LENSES

ATTACHING



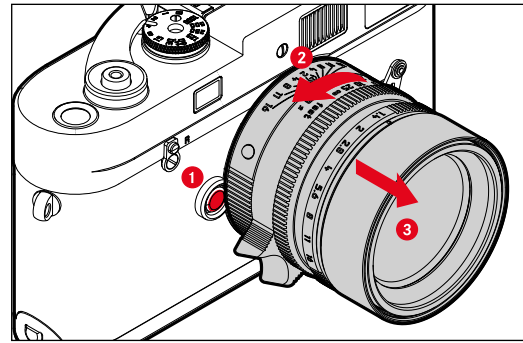
→ Hold the lens by the fixed ring.

→ Position the lens index button opposite the release button on the camera housing.

→ Attach the lens in this position so it is straight.

→ Turn the lens clockwise until you hear and feel it click into place.

REMOVING



→ Hold the lens by the fixed ring.

→ Hold down the release button on the camera housing.

→ Turn the lens counterclockwise until its index button is opposite the release button.

→ Remove the lens perpendicularly.

Important

- A lens or the camera bayonet cap should always be fitted to prevent dust, etc. from entering the interior of the camera.
- For the same reason, lenses should be changed quickly and in as dust-free an environment as possible.
- With film loaded, you should change the lens in the shadow of your own body, as direct sunlight can result in light passing through the shutter.

DIOPTER COMPENSATION

A diopter compensation function for up to ±3 diopter is available for users of eye glasses.

The rangefinder can be fitted with an optional Leica correction lens for this purpose.

https://store.leica-camera.com

→ Attach the correction lens flat against the viewfinder eyepiece.

→ Tighten by turning clockwise.

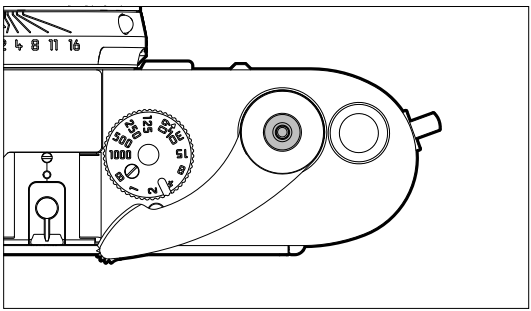
Notes

- Please note the information provided on the Leica website for the selection of an appropriate correction lens.
- Please note that the default viewfinder setting of the Leica M-A is -0.5 diopter. So if you wear glasses with 1 diopter, you need a corrective lens with +1.5 diopter.

CAMERA OPERATION

CONTROLS

SHUTTER BUTTON



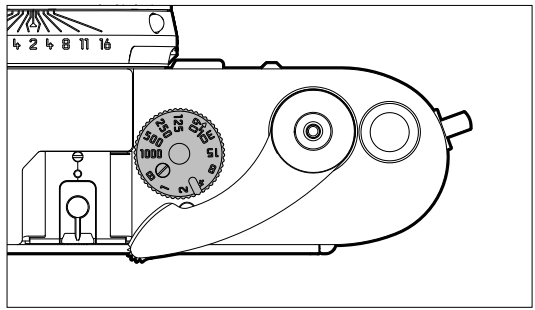
The shutter button has a pressure point. Pressing past the pressure point releases the shutter.

Notes

- To prevent shaking, press down the shutter button softly without jerking until you hear the click of the shutter.
- The shutter button remains locked until the shutter is cocked.
- The shutter button comes equipped with a standard thread for a wired release button.

SHUTTER SPEED DIAL

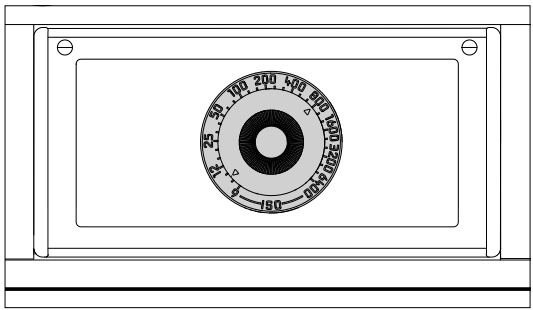
The shutter speed dial features a stop between the positions **1000** and **B**. It clicks into place at each of the marked positions. Intermediate positions between the marked positions must not be used.



