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Leica

User Manual

LEICA R-E

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Further information and details of seminars are available from:
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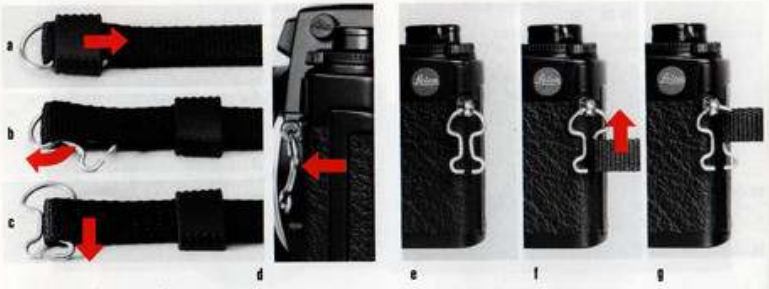


Attaching the carrying strap

To attach the carrying strap to the eyelets (5):

- Slide back the safety loop at the end of the strap (Fig. a).
- Remove the metal hook from the strap (Fig. b and c).
- Insert the hook in the eyelet (5), with the bent part of the hook parallel to the side of the camera (Fig. d and e).
- Insert the strap through the open end and narrow part of the hook, then turn through 90° for a proper seating on the D-shaped loop (Fig. f, g and h).
- Slide the safety loop fully home over the hook (Fig. i and j).

Fitting the lens

To avoid damage to your LEICA R-E, do not attempt to fit any lens that does not have a control cam for a LEICA R camera (see page 45).

To insert a LEICA R-Lens regardless of the focus and aperture settings, proceed as follows:

Grip the lens by the fixed ring (10). Position the red dot (11) on the lens mount opposite the dot on the bayonet lock (7) on the camera body. Insert the lens in this position. A slight clockwise turn clicks the lens into position.

Removing the lens

Grip the lens by the fixed ring (10). Press in the bayonet lock (7) on the camera body. Turn the lens anticlockwise and remove. Always change lenses in the shade or in your body's shadow.

Inserting and checking the batteries
The exposure meter and shutter release of the LEICA R-E are powered by two silver oxide button cells or a lithium cell; see page 9 for list of suitable battery cells.
Insert a coin in the slot of the battery cap (35) to unscrew. Use a clean cloth to wipe off any oxidization on the surface of the battery cells and insert the batteries in the battery cap; position them as marked in the battery cap. Screw the cap with the battery cells back into the baseplate of the camera.
Always check the state of the batteries before attempting to take any photographs, especially when the camera has not been used for some time. To do so, press the test button (19) for about 5 s. If the battery cells are in working order, the red LED (20) in front of the test button lights. If in these five seconds the LED dims noticeably, the cells are nearly flat and should be replaced as soon as possible.
If the LED does not light, the outside of the battery cells may have oxidized. If so, simply wipe them clean.
To switch on the camera and activate the LEDs in the viewfinder, press the battery-test button (19).

Silver oxide button cells
suitable for the LEICA R-E

Duracell	D 357 (10 L 14)
EverReady	EPX 76
Maxell	SR 44
National	SR 44
Philips	357
Ray-O-Vac	Panas 357
Sony	SR 44
Ucar	EPX 76
Varta	V 76 PX

Lithium cells
suitable for the LEICA R-E

Duracell	DL ⅓ N
Philips	CR ⅓ N
Ucar	2 L 76
Varta	CR ⅓ N

Caution:
Always remove the battery cells if the camera is unlikely to be used for some time.

Note: When a Motor-Winder or Motor-Drive is fitted, the camera is powered by the batteries of the motorized film transport, i.e. you cannot check the camera's batteries.

To check that the motor batteries are in fact supplying power to the exposure meter an the viewfinder displays, press the battery-test button (19), at the same time switching on the exposure meter, e.g. by pressing the locking button to the selector switch (see page 18: Switching on the exposure meter). However, this is not a battery check for the motor functions.

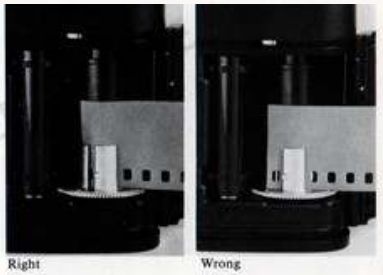
Shutter release without batteries
You can still use the camera when the battery cells are flat or have been removed. To do so, set the shutter speed to B or 100 (see page 22).

