

**You are the owner of a LEICA**

We hope that you will obtain as much enjoyment from it as all the many LEICA fans in every country of the globe.

As a LEICA owner you have the benefit of a universal photographic system, which also covers the technical and scientific field in the widest sense. It includes the well-known LEITZ enlargers and LEITZ miniature projectors. The projected image, huge, luminous, and realistic, reveals the full beauty of your own photographs, and never fails to fascinate you and your friends. May your LEICA be a constant source of pleasure to you.

Yours sincerely  
ERNST LEITZ WETZLAR GMBH



- 1 Automatic frame counter
- 2 Shutter release button
- 3 Rapid transport lever
- 4 Film rewind release
- 5 Shutter speed dial
- 6 Rangefinder window
- 7 Lens bayonet lock
- 8 Red focusing knob for lens insertion
- 9 Accessory shoe with flash contact
- 10 Depth-of-field scale
- 11 Distance scale
- 12 Aperture scale



**Fitting the carrying strap**  
The series (T) are provided for fitting the carrying strap. Release the double-disk length of leather from the round part of the shackle, push off both metal parts and lock them in the eyelets of the camera in opposite directions.

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**LEICA-Windar M 4-2**

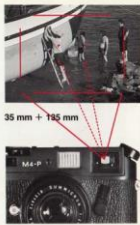
The bright-line measuring viewfinder of the LEICA M 4.P has been designed to combine the functions of a standard rangefinder and of a viewfinder of outstanding quality. Whatever you see within the bright frame will appear on your exposed film. The bright-line frame is coupled with the rangefinder so that the parallax — the difference between the lens axis and the viewfinder axis — is automatically compensated. The measuring field, brighter than the surrounding field, is located in the centre.

of the viewfinder. All the lenses of 21-135mm focal length are coupled with the rangefinder on location in the LEICA. When lenses of 28, 35, 50, 75, 90, and 135 mm focal length are inserted, the appropriate bright-line frames will automatically appear in the viewfinder image in the combinations 28 + 90 mm, 35 + 135 mm, and 50 + 75 mm.

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**The field-of-view selector**

The field-of-view selector (14) functions as a universal viewfinder. It enables the LEICA owner at any time to reflect into the viewfinder field the frames outlining the field-of-view other than that of the lens that happens to be in the camera. Lever outward: field-of-view frames for 28 and 135mm focal lengths. Lever inward: field-of-view frame for the 35 and 90 mm focal lengths. Lever in the middle position: field-of-view frame for the 50 and 75 mm focal lengths.



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**The rangefinder**

The measuring field of the rangefinder appears in the centre of the viewfinder as a bright, sharply outlined oblong. If you block the target field window (15) of the viewfinder, only the reflected bright-line frame and the measuring field remain visible. Focusing can be carried out according to the coincidence or to the split-image method.

**Coincidence (double image) focusing:** In portraiture, for instance, look on the highlight in the sitter's eye. Observe the subject through the viewfinder and rotate the lens until the double contours in the measuring field coincide.  
**Split-image focusing:** Sight an edge or any other clearcut line. If you find that the line is offset sideways as it enters the measuring field, rotate the lens until the line becomes continuous as it passes from the viewfinder into the measuring field and out again. This method is to be preferred because of its superior accuracy.

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The rapid winding lever (3) at each full lever movement transports the film through one frame, winds the shutter and advances the frame counter to the next number. The film can also be transported by several short strokes of the transport lever. The film plane indicator. The release button (5) has a thread for a cable release (Code No. 14102). It should be pressed smoothly, without a jerk, until its anti-click indicates that the shutter is released.

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The shutter speed dial (5) controls the shutter speed and can be set either before or after the shutter is wound. It clicks home at every engraved speed value and, except for the range between 8 and 15 any intermediate speeds can be set and are fully effective. At the "T" setting the shutter remains open as long as the release button is pressed. The dial must be set at the symbol  $\frac{1}{2}$  — 1/2 sec. when electronic flash is used.