- **1000**–**1**: Fixed shutter speeds of 1/1000 s to 1 s
- **B**: Long-term exposure (bulb)
- ϟ: The shortest possible sync speed (1/50 s) for flash mode

ISO REMINDER DIAL

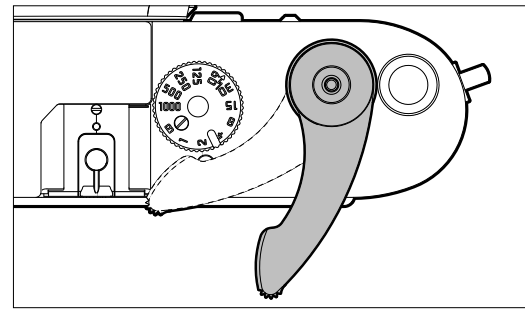
To indicate what type of film is inserted, the ISO value indicated on the film cartridge can be set using the ISO reminder dial. Choose a marked setting on the ISO reminder dial.



– **6**–**6400**: Fixed ISO values

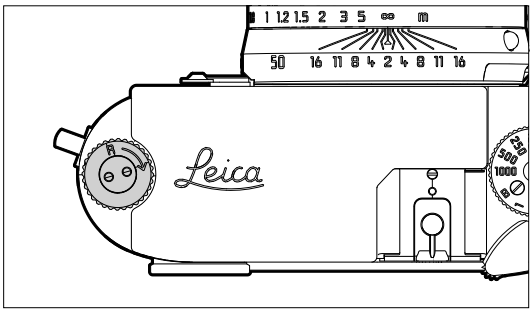
FILM ADVANCE LEVER

The film advance lever is used to advance the film, wind the shutter and automatically advance the exposure counter.



REWIND KNOB

After the last film shot is taken, rewind the film back into the film cartridge by pressing the rewind button.



REWIND RELEASE LEVER

The rewind release lever prevents the film from being accidentally rewound.

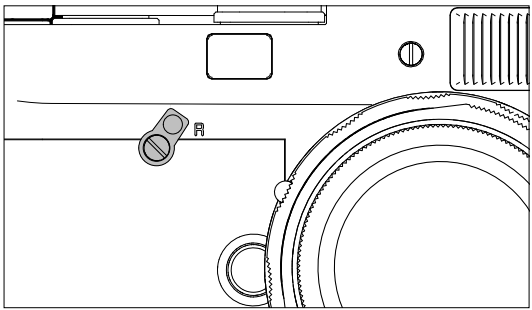
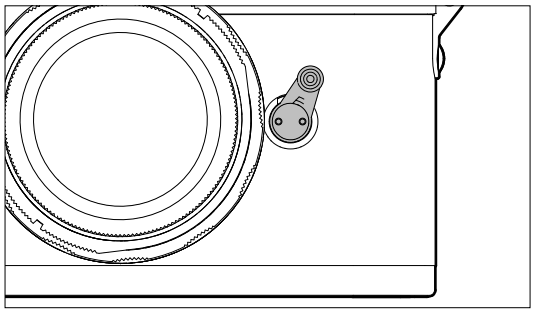


IMAGE FIELD SELECTOR

An alternative bright-line frame appears in the viewfinder when the image field selector is pressed.



REPLACING THE FILM

The inserted film is fully exposed and must be replaced if the shutter can no longer be cocked.

To replace the film

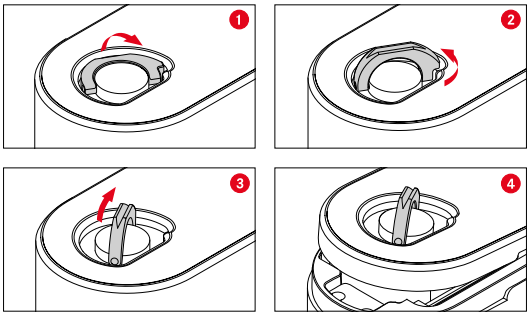
→ Rewind the exposed film (see page 27)
→ Remove the exposed film (see page 28)
→ Insert new film (see page 28)
→ Forward film to the first exposure (see page 29)

Important

- Before removing the film, it must be fully rewound into the film cartridge. Otherwise, parts of the film will become ruined due to the ambient light.