Notes on battery care and use:
Store battery cells in a cool, dry place.
Never use old and new battery cells together.
Do not mix battery cells of different makes.
These battery cells are not rechargeable.
Batteries contain toxic and environmentally damaging substances. Do not discard used battery cells, but return them to your camera dealer for recycling.

Quick-wind lever
The quick-wind lever (26) winds the film, cocks the shutter, and turns the frame counter (27).
When you hinge out the lever in the stand-by position, there is room to slide your thumb behind it and firmly support the camera.
For use with a Motor-Winder or Motor-Drive, see the user manual supplied with the motor unit.
The ⊖ symbol (23) marks the film plane.

Inserting the film
Pull up the rewind crank (18) and knob past the spring resistance to release and open the camera back.* This also resets the frame counter to S (start).
Pick up the film cartridge as shown above, with the emulsion side facing up. Slide the end of the film obliquely from above into one of the slots of the take-up spool, making sure that the film is gripped by at least one of the retaining clips and projects **under** the next clip.

* = The procedure is identical when a databack is fitted.



Right Wrong

Pull up the rewind crank as far as it will go and insert the film cartridge in the empty cartridge chamber, then push in the rewind crank. The edge of the film must be parallel with the film guide. As you move the quick-wind lever, the sprockets of the transport drum must engage in the edge perforations of the film.

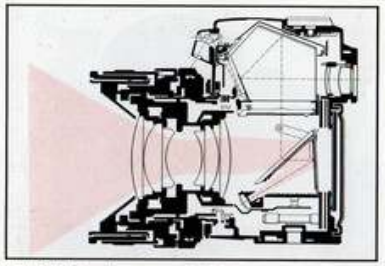
Use the quick-wind lever to wind the film one frame forward, to ensure that it lies tensioned in the film guide and that the mouth of the cartridge does not project too far.
You may occasionally wish to take out a partly exposed film and later insert it again. To ensure that the film is always inserted under the same conditions, use the quick-wind lever to cock the shutter, then release the shutter before you insert the film.

Snap the camera back shut to close the camera. Release the shutter. Wind the film one frame forward, release the shutter again, then wind on one more frame. The camera is now ready for use. The frame counter (27) stands at 1. It counts up to "36". To indicate the various lengths of film available, the figures "20", "24", and "36" are marked in red.

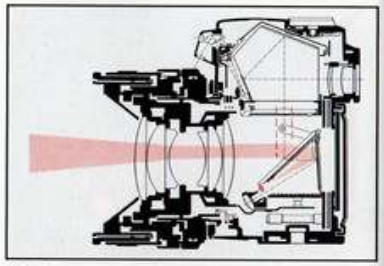
Important:
Bright light may enter through the mouth of the cartridge and damage your film. Never insert a film in bright light.

Setting the film speed
To set the film speed in ISO units, press the locking button (19) and turn the setting ring (17) at the same time until the window (14) displays the required film speed. The display of all ISO values is split, e.g. for ISO 100/21°, 100 appears in the lower window and 21 in the upper.
The setting range covers all values from ISO 12/12° to 3200/36° inclusive.

Rewinding and removing the exposed film
Exposure of the last frame blocks the action of the quick-wind lever. Rewind the film into its cartridge before removing it from the camera. Press the rewind release button (37) in the camera's baseplate, hinge out the rewind crank and turn it clockwise in the direction indicated by the arrow until you feel a slight resistance as the film is pulled out of the take-up spool. Pull up the rewind crank and knob to open the camera back, and remove the cartridge with the exposed film.
To use a MOTOR-WINDER R or MOTOR-DRIVE R, see the manual supplied with the winder or drive.



Full-field integral exposure metering



Selective exposure metering

The LEICA R-E has an exposure-meter system that provides two alternative modes:
□ Full-field integral mode
○ Selective mode

These exposure-metering modes are linked to the automatic shutter control. For manual control of the shutter speed, choose program Ⓜ. In this program the exposure meter is in selective mode.

The exposure meter measures the light that passes through the lens (TTL exposure-metering system). It uses a silicon photodiode, placed in the base of the camera to protect it from stray light. When you use any LEICA R lens with an automatic spring-back diaphragm, the exposure meter works at full aperture. The symbol displayed in the window (22) next to the program selector (28) and at the lower left of the viewfinder indicates the mode selected.

