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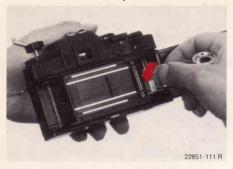
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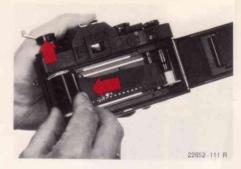
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# Inserting the film

Open camera back; pull up the rewind crank (9). After a spring resistance is overcome the camera back opens automatically. The film counter (29) returns to "S". Wind the camera and press the release button. Insert the end of the film in one of the slots of the take-up spool as shown in the illustration. Ensure that the film is gripped by at least one retaining bracket.





Now insert the film cartridge in the empty chamber. It may be necessary briefly to pull up the rewind crank. Push the rewind crank in. The edge of the film must be parallel to the film guide, and the sprockets of the transport drum must engage the perforation holes of the film leader when the rapid winding lever (2) is slowly moved as far it will go.

Close the camera by snapping the back shut. Release the shutter. Wind the film on once and again release the shutter. Wind the film on again. The camera is now ready for exposure. The film counter (29) points at 1. The film is correctly inserted and wound when an orange-coloured mark appears on the left in the control window (28), moving towards the right as more and more exposures are made.

Push the beginning of the film into one of the slots of the take-up spool from the top and the left.





#### Removing the film

After the last frame of the film has been exposed, increased resistance of the rapid winding lever (2) will be noticed. To remove the film from the camera, it must be rewound into its cartridge.

Press the rewind release button (32) on the underside of the camera body, unfold the rewind crank (9) and turn it in the direction of the arrow until you feel a slight resistance; after a further full turn the film will have been wound back into its cartridge. Pull out the rewind crank (9), open the camera body and take out the cartridge.





# Holding the camera correctly

Grip the camera with your right hand to ensure steady 3-point support. The index finger lies on the release button (3), the thumb against the rapid winding lever (2). The left-hand supports the lens from below. Simply rotate the LEICA R 3 when taking upright pictures. The hands remain in the same position as for horizontal pictures, ready to wind the film and to focus.





### **Multiple exposures**

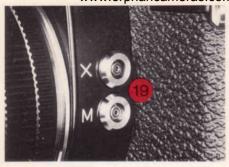
Make your first exposure. Set the selector (1) to the right at symbol (••) before you move the rapid winding lever (2) again. The already exposed piece of film can now be exposed again. At the end of its travel the rapid winding lever automatically returns the selector to single exposure, symbol (•). If further exposures are desired on the same piece of film, the selector must be set at multiple exposure, symbol (••), each time the rapid winding lever is operated. On the LEICA R 3-MOT the selector must be returned by hand if multiple exposures are taken during motor winder operation.

# Self-timer (not on model R 3-MOT)

The self-timer (delayed-action mechanism) functions irrespective of the shutter speed Cock the shutter, wind the self-timer by turning lever (12); the separate release button for the self-timer becomes visible. The delay before the exposure is about 10sec. During this time the lever (12) returns to its end position, releasing the shutter just before it does so.

When the shutter is not wound, the self-timer is blocked before it reaches the end position. Wind the self-timer again and wind the shutter. For structural reasons the LEICA R 3-MOT does not include a self-timer. Its function is performed by the RC LEICA R electronic control unit.

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#### Flash synchronization

All flash units on the market with standardized flash contacts (coaxial contacts) or with accessory shoe contact can be used on the LEICA R 3.

The 2 contact bushes (19) are situated on the left front of the camera. The upper contact bush, marked X, accepts electronic flash units, the lower one, marked M flash-bulb units. Flash units with accessory shoe contact and adapter without cable connection can be connected via the X flash contact in the accessory shoe (6).

Electronic flash units can be connected either through the accessory shoe or through the X contact bush. The two contacts for electronic flash units must not, however, be connected simultaneously. Flash-bulb units are connected to the M contact bush. Both types of flash can be used simultaneously.