OPENING/CLOSING THE CAMERA

OPENING THE CAMERA

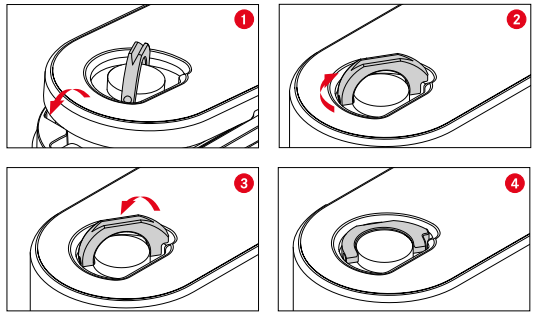


→ Hold the camera with the base facing upwards
→ Raise the locking toggle
→ Turn the locking toggle counterclockwise
→ Remove the bottom cover
→ Open the rear panel

Note

- When the bottom cover is opened, the automatic exposure counter is automatically reset to zero.

CLOSING THE CAMERA

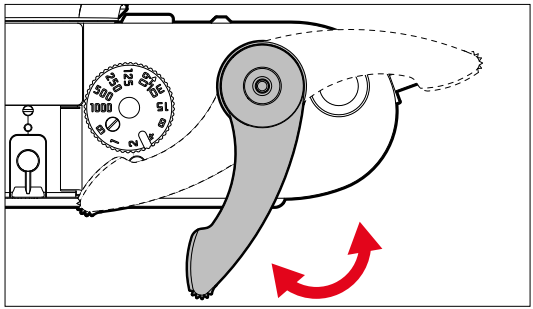


→ Hold the camera with the base facing upwards
→ Close the rear panel
→ Hook the bottom cover into the locking pin on the camera side
→ Close the bottom cover

- The rear panel must be fully pressed down and surrounded by the bottom cover.

→ Turn the locking toggle clockwise
→ Push the locking toggle down
→ Check that the bottom cover is correctly positioned and closed

COCKING THE SHUTTER



To cock the shutter

→ Press the film advance lever forward to the stop in one motion

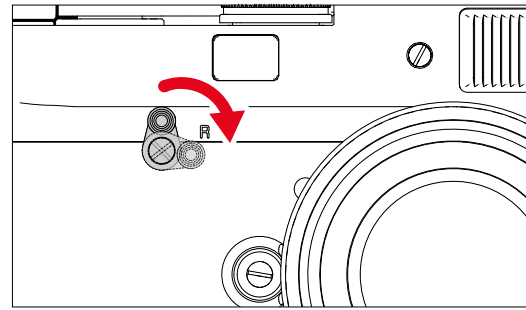
or

→ Press the film advance lever several times until reaching the stop

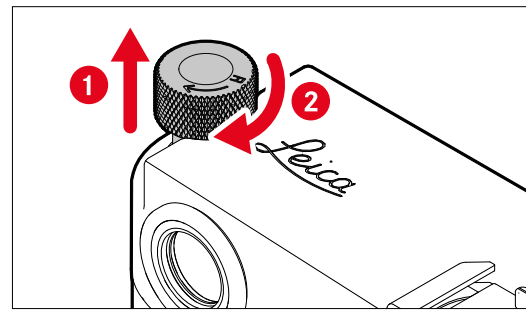
Notes

- The film advance lever can be pushed in towards the center when it is not used.
- The exposure counter will advance every time the film advance lever is cocked, even if there is no film in the camera.

REWINDING THE FILM



→ Move the rewind release lever into position **R**.



→ Fold out the rewind knob.

→ Turn the rewind knob clockwise.

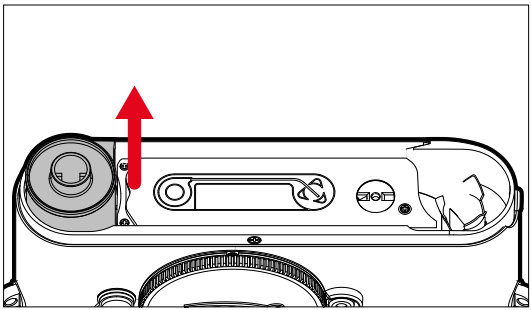
- The film will be pulled out of the take-up spool with a little resistance.

→ Continue turning the rewind crank a few more times.

→ Fold the rewind knob back in.