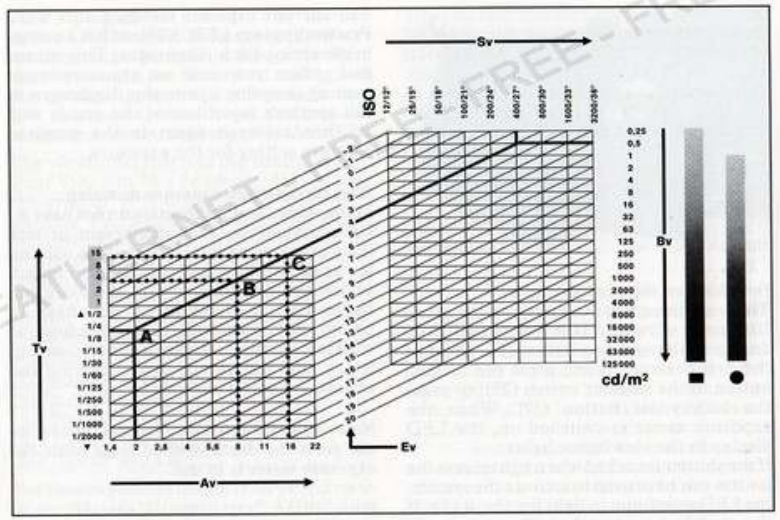
Full-field integral mode
Most photographic subjects contain details of varied brightness. The light reflected by this type of subject has a mean grey value of 18%, i.e. it is the same as that of a standard grey area that reflects 18% of the light it receives. This is the calibration value for all exposure meters.
The full-field integral mode is suitable for all subjects in normal light, with no extremes of light or colour, and where the light and dark areas are fairly evenly distributed over the entire visual field. For this type of subject, choose one of the programs that use the full-field integral mode Ⓐ (see page 24).

Selective mode
This is the method of choice when the subject has a very wide brightness range and the correct exposure of a certain detail is particularly important.
The large central circle in the viewfinder indicates the field covered in this mode, in which the exposure meter measures only the light reflected by the exact area of the subject that you want to determine the exposure. The field is the same size on all focusing screens and for all lenses, whatever their focal length, and is clearly marked in the viewfinder. For selective mode, choose programs Ⓐ and Ⓜ (see pages 26 and 28).

Range of exposure meter
In integral mode, the exposure meter has a range from 0.25 cd/m² to 125000 cd/m² at f/1.4. For ISO 100/21° film this is equal to the standard exposure values Ev +1 to +20, i.e. from 1 s at f/1.4 to 1/2000 s at f/22.
In selective mode, its range is from 1 cd/m² to 125000 cd/m² at f/1.4. For ISO 100/21° film this is equal to the standard exposure values Ev +3 to +20, or 1/4 s at f/1.4 to 1/2000 s at f/22.
The diagram on page 16 gives all necessary data for the exposure-metering system of the LEICA R-E, such as sensitivity and range.

Working diagram of the exposure meter
The diagram shows the relationship between film speed Sv and brightness Bv on the one hand, and between shutter speed Tv and aperture Av on the other, together with the resulting exposure value Ev. The diagram is in two parts connected by diagonal lines that represent the exposure values Ev. On the right, you can find the brightness value Bv determined by the exposure meter. The adjacent grey wedges indicate the working range of the exposure meter in selective (●) and integral (■) modes. The film speeds Sv are marked across the top.

The left side of the diagram shows the camera's working range. In the column of shutter speeds Tv, the long time-exposure range from 1 s to 15 s is overprinted on a grey screen. The aperture range is marked along the base.
A typical example marked in red, shows how these values correlate. Assuming a film speed of ISO 400/27°, follow the vertical line to the point where it intersects with the horizontal line for brightness, in this case 0.5 cd/m², typical for night-time photography. The diagonal which passes through this point of intersection leads to the relevant exposure value, in this case Ev 4. Various combinations of aperture and shutter speed can produce this value. For correct exposure, the points of intersection of the vertical Av and the horizontal Tv lines must always lie exactly on a diagonal Ev line. In the example, three such combinations are shown: A = stop 2 at 1/4 s; B = stop 8 at 4 s; and C = stop 16 at 15 s.
With aperture priority, the camera automatically sets the shutter speed in accordance with the preset stop and the exposure value determined by the exposure meter.