The table on the facing page offers information about the various possibilities.

www.orphancameras.com

LEICA		R3	
		X contact	M contact
Electronic flash		$X (^{1}_{90})$ 4 S $\longrightarrow$ $^{1}/_{60}$ , B	_
Flashbulb units	AG 1 AG 3 Flash cubes PF 1 XM 1	4 S → ¹/ <sub>30</sub> , B	
	M 2	$4 S \rightarrow \frac{1}{60}$ , B	_
	PF 5 XM 5 M 3 25 GE 5	4 S → <sup>1</sup> / <sub>30</sub> , B	¹/ <sub>125</sub> → ¹/ <sub>1000</sub>
	FP 26 PF 6 XM 6	4 S → <sup>1</sup> / <sub>15</sub> , B	1/ <sub>30</sub> -> 1/ <sub>1000</sub>
	PF 45	4 S → <sup>1</sup> / <sub>15</sub> , B	¹/ <sub>30</sub> → ¹/ <sub>250</sub>
	PF 60	4 S → <sup>1</sup> / <sub>30</sub> , B	<del>-</del>
	PF 100	4 S → <sup>1</sup> / <sub>15</sub> , B	1/30

For flash exposures the camera should be set at "manual".



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#### Design of the LEICA R lenses

All LEICA R lenses have the same external design, i. e. the same arrangement of the rotatable diaphragm preselecting ring (16), the fixed ring with depth-of-field indication (17), and the distance setting ring (18). You will very easily become accustomed to using your left hand for quick and confident operation of lenses of all focal lengths.

# Automatic spring-back diaphragm

All LEICA R lenses have spring-back diaphragms. This means that the viewfinder image is always — i. e. before and after the exposure — seen at full aperture and therefore maximum brightness. Immediately before the exposure or when the depthof-field lever (14) is depressed the lens diaphragm closes to the preselected value. For the 35mm PA-CURTAGON®-R f/4, the 400mm TELYT®-R f/6.8, and the 560mm TELYT-R f/6.8 see "Measuring through the working aperture", p. 23.



#### Lens hoods

A functionally designed lens hood is part of all LEICA R lenses. It should always be used, because it offers effective protection against stray light and flare as well as raindrops and fingermarks. To some lenses, the lens hood is attached — white dot against white dot — and secured by a clockwise turn. To unlock it, first lift it slightly, and release it with an anticlockwise turn. The lens hood of these lenses also serves as an adapter for series filters.

The lens hoods of the 50mm SUMMICRON-R f/2, Code No. 11 215 and of long-focal-lenght lenses are permanently attached and can be extended like a telescope.



#### **Series filters**

Series 7 filters can also be used on lenses with filter thread  $1155 \times 0.75$  (E 55). The filter adapter Code No. 14 225 is required.

Where the lens hood is detachable, the filters is inserted in it.

Lenses with extensible telescopic lens hoods have a screwed-in adapter ring for series filters. Unscrew the adapter ring, insert the filter, and screw the adapter ring in again to secure the filter. The ring can be easily unscrewed if it is gripped only on one side, which avoids strain.

The 50mm SUMMICRON-R f/2, Code No. 11 215, requires M 55 x 0.75 screw-in filters.



#### Use of LEICAFLEX accessories

Existing LEICAFLEX lenses must be fitted with a control cam so that the possibilities of exposure available on the LEICA R 3 can be fully utilized. The focusing bellows-R, the ring combination for the close-up range, and all other adapters and intermediate rings also require this for measurement through working apertures.