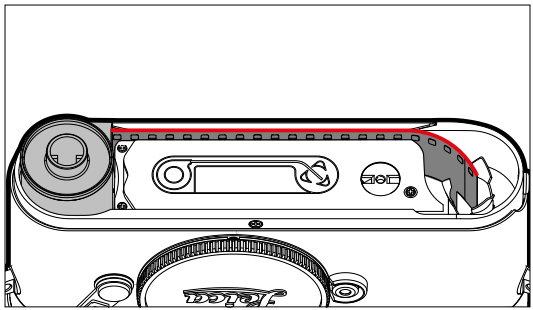
→ Tilt the rewind release lever back into its vertical position.

REMOVING THE FILM



- → Hold the camera with the base facing upwards
- → Open the camera (see page 26)
- → Pull out the film.
- → Store the film in a cool and dark location.

INSERTING THE FILM



- → Hold the camera with the base facing upwards
- → Open the camera (see page 26)
- → Push the film cartridge approximately half-way into the recess in the camera.
- → Grab the start of the film and pull it into the take-up spool on the other end of the camera.
  - The schematic illustration on the base of the camera shows the correct end position.
- → Use your fingertips to gently push the film cartridge and the start of the film into the camera.
- → Close the camera (see page 26)

Important

- Do not check the film winding while the camera is open, because the bottom cover is designed to guide the film into the correct position when closed.
- There are contacts for the transmission of the film sensitivity setting on the inside of the rear cover and on the relevant point of the camera housing. These must be protected from dirt and direct contact with water.

Notes

- The start of the film must be trimmed like every standard film stock.
- It will not affect function if the start of the film is pulled out so far that it protrudes from one of the slits on the opposite side of the take-up spool. In sub-zero temperatures the film must be inserted exactly as shown in the figure, meaning the start of the film must be caught by only one of the slits on the take-up spool so that the protruding end of the film does not break off.

ADVANCING TO THE FIRST EXPOSURE

→ Cocking the shutter

→ Shutter release

→ Cocking the shutter again

- The film advances correctly if the rewind crank turns as well.

→ Press the shutter release again.

→ Cock the shutter a third time.

- The exposure counter should now show Exposure 1.
- The camera is now ready to take pictures.

TAKING PICTURES

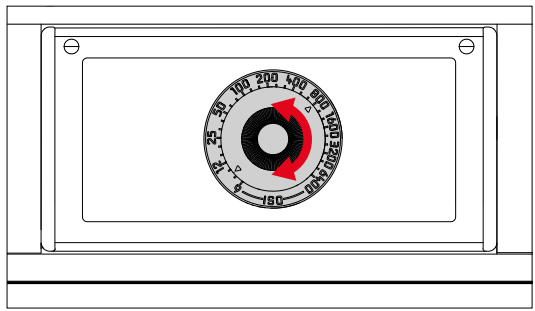
→ Cock the shutter as needed (see page 27).
→ Specify the image field (see page 32).
→ Determine the correct exposure.
→ Set the desired combination of shutter speed and aperture.
  • In addition to the correct exposure, various picture layout considerations like depth of field and the effect of movement play an important role.
→ Use the focus ring to focus on the object.
  • It may be necessary to temporarily change the image section, because the metering field is in the center of the image.
→ Specify the final image section.
→ Shutter release

ISO SENSITIVITY

The expected shooting conditions and intended use of the images taken play a role in choosing the right film sensitivity.

– Low film sensitivity offers sharper and more finely grained results.
– High film sensitivity allows shooting in low lighting or with shorter shutter speeds (e.g., for sports photography).

To indicate what type of film is inserted, the ISO value indicated on the film cartridge can be set using the ISO reminder dial. Choose a marked setting on the ISO reminder dial. The film sensitivity settings are given in ISO values and in degrees.



→ Turn the ISO reminder dial so that the desired value is opposite the red (for color film) or black (for black/white film) triangle.