Switching on the exposure meter
There are three ways to switch on the exposure meter of your LEICA R-E: press lightly on the shutter-release button (24) as far as the first pressure point; press the locking button to the selector switch (28); or press the battery-test button (19). When the exposure meter is switched on, the LED display in the viewfinder lights.
If the shutter is cocked when you release the button you have used to activate the system, the LEDs continue to light for about 12 s. If the shutter is not cocked, they go out at once.

Full-aperture exposure metering
Practically every LEICA R lens has an automatic spring-back diaphragm. This means that, when you take an exposure-meter reading, a spring opens the diaphragm to full aperture regardless of the preset stop an then closes it again to the required aperture setting for the exposure.

Working-aperture exposure metering
Some lenses and accessories do not have an automatic spring back diaphragm or lack the linkage mechanism for it. This applies, for example, to those with a focal length of 400 mm or more, and to the Focusing Bellows R. In these cases, you have to obtain the exposure-meter reading at working aperture, stopping up or down to adjust the amount of light reaching the exposure meter's photocell.

Note: To prevent wrong exposure values, do not press the depth-of-field lever while the exposure meter is in use.

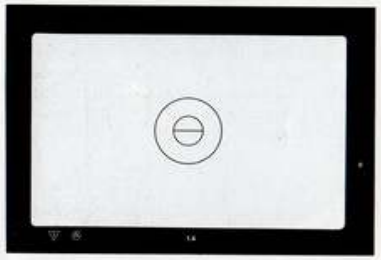
Time exposures
In the LEICA R-E, the exposure meter's working range depends on the sensitivity of the photodiode, the film-speed setting, and the nominal aperture of the lens in use. The shortest exposure it can measure and compute is 1/2000 s, the longest is about 15 s.

The viewfinder displays the shutter speeds from 1/2000 s to 1/2 s or longer. In addition, the symbol ▽ is displayed as a low-light warning, i.e., when there is too little light for correct exposure. If you release the shutter in spite of this, the exposure-control system may compute an incorrect exposure of up to 15 seconds.
At full f/1.4 aperture in integral mode, the following are the longest exposures possible:

ISO 800/30° = 1/8 s
ISO 400/27° = 1/4 s
ISO 200/24° = 1/2 s
ISO 100/21° = 1 s
ISO 50/18° = 2 s etc.

For time exposures longer than 1/4, the viewfinder displays "1/2 s or longer". At that point it no longer matters whether the exposure is 1, 2, 3, 4, 8, or 15 seconds, because it should in any case be made with the camera attached to a tripod.

You can also measure the light at full aperture, compute the shutter speed for any other stop, and make the exposure at the B setting. The diagram on page 17 indicates this range by the dotted lines B and C. The measured shutter speed at stop 2 is 1/4 s. At stop 8, the correct exposure would be 4 s, at stop 16 it is 15 s.



Low-light warning
The camera has a linear measuring range for correct exposures. When there is too little light for this range, the exposure meter's photoelectric cell can no longer produce an accurate reading and the exposure that the viewfinder displays may produce a poor result. To avoid this, the LEICA R-E has a low-light warning: a ▽ symbol lights up.
Caution: In the borderline range the signal may blink.

If you press the shutter release in spite of this, the exposure may be undesirably long, i.e. up to 15 seconds. You can stop this immediately by turning the shutter-speed setting ring to X.

Manual override control (exposure correction)
Exposure meters are calibrated to a standard grey value for an average photographic subject. If the subject does not conform to this standard, manual override correction of the exposure-meter reading becomes necessary. Manual override is more often necessary in the full-field integral mode. In selective mode, the more limited metering field makes it possible to measure a representative detail with an average grey value, thus ensuring accurate measurement.

Positive override correction
For a very brightly lit subject, such as snow, sand, or water, the high reflectivity causes the exposure meter to indicate too short an exposure. To prevent such underexposure, set a slower shutter speed. For snow, for example, you may have to increase the exposure from 1/500 s to 1/125 s, i.e. in this case set the override control to +2.

Negative override correction
For a very dark subject that reflects only a small amount of light, the exposure meter indicates too long an exposure. To prevent such overexposure, select a faster shutter speed, e.g. from 1/60 to 1/125 s, i.e. in this case set the override control to –1.