In addition, the diaphragm setting ring of various LEICA R lenses can also be exchanged, so that it will be possible to read the aperture values in the viewfinder of the LEICA R 3:

35mm SUMMICRON®-R f/2 50mm SUMMILUX®-R f/1.4 60mm MACRO-ELMARIT-R f/2.8
1:1 adapter for the 60mm f/2.8
90mm ELMARIT-R f/2.8
90mm SUMMICRON-R f/2
135mm ELMARIT-R f/2.8
180mm ELMARIT®-R f/2.8
250mm TELYT-R f/4
After conversion, the components remain fully functional on all LEICAFLEX models.

# Tips for care of the LEICA R 3/R 3-MOT and its lenses

It is best to remove dust and fibres on the mirror carefully with a soft, dry sable brush, which must be degreased in ether before and repeatedly during the cleaning operation, but allowed to dry completely before it is used. Dust and fibres on the lower viewfinder plate should be removed only if they severely affect the quality of the viewfinder image.

Strictly avoid touching the viewfinder plate with the metal part of the brush. Important: Do not blow into the mirror chamber, because this may carry dust into the interior of the camera.

A lens acts like a burning glass if it is directed straight at the sun. Protect the interior of your camera with the lens cap, or by keeping the camera in your pocket or in the shade. Each lens has not only its type but also its "individual" serial number engraved on the front mount. Make a note of this number as well as of that of the camera, which you will find on the back of the baseplate of your LEICA R 3. This will be very important in case of loss.

Dust on the front and rear elements of your lenses is removed with a soft sable brush or very gently with a clean, dry, soft piece of linen. Special cleaning cloths such as are used for the cleaning of spectacles are not recommended because they are chemically impregnated and may attack the glass of your lenses. (They composition of glass used for spectacles differs from that of optical glass for high-quality camera lenses).

In unfavourable conditions, for instance at sea, in subtropical areas, etc., a colourless UVa filter protects the front element of the lens against external effects, caused, for instance, by splashes of sea water and by sand. An additional colourless and optically flat glass plate, i.e. a filter in the optical path can, however, cause undesirable reflections at certain incident angles of the light, especially in contre jour light and with strong contrast. The lens hood, too, protects the lens against accidental fingermarks and raindrops.



#### Accessories

# Interchangeable lenses

In addition to the standard lenses of 50mm focal length a large number of other interchangeable lenses form 16 to 800mm focal length are available. The lenses from 16 to 250mm, except the 35mm PA-CURTAGON-R special lens, include an automatic springback diaphragm.





#### Follow-focus lenses

The 400mm and 560mm TELYT-R f/6.8 lenses of very long focal lengths have a precision parallel guide in which the front part of the lens mount is adjusted for quick and at the same time critical focusing. The focusing mechanism can be released for focusing with a push-button, and clamped at the required setting. In addition to simple operation, light weight is an outstanding feature of these lenses. They are supplied with an adjustable shoulder stock.

### LEICA M lenses on the LEICA R 3

All lenses of the LEICA M range that fit the VISOFLEX® attachment can also be used on the LEICA R. A special adapter (Code No. 14 167) forms the bridge between the two LEITZ systems of 35mm photography. Any vignetting observed in the viewfinder has no effect on the exposures.







#### **ELPRO close-up attachments**

These attachments extend the focusing range, and as achromatic lens elements also increase the image quality in the close-up range. Even medium apertures produce excellent sharpness. Exposure technique including exposure measurement is the same as in the normal range. ELPRO close-up attachments are available for the 50mm SUMMICRON-R f/2, the 90mm lenses, the 135mm ELMARIT-R f/2.8, and the 180mm ELMAR®-R f/4.

#### Focusing Bellows-R

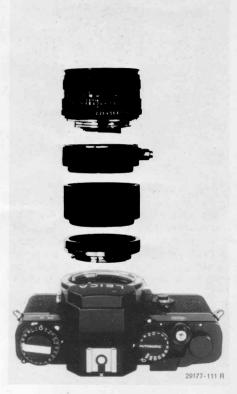
The Focusing Bellows-R (Code No. 16 860) for the LEICA R in conjunction with the 100mm MACRO-ELMAR f/4 special lens (Code No. 11 230) permits work continuously within the range from  $\infty$  to 1:1. The 50, 60, 90, 135, 180 and 250mm lenses, too, can be used on the Focusing Bellows-R in the near-focusing range.