ISO/ASA/DIN CONVERSION

ISO	ASA	DIN
6	6	9°
–	8	10°
–	10	11°
12	12	12°
–	16	13°
–	20	14°
25	25	15°
–	32	16°
–	40	17°
50	50	18°
–	64	19°
–	80	20°
100	100	21°
–	125	22°
–	160	23°
200	200	24°
–	250	25°
–	320	26°
400	400	27°
–	500	28°
–	640	29°

ISO	ASA	DIN
800	800	30°
–	1000	31°
–	1250	32°
1600	1600	33°
–	2000	34°
–	2500	35°
3200	3200	36°
–	4000	37°
–	5000	38°
6400	6400	39°

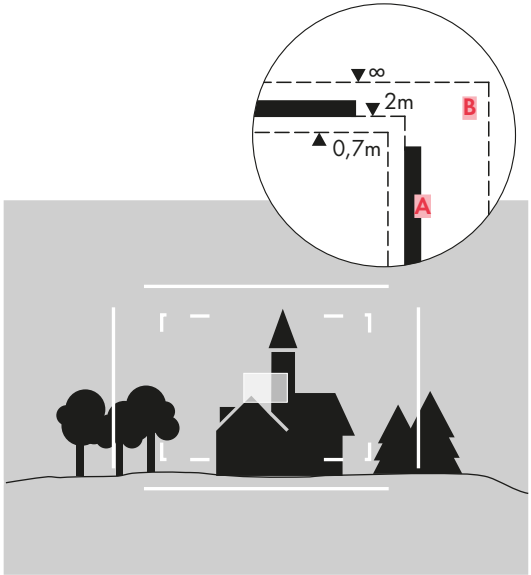
IMAGE COMPOSITION

IMAGE FIELD (BRIGHT-LINE FRAME)

This camera's bright-line rangefinder is not just a particularly high-quality, large, brilliant and bright viewfinder, it also doubles as a highly precise, lens-coupled rangefinder. All Leica M lenses with focal lengths between 16 and 135 mm are coupled automatically when they are attached to a camera. The viewfinder has a magnification factor of 0.72x.

The bright-line frame is coupled with the focusing function in such a way that the parallax – the offset between the lens axis and the viewfinder axis – is compensated automatically.

The size of the bright-line frame corresponds to an image size of approx. 23 x 35 mm (slide format) at the shortest distance setting for each focal length. At distances less than 2 m, the film captures slightly less than indicated by the inner edges of the bright-line frame, and slightly more at longer ranges (see adjacent figure). These slight – in practical terms rarely decisive – deviations are a matter of principle. The bright-line frames of a camera with viewfinder must be adjusted to the view angle of the focal length of the lens. The nominal view angle changes slightly when focusing due to the changing draw-out, i.e., the distance of the lens system to the film surface. When the set distance is below infinity (and the draw-out accordingly greater), the actual view angle also decreases. The lens captures less of the image object. The view angle differences at greater focal lengths tend to be larger due to the greater draw-out.



All pictures and bright-line frame positions at 50 mm focal length

A	Bright-line frame
B	Actual image field
Set to 0.7 m	The film captures around one frame width less.
Set to 2 m	The film captures exactly the image field shown within the inner edges of the bright-line frame.
Set to infinity	The film captures approx. 1 or 4 (vertical or horizontal) frame width(s) more.

Note

- The rectangular rangefinder field, which is brighter than the surrounding image field, is in the center of the viewfinder frame. For more information about distance and exposure metering, read the relevant sections.

SHOW ALTERNATIVE IMAGE FIELDS/FOCAL LENGTHS

The relevant bright-line frame will light up in the combinations 35 mm + 135 mm, 50 mm + 75 mm or 28 mm + 90 mm when lenses with a focal length of 28 (Elmarit as of serial number 2 411 001), 35, 50, 75, 90 and 135 mm are used. The image field selector is set to the relevant position automatically.

Additional bright-line frames may be displayed depending on the attached lens. These allow a simulation of the relevant focal lengths. This process helps in the selection of the right lens for the desired image field.

→ Move the image field selector to the desired position.

- The image field selector will snap back automatically when released.

35 mm + 135 mm

50 mm + 75 mm

28 mm + 90 mm

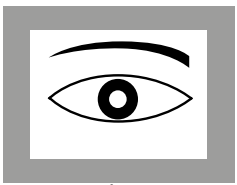
FOCUSING

The rangefinder can be used for focusing.
The rangefinder of this camera is very precise due to its wide and effective measurement basis. Image sharpness can be set via the superimposed image or the split image method.

SUPERIMPOSED IMAGE METHOD (DOUBLE IMAGE)

For a portrait, you might focus on the eyes using the metering field of the rangefinder, turning the focus ring on the lens until the contours are aligned exactly inside the metering field.