To set the override control, press the locking button (13) and turn the setting scale (16) to the required value by lever (15). To lock the button (13), press it in and turn it anticlockwise. When the override control is at 0, the lever (15) fits snugly into the camera body. The override control can be set in steps of one-third of an exposure value, from Ev +2 to Ev –2. At the extremes of the ISO scale, the override control's working range is strictly limited.
When override is active, the shutter-speed display in the viewfinder indicates the actual shutter speed set and the symbol ▽ flashes at bottom left.

Shutter-speed setting ring
In program Ⓜ, you have to set the shutter speed manually with the setting ring. The spring-loaded setting ring engages at all setting values marked. Do not attempt to set it to an intermediate value. The camera's electronics automatically compute all shutter speeds from 1/2000 s to 1/2 s.
In programs Ⓐ and Ⓐ, the shutter-speed setting ring may be set to any value except X, B, or 100. When the camera is set for aperture priority and is switched on, it automatically computes any value from 1/2000 s to about 15 s and displays it by light diodes on the right-hand side of the viewfinder, down to a shutter speed of 1/2 s.

If two diodes light at the same time, the camera computes an intermediate value. For using non-system electronic flash units*, set the shutter speed to X. At B, the shutter remains open as long as you hold the shutter release pressed down. The resistance between 2 and X is slightly greater than for other settings, to prevent a non-automatic shutter speed being set inadvertently.

When the shutter-speed setting ring is set to B or 100, you can release the shutter without batteries. The 100 setting is for a shutter speed of 1/100 s and for synchronized electronic flash. It is also available for emergency use when the battery is unserviceable.
In the X, B, and 100 settings, the exposure meter is not in use even when power is supplied by button-type batteries or another power source. To indicate this the upper triangular LED in the viewfinder lights up.

* See page 36: Flash units

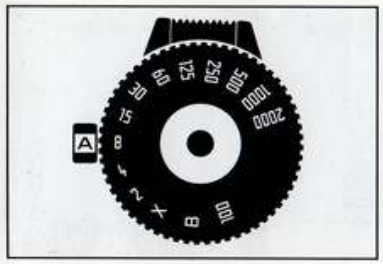
Program selection
To choose a program, press the locking button and at the same time slide the program selector (28) to the required position. By pressing the locking button you switch on the camera. The viewfinder displays the program you have selected in its lower left-hand corner. The window (22) next to the shutter-speed setting ring also displays the program setting.

Check that the program selector engages properly. To change the setting, always press the locking button.

You can choose between the following programs:

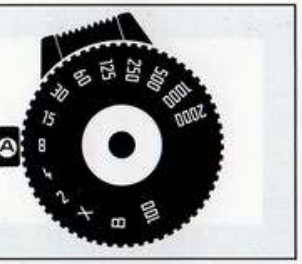
- Ⓐ **Aperture Priority,** full-field integral mode.
- Ⓐ **Aperture Priority,** selective mode.
- Ⓜ **Manual setting** of shutter speed and lens aperture, selective mode.

To switch between Ⓐ and Ⓐ, always move the program selector fully home. There is no need to remove the camera from the eye. To determine which exposure-meter display is best suited for your subject, switch rapidly back and forth as you observe the exposure-meter display. If you have loaded colour-reversal film for slides and there is a difference of one or more shutter-speed steps, always use selective mode. Always observe the film manufacturer's recommendations.
To select program Ⓐ, from position Ⓐ, press the locking button again. This allows you to move the program selector beyond its stop to Ⓐ.



A **Aperture priority,** full-field integral mode.
Preset the required aperture.
This program is particularly suitable for normal light conditions and when depth of field is an important creative element.
Choose this program for applications such as landscape and architectural photography. Set the depth of field with the aperture setting ring (12). The camera automatically computes the shutter speed within the range from 1/2000 s and about 15 s, depending on the available light. The shutter-speed setting ring may be set to any shutter speed from 1/2000 s and 1/2 s, but not X, B, or 100.

Program **A** works with any LEICA R lens and such accessories as adapters, the universal Focusing Bellows-R, etc.
(see page 46).