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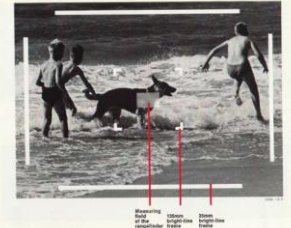


- 13 Window illuminating the bright-line frame
- 14 Field-of-view selector
- 15 Viewfinder field window
- 16 Focusing rewind crank
- 17 Carrying-strap eyelets
- 18 Measuring-viewfinder eyepiece
- 19 Baseplate lock
- 20 Contact bush for flashbulbs
- 21 Contact bush for electronic flash units
- 22 Film indicator (blue ball-point writing) with DIN/ASA comparison scale
- 23 Tripod thread A11 (1/4")

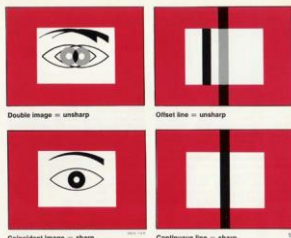
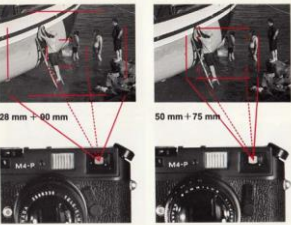


**How to hold the LEICA**  
For steady three-point support hold your camera with your right hand, your index finger resting on the release button, your thumb on the rapid-transport lever. The left hand either supports the lens from below, ready for quick refocusing, or it grasps the camera. In addition press the camera against your forehead.

For upright views all you have to do is to rotate the camera through 90°. The position of your hands is the same as for horizontal views. You can also rotate the camera in the opposite direction, then you must use your thumb to release the shutter.



Measuring of building height



The LEICA lenses have a fixed ring with depth-of-field scale (10), a rotatable ring for setting the focusing distance (11) and an iris diaphragm ring (12).

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**The depth-of-field scale**  
The lens reproduces at maximum sharpness the plane parallel to the film, on which it is focused. This maximum sharpness falls off gradually towards the front and rear within a certain depth, then the subject will appear sharp. This depth of field depends on the camera distance, the focal length of the lens, and the lens stop set. Stopping down the lens increases, opening it up decreases the depth of field.

The depth-of-field scale indicates the depth-of-field zone for the object distance on which the lens is focused. With the 50mm ELMMARIT 1:2 focused on 5m (16.4 ft), sharpness at f/4 extends from 4m to about 8m (13.1 to about 26.2 ft). However, if you stop down to f/11 at the same focusing distance, sharpness will extend from 3m to about 20m (9.8 to about 65.6 ft).



**Inserting the lens**  
The red knob on the lens mount (8) must have the red dot on the camera body. After a short turn to the right the lens will engage in the bayonet mount with a click. Change lenses in the shade (e.g. of your own body). Remove the lens cap before you take pictures.



**Taking out the lens**  
Grip the rear, fixed ring (10) of the lens. Depress arresting button (7), rotate the lens to the left and take it out.



**Flash synchronization**  
The LEICA M 4-P accepts all flash units on the market with standard flash plugs (occasional plug) or with accessory-shoe contact. The bushes for the cable connection of flash units are arranged on the back of the camera. Flashbushes are connected to the left-hand bush (20) marked "M", and electronic flash units on the right-hand bush marked "X" (21).

Flash units and adapters without cable connection can be connected through the "X" flash contact in the accessory shoe (9). Flash cubes and certain types of flashbushes are fired through the X contact bush. The table on the right offers information about the various possibilities. Three flash units may be used simultaneously through the 3 flash connections.

**Flash table**

Electronic flash	X	B	$\rightarrow$	$\frac{1}{f}$ (m)
AG 1				
Flash Cubes				
AG 3				$\frac{1}{16}$ m
M 2				
Flashbushes				
XM 1				$\frac{1}{16}$ m
PF 1				
XM 5				$\frac{1}{16}$ m
PF 5				
M 3				$\frac{1}{16}$ m
M 3				$\frac{1}{16}$ m
CE 5				$\frac{1}{16}$ m
25				$\frac{1}{16}$ m

X = Contact or accessory shoe electronic flash  
M = Contact for flashbushes



**Inserting the film**  
First make sure, by turning the rewind crank (18) in the direction of the arrow, that the camera is empty. If you feel any resistance, proceed as described on the following page.