#### Ring combination for the close-up range

A 3-part ring combination (Code No. 14159), which is used mainly in conjunction with the 50mm SUMMICRON-R f/2 standard lens, permits work within a range down to 1:1 reproduction scale. The combination can be extended at will by the insertion of several middle rings.

It can also be used in conjunction with the 90, 135, 180 and 250mm lenses.

The lens diaphragm can be semi-automatically closed with the twin cable release.







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#### Cases

Two ever-ready cases, one with a normal and another with a large front part are available for the LEICA R 3. The front part can be detached after the press stud on the back of the case has been pushed upwards to unlock it. The two versions of the ever-ready case can be used with the following lenses:

	Standard every-rady case Code No. 14 506	Case with large front part Code No. 14 507
16mm f/2.8	Yes	Yes
19mm f/2.8	_	
21mm f/4	_	Without lens hood
24mm f/2.8	Without lens hood	Without lens hood
28mm f/2.8	Without lens hood	Yes
35mm f/2	Without lens hood	Without lens hood
35mm f/2.8	Without lens hood	Yes
35mm PA	Without lens hood	Without lens hood
50mm f/1.4	Yes	Yes
50mm f/2	Yes	Yes
60mm f/2.8		ithout 1:1 adapter)
90mm f/2		Yes
90mm f2.8		Yes

For extensive camera equipment comprising several lenses and various accessories combination cases are available. Further information: List No. 120–42.





#### **Motor Winder R 3**

In combination with the LEICA R3-MOT the MOTOR WINDER transports the film and winds the shutter. Frequencies of up to 2 frames/sec are possible. All shutter speeds from 1 to 1/1000 sec can be used. The motor winder is powered by six standard midget (we recommend alcali-manganese batteries) batteries or six rechargeable NC batteries of the same dimensions. One battery charge (or recharge) is sufficient for the exposure of about 70 films. Code No. 14 270 With the handgrip with adjustable leather loop the LEICA R3-MOT with MOTOR WINDER R3 can be held more securely Code No. 14 271 and conveniently.

# Remote-Control LEICA R electronic control unit

This handy control unit combines two functions: it is a remote release with luminous digital display of the completed exposure through feedback from the camera and also a timer for automatic single exposures at variable time intervals. The interval releases can be programmed from about two frames/sec to one frame about every ten minutes. The RC LEICA R has an appliance cable of 2.5 m length and is connected with a screw plug to the 5-pin socket of the motor winder housing. With extension cables the range of the control unit is at least 100 m. Code No. 14 277



# Reproduction



#### **Enlargers**

A high-quality camera such as the LEICAR3 demands an enlarger of equal quality.

Well-tried top-quality enlargers with automatic focusing, the FOCOMAT® Ic exclusively for the 35mm format, and the FOCOMAT V 35 Autofocus as a multi-purpose enlarger for all film formats up to 6x9cm have been part of our production range for many decades. You will find detailed information about them in our lists No. 170–2 and 170–15 respectively.

# **Projectors**

A wide range of projectors is available for every purpose. They offer maximum convenience in operation and versatile extension facilities.

The most outstanding common feature of all LEITZ projectors is optimum optical performance combined with traditional LEITZ precision.

Descriptive literature on request.

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

Address: Ernst Leitz Wetzlar GmbH Technical Service P.O.B. 2027 D-6330 Wetzlar, Germany,

or your National Leitz Agency or authorized LEITZ After Sales Service Workshop. Repair unless caused by incorrect handling will be carried out free of charge. The warranty card, duly completed by the dealer, should, however, always accompany the camera. A list of the LEITZ Agencies and authorized After Sales Service Workshops is enclosed with every LEICA R3 camera.