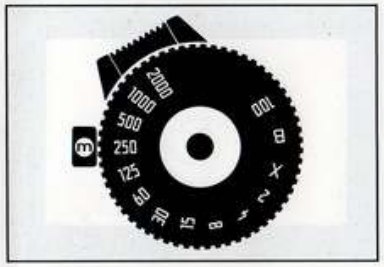
Ⓐ **Aperture priority,** selective mode.
Preset the required aperture.
This program is indicated where spot readings are necessary, for example in contre-jour portraiture and for spotlighted stage subjects.
Set the depth of field with the aperture setting ring (12). The camera automatically computes the shutter speed within the range from 1/2000 s and about 15 s, depending on the available light. The shutter-speed setting ring may be set to any shutter speed from 1/2000 s and 1/2 s, but not X, B, or 100.

Program **Ⓐ** works with any LEICA R lens and such accessories as adapters, the universal focusing bellows R, etc. (see page 46).

Storing exposure-meter readings
In selective mode, the exposure meter covers only the field within the large central circle of the viewfinder. This allows you to determine the light reflected by a limited area of the subject. To store this value, press the shutter release beyond the first pressure point to the second pressure point and keep your finger in position. The exposure-meter reading is stored as long as you keep the shutter release pressed down in this position. To indicate this, the display **Ⓐ** in the viewfinder is extinguished. Still keeping your finger on the shutter release, you can now pan the camera to compose the photograph, than press the shutter release fully home. As long as the exposure value remains in the memory, the viewfinder continues to display the stored shutter speed. The shutter speed remains stored for about 30 s. If during this time you alter the aperture, the shutter speed changes automatically and the viewfinder displays the new shutter speed. As soon as you take your finger from the shutter release, the stored value is lost.

Viewfinder display:
The viewfinder displays the program setting in the lower left-hand corner, with the preset aperture next to it on the right.
The scale of shutter speeds is a column on the right of the viewfinder and displays the automatically computed shutter speed. Shutter speeds are computed continuously. When a pair of the shutter-speed LEDs lights, this indicates that the program has computed an intermediate value. In extremely bright conditions, the preset aperture may be too large for the range of available shutter speeds and is indicated by the red triangular LED at the top of the shutter-speed scale. To remedy this, stop down if possible.
If the triangular LED at the bottom of the shutter-speed scale lights, it indicates that the computed shutter speed is 1/2 s or longer.
If the low-light warning symbol ▽ lights, this indicates that the shutter speed is slower than the exposure meter can display (see page 20).

Viewfinder display:
The viewfinder displays the program setting in the lower left-hand corner, with the preset aperture next to it on the right.
The scale of shutter speeds is a column on the right of the viewfinder and displays the automatically computed shutter speed. Shutter speeds are computed continuously. When a pair of the shutter-speed LEDs lights, this indicates that the program has computed an intermediate value. In extremely bright conditions, the preset aperture may be too large for the range of available shutter speeds and is indicated by the red triangular LED at the top of the shutter-speed scale. To remedy this, stop down if possible.
If the triangular LED at the bottom of the shutter-speed scale lights, it indicates that the computed shutter speed is slower than the exposure meter can display (see page 20).



Ⓜ **Manual setting** with selective mode.
Set the required shutter speed and aperture by hand.

For certain exposure conditions it is preferable to switch off the automatic exposure control and to set both the shutter speed and aperture by hand. These settings can be made in steps.

To do so, you have to determine the exposure value, i. e. the appropriate combination of shutter speed and aperture, before you release the shutter. There are two ways of doing this:

1) **Preset aperture**
Switch on the camera by pressing the program selector's locking button or by slight pressure on the shutter release. Point the camera at the subject. Set the shutter-speed setting ring to the shutter-speed indicated in the viewfinder. Do not attempt to set an intermediate shutter speed not marked on the ring. If the viewfinder displays two shutter speeds, change the aperture setting by half a stop up or down.

2) **Preset shutter speed**
Point the camera at the subject and change the aperture setting until the shutter speed indicated on the right-hand side of the viewfinder frame is the same as the preset shutter speed.