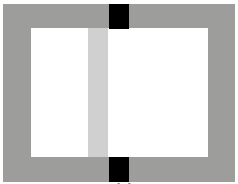
out of focus



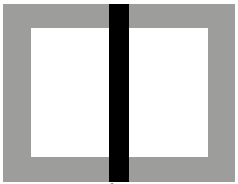
in focus

SPLIT IMAGE METHOD

For an architectural photograph, you might focus the metering field of the rangefinder at e.g., the vertical edge or any other clearly defined vertical line and keep turning the focus ring on the lens until the contour of the edge or of the line is visible at the outer edges of the metering field without any offset.



out of focus



in focus

Notes

- Very precise distance measurements are particularly beneficial when using wide-angle lenses with a relatively large depth of field.
- With both methods, the rangefinder's metering field is visible as a bright, sharply defined rectangle. The position of the metering field cannot be changed; it is always in the center of the viewfinder.

EXPOSURE

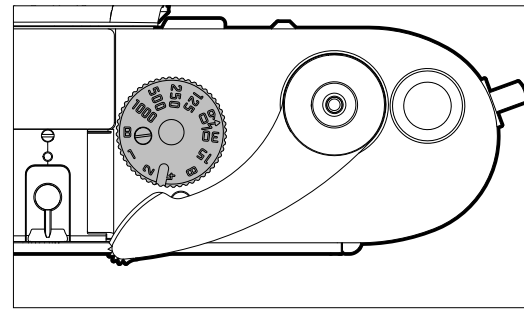
EXPOSURE METERING

The exposure on the Leica M-A is set manually by selecting the shutter speed and lens aperture as specified by an external exposure meter or by estimation.

For further details on metering and setting exposure meters, refer to the instructions for the device used.

LONG-TERM EXPOSURE (BULB)

If the shutter-speed dial is set to **B**, the shutter remains open as long as the shutter button is held down.



→ Set the shutter-speed dial to **B**.

FLASH PHOTOGRAPHY

The Leica M-A does not have its own flash metering and control feature. As a result, the flash exposure must either be controlled by the attached flash unit itself (computer control), or the aperture must be set manually for each shot according to the guide number calculation, depending on the distance of the object to the camera.

The shortest possible exposure time for photos taken with electronic flash units, sync speed 1/50 seconds, is marked as ϟ on the shutter-speed dial.

Longer shutter speeds are possible and, by taking into account natural ambient light, can be beneficial for the image effect.

COMPATIBLE FLASH UNITS

All commercial flash units with a standard flash sync terminal or center contact can be used with the Leica M-A. We recommend using state-of-the-art thyristor-controlled electronic flash units.

Important

- Use of an incompatible flash unit with the Leica M-A can, in a worst case scenario, lead to irreparable damage to the camera and/or the flash unit.

Notes

- A flash unit that is not ready to flash may cause incorrect exposures.
- Studio flash equipment may have a very long flash duration. It may therefore be advantageous to select a shutter speed slower than 1/50 seconds when using this type of equipment. The same applies to radio-controlled flash firing for "off-camera" flashes, as the radio transmission may cause a delay.

ATTACHING FLASH UNITS

Leica M-A offers two flash ports.

– An accessory shoe with center contact for all flash units with a standard flash shoe is located on the top of the camera.
– On the back (directly underneath the accessory shoe) is a sync port for a sync cable connection.

Notes

- Two flash units can be fired at the same time by attaching one unit to the accessory shoe and one to the sync port.
- For more information about flash use and the various available flash modes, read the relevant manual.

ATTACHING A FLASH UNIT VIA THE ACCESSORY SHOE

ATTACHING THE FLASH UNIT

→ Switch off the flash unit.

→ Slide the foot of the flash unit all the way into the accessory shoe.

→ Close locking device where available (clamp ring, pushbutton or similar).

- This is important, as it prevents the flash unit from falling out or an interruption in contact due to movement.

REMOVING THE FLASH UNIT

→ Switch off the flash unit.

→ Open locking device where available (clamp ring, pushbutton or similar).

→ Remove the flash unit.