Take the camera in your left hand, baseplate facing you. Pull out the toggle in the baseplate (19), turn it to the left, and remove the baseplate. The film lead must be trimmed like that of all films sold in cart-

tridges. Take the cartridge or cassette in your right hand and insert it about halfway into the space provided for it in the camera. Grip the film lead, and pull it into the take-up spool. Push film cartridge and lead into the camera with the palm of your hand. Bring the baseplate on to the lug at the side of the camera, close it and lock it by means of the toggle (19). The baseplate is designed so that after it is fixed on the camera it adjusts the film to its correct position. Transport the film through two frames and release the shutter. Tension the film after the second shutter-wind by rotating the rewind crank (15). The film is transported correctly if the rewind crank (15) turns against the direction of the arrow during film transport. After the third shutter-wind the automatic frame counter (1) points at 1 and the camera is ready for action.

**Removing the film**  
After the exposure of the last frame the rapid transport lever (2) can no longer be moved. The film must now be rewound. Move the lever (6) to "T". Unfold the rewind crank (16) and rotate it in the direction of the arrow until the film is wound back into the cassette. Open baseplate and remove the film cassette.



If the film is not securely attached to the winding spool it is possible that the film is torn or damaged. To avoid this, the film should be rewound in the direction of the arrow. If necessary, use the camera against your hand.

**Looking after your LEICA and its lenses**

LEICA lenses act like burning glasses if the LEICA lies with the lens face upwards in full sunlight. You must therefore protect the housing and the shutter by putting on the lens cap or keeping the camera in a case or in the shade. Each lens has, in addition to its type, its "serial" serial number engraved on it. You should make a note of this number so well as of the serial number of the camera engraved on the top of the LEICA. This can be very helpful indeed in case of loss or theft. The coating of LEICA lenses, together with the use of special UV-absorbing cement, reduces reflection and thus prevents violet light. This ensures consequently that all lenses possess the same colour-transmitting properties, irrespective of focal length. The external anti-reflection coating is wear-resistant.

Dust should be removed with a soft sable brush, a piece of cotton cloth (e.g. handkerchief) washed several times, or lens tissue. Special cleaning cloths, such as are used for the cleaning of spectacles, are not recommended, as they are chemically impregnated and might attack the lens surface (optical glass for spectacles has a composition different from that of optical glass for high-quality lenses). A colourless UV-A filter can be left permanently on the lens, where it will protect the front element from external influences, e.g. of acid or sea water spray on the lens. The lens hood, too, protects the lens from accidental finger marks and raindrops. Protect your precious lenses with the appropriate lens caps.

**The LEICA system**



**Exposure meter**  
The LEICAMETER MR exposure meter can be coupled with the LEICA M 4-P for aimed exposure measurement. The clearly defined measuring field of the LEICAMETER MR corresponds to the picture area of the 50mm LEICA lens. Independence of the lens in the camera it can be reflected into the field of view with the field-of-view selector (14) at any time.



**Interchangeable lenses**  
Besides the lenses of 35 to 135 mm focal lengths the LEICA center has a whole range of interchangeable lenses of shorter and longer focal lengths at his command.

The optical units of the 135 mm lenses can be unremovably used for ground-glass screens. Focusing with the VISOFLEX 3 and on the Focusing Below 2.



**The LEICA-Winder M 4-2**  
A winder for automatic shutter-wind and film transport for single frames of on to 3 ips can be connected to the LEICA M 4-P. It is attached to the bottom of the camera housing in place of the baseplate. The winder is suitable for all shutter speeds from 1 to 1/1000 including B. When the winder is disconnected or the batteries are exhausted the film and the shutter can still be wound manually. Remote control via the cable release bush.