CARE/STORAGE

CAMERA HOUSING

- Take care to keep your equipment as clean as possible, as any dirt also provides a breeding ground for micro-organisms.
- Use only a soft, dry cloth to clean the camera. Stubborn soiling should first be moistened with highly diluted dishwashing liquid and then wiped off with a dry cloth.
- If the camera is splashed with salt water, first dampen a soft cloth with tap water and then wring it out thoroughly and use it to wipe down the camera. Finally, dry the LUX Grip thoroughly with a dry cloth.
- To remove stains and fingerprints, wipe down the camera with a clean, lint-free cloth. Tougher dirt in hard to reach corners of the camera housing can be removed with a small brush. Do not touch the shutter when cleaning with a brush.
- It is preferable to store the camera in an enclosed closed and padded case so that nothing can rub against it and it is protected from dust.
- Store the camera in a dry place with sufficient ventilation and protect it from high temperatures and moisture. If the camera is used in a humid environment, it is essential that all moisture be removed before it is put into storage.
- To prevent the growth of fungus and mold, you should avoid storing the camera in leather bags for extended periods.
- Camera bags that have become wet during use should be emptied out to prevent damage to your equipment caused by moisture and any leather tanning agent residue that may be released.
- All of your camera's mechanically moving bearings and sliding surfaces are lubricated. If you do not use your camera for a longer period of time, it should be wound several times about every three months without film and released at all shutter speeds to prevent gumming up of the lubrication points. We also recommend repeated adjustment and use of all the other operating elements.
- If the camera equipment is used in a hot and humid tropical climate, it should be exposed to the sun and air as much as possible to prevent the growth of fungus and mold. Storage in tightly sealed containers or bags is only recommended if a desiccant such as silica gel is also used.
- If condensation has formed on or in the camera, you should switch it off and leave it at room temperature for about one hour. Once the room and camera temperatures have equalized, the condensation will disappear by itself.

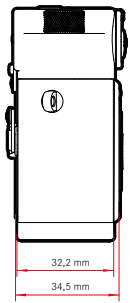
LENS

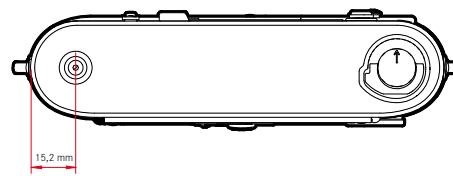
- A soft-bristle brush will usually suffice to remove dust from the outer lenses. Remove more severe soiling with a clean, soft cloth that is completely free of foreign matter. Wipe the lens carefully in a circular motion from the center outward. We recommend using microfiber cloths that are stored in a protective container and are available from photography shops and other optical retailers. These cloths are machine-washable at 40°C. Do not use fabric softener and do not iron them. Do not use cleaning cloths for eye glasses, as these are soaked in chemicals that could damage the glass of the camera lenses.
- Attach a transparent UVA filter for optimal front lens protection in unfavorable conditions (e.g., sand, salt water spray). Remember that this filter, as is the case with any filter, may create unwanted light reflections in some situations where there is backlight.
- Lens caps also protect the lens from accidental fingerprint smudges and rain.
- All mechanical bearings and sliding surfaces on your lens are lubricated. Make sure to periodically move the focus ring and the aperture setting ring to prevent gumming up of the lubrication points if the lens will not be used for an extended period of time.

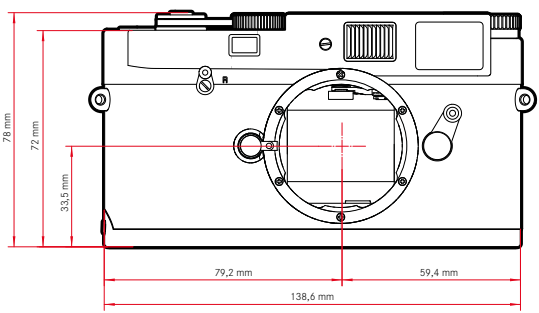
FAQ

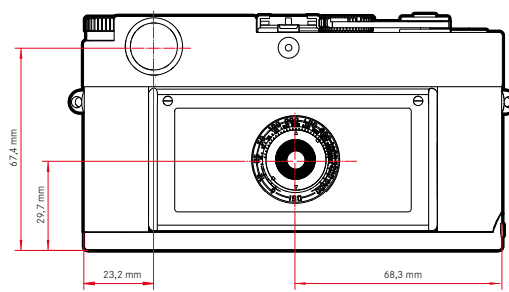
Issue	Possible cause/troubleshooting	Suggested remedies
When taking a photo		
Flash does not trigger	Flash cannot be used with the current settings	Note the list of settings compatible with the flash function
	Pressing the shutter button while the flash is still charging	Wait until the flash is fully charged
Flash does not fully illuminate the object	Subject out of flash range	Bring subject within flash range
	Flash light is blocked	Make sure that the flash light is not blocked by fingers or objects.
Camera cannot be triggered/ shutter disabled/not possible to take photo	Loaded film has been used completely	Replace the film
Images are out of focus	Lens is dirty	Clean the lens
	Camera was moved while photo was taken	Use the flash
		Mount the camera on a tripod
		Use a faster shutter speed
Images are overexposed	Flash is active even in bright surroundings	Change the flash mode
	Strong light sources are present in the image	Avoid strong light sources in the image
	(Half) backlight falls into the lens (also from light sources outside the image field)	Use a lens hood or change the object
	Exposure time selected is too long	Select a shorter exposure time
Out of focus	Shooting in dark locations without flash	Use a tripod

TECHNICAL DATA









LEICA M-A

CAMERA

Camera type
Analogue system camera with rangefinder (small format)

Order No.
Black: 10 370

Material
Closed all-metal housing with hinged rear panel
Top and bottom cover: Brass, black lacquered

Lens mount
Leica M bayonet

Operating conditions
0°C to +40°C

Interfaces
Accessory shoe, sync port

Tripod thread
A 1/4 DIN 4503 (1/4") made from stainless steel in the bottom plate

Dimensions (WxHxD)
138 x 77 x 38 mm

Weight
Approx. 575 g

VIEWFINDER

Viewfinder type
Large bright-line frame rangefinder with automatic parallax compensation
Calibrated to -0.5 dpt
Corrective lenses from -3 to +3 dpt available

Image field limitation
By illuminating frame pairs: 35 mm + 135 mm, 28 mm+ 90 mm, 50 mm + 75 mm (automatic toggling when the lens is inserted)
Alternative image field limitations/bright-line frames can be shown

Parallax compensation
The horizontal and vertical difference between the viewfinder and the lens is automatically compensated based on the relevant distance setting, i.e., the viewfinder's bright-line frame automatically aligns with the subject detail recorded by the lens.

Viewfinder magnification
0.72× (for all lenses)

Effective measurement basis
49.9 mm: 69.25 mm (mechanical measurement basis) x 0.72x (viewfinder magnification)

Alignment of viewfinder and film images
At the shortest 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, the film captures approx. 9% (28 mm) to 23% (135 mm) more than is shown in the corresponding bright-line frame.

Large-basis rangefinder
Split and superimposed image rangefinder in the center of the viewfinder image as a bright field.

SHUTTER

Shutter type

Rubber blanket slotted shutter with horizontal movement; mechanically controlled; extremely quiet

Shutter speeds

Mech. shutter: 1 s to 1/1000 s

Flash sync speed: up to 1/50 s

Shutter button

One-stage

Standardized thread for cable release integrated

FILM WINDING

Winding forwards

Manually with quick-wind lever or Leicavit M (available as an accessory) or motorized using Leica Motor-M, Leica Winder-M, Leica Winder M4-P, or Leica Winder M4-2

Rewinding

Manual with rewind knob after the rewind release lever has been swiveled to the R position

Automatic exposure counter

On the top of the camera

Automatically reset upon removal of the bottom cover

FOCUSING

Working area

70 cm to infinite

Focusing mode

Manual

FLASH EXPOSURE CONTROL

Flash unit connection

Accessory shoe, sync port

Synchronization

On the 1st shutter curtain

Flash sync speed

ϟ =1/50 s; slower shutter speeds can be used

Flash exposure metering

Via computer control of the flash unit or by calculating the guide number and manually setting the required aperture

LEICA CUSTOMER CARE

Contact Leica Camera AG Customer Care for the maintenance of your Leica equipment and for consultation on all Leica products and to place an order. For repairs or in the event of damage, you can also contact Customer Care or the repair service at your local Leica representative directly.

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YOUR LOCAL LEICA REPRESENTATIVE

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LEICA ACADEMY

You can find our entire seminar program with many interesting photography workshops at:
https://leica-camera.com/en-int/leica-akademie