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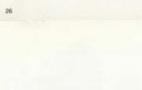
**VISOFLEX**  
The long-focal-length telephoto lenses of 200mm focal length and more, the 50mm ELMMARIT 1:5.5, and the optical units of the 135 mm lenses are used in conjunction with the ground-glass screen of the VISOFLEX attachment. Here as in macro-photography a ground-glass screen offers genuine advantages. Further details are contained in our list 160-3.

**The focusing bellows**  
The Focusing Bellows II permits the use of almost all the LEICA lenses. High magnifications are possible with the 35 and 50mm lenses, with the 80mm lenses the reproduction range from  $\infty$  to 1:1, and with the 135 mm lenses the continuous focusing range from  $\infty$  to 1:1.5 is obtained. Our list No. 160-1 contains further information.



**Lens hoods**  
Various lens hoods of functional design are available for the range of LEICA lenses. Some of them can be removed on the lens. To the long-focal-length lenses the lens hoods are permanently attached and can be extended like a telescope. The lens should never be used without a lens hood, which offers effective protection against stray light and flare, as well as against rain drops and finger marks.

**Camera cases**  
For the LEICA with standard lens the ever-ready case (Code No. 91546) is recommended. In addition, combination cases are available for extensive photographic outfits. For further details see List No. 160-42.



**Enlargers**  
A high-quality camera such as the LEICA calls for an enlarger of matching performance. If this quality is not to be wasted, LEITZ have offer two well-tried top-quality models with automatic focusing: the 35 mm-only FOCOMA\* V 38 enlarger for the 35 mm format only, and the FOCOMAT II accommodating all film formats from 12.17 mm to 8 x 6 cm. For detailed information please consult our Lists No. 170-2 and 170-3.



**Projectors**  
A large selection of projectors is available depending on the user's preference and purposes. They are extremely convenient to operate and can be adapted to a variable range of slides. The most outstanding common characteristic of all LEITZ projectors is their unsurpassed optical performance coupled with traditional LEITZ precision. Please ask for descriptive literature.

**LEITZ Service**  
In cases of damage our After-Sales Service is at your disposal.

Address:

**Ernst Leitz Wetzlar GmbH**  
Technical Service Department  
P.O. Box 2027  
D-6330 Wetzlar  
Germany

or your national LEITZ Agency.  
Each LEICA camera is accompanied by a list of the LEITZ Agencies. Cases of damage are settled according to the International LEITZ Guarantee.

**Read "LEICA FOTOGRAFIE"**

Enclosed with every LEICA is a free voucher for sample copies of "LEICA FOTOGRAFIE", the topical magazine of 35mm technique, available in German, English, and French. Please forward the completed voucher direct to:

**LEICA FOTOGRAFIE**  
Ulrichs Verlag  
Stuttgarter Strasse 18-24  
D-6100 Frankfurt/Main  
Germany

**The LEITZ Information Service**

The LEITZ Information Service is available from 9 to 12 a. m. and 1 to 4 p. m. from Monday to Friday, telephone (0641) 291426, and will answer all questions connected with 35mm photography, projection, enlarging techniques and binoculars. Letters should be addressed to:

**ERNST LEITZ WETZLAR GMBH**  
Information Service  
P.O. Box 2030  
D-6330 Wetzlar  
Germany

**The LEICA School**

The LEICA School is part of the service given by Leitz. It was established to meet the wishes of many committed photographers to receive a thorough further grounding in the fields of photography, projection, and enlarging.  
The courses offer the members a comprehensive photographic programme and many suggestions, items of information, and pieces of practical advice.  
Further information and booking forms obtainable from

**ERNST LEITZ WETZLAR GMBH**  
LEICA School  
P.O. Box 2030  
D-6330 Wetzlar  
Germany

 Leitz means precision. Worldwide.

# INSTRUCTIONS



**LEICA M 4-P**



**Read LEICA Photographs.**  
See you on page 100 and 101.

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