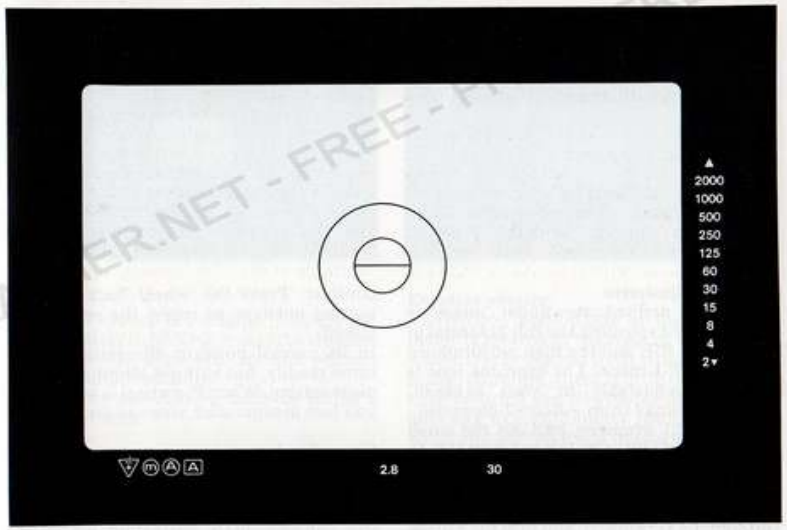
Program Ⓜ works with any LEICA R lens and such accessories as adapters, the universal focusing bellows R, etc. (see page 46).

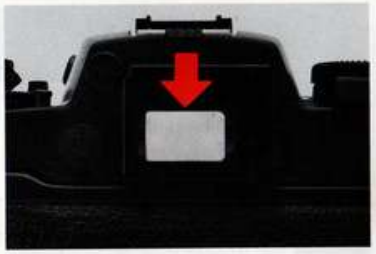
Viewfinder display:
The viewfinder displays the program setting in the lower left-hand corner, with the preset aperture in the centre and the preset shutter speed on the bottom right of the viewfinder frame.
The scale of shutter speeds is a column on the right of the viewfinder and displays the measured shutter speed. If the triangular LED at the top or at the bottom of the shutter-speed column lights, it indicates over- or underexposure. In this case, set a different shutter/aperture combination. If necessary, use a faster lens, or a faster or slower film.
If the low-light warning symbol ▽ lights, this indicates that the shutter speed is slower than the exposure meter can measure (see page 20).

The viewfinder as composition and control centre
The viewfinder of the LEICA R-E helps you compose your photographs and is the control centre for all important items of information:
It lets you assess focus, perspective, and depth of field; see page 40 for details. The larger of the two central circles clearly defines the field used for selective exposure-metering mode. The viewfinder area is 92% of the frame size. With the eyepiece at 0 diopters and a standard 50 mm lens fitted and focused to infinity, it has an 0.8 x magnification.
The viewfinder displays all essential data for the program you have set. When the shutter is cocked, the LEDs light for about 12 s when you press and release the locking button to the program selector, the battery-test button, or the shutter release. To avoid confusion, the viewfinder displays only the essential data in each program (see pages 24 to 39).

The illustration on page 31 shows all the available displays.

The display ▽ at the lower left of the viewfinder frame indicates either that you have set the manual override control or that the available light is less than the lower limit of the exposure meter's range. On the right of this is the symbol for the program in use. At the centre, the bottom frame displays the preset lens aperture, with the preset shutter speed shown on the lower right.
The shutter-speed scale is on the right-hand side of the viewfinder frame, with a triangular LED overexposure warning at the top and the "1/2 s or longer" or underexposure warning at the foot of the column.
The large circle in the centre of the viewfinder indicates the field for the selective exposure-metering mode. The illustration shows the universal focusing screen supplied as the standard focusing screen with every LEICA R-E.





Eyepiece adjustment
A sharply defined viewfinder image is essential for exploiting the full potential of the LEICA R-E and the high performance of LEICA R-Lenses. The eyepiece lens is therefore adjustable to your eyesight, within the range from +2 to −2 diopters.
To adjust the eyepiece, pull out the small setting wheel (30) at its left and turn this to the required setting. To do so, set the lens out of focus, e.g. at the shortest focusing distance, point the camera at the sky, look through the viewfinder, and turn the setting wheel until the circle that indicates the edge of the field for the selective exposure-meter mode is sharply defined and in good contrast. Press the wheel back into its normal position to retain the setting obtained.
In its normal position, the setting wheel turns readily, but without altering the eyepiece setting. When the wheel is pulled out, you feel distinct click stops as you turn it.

Correction lenses
If the standard eyepiece adjustment from +2 to −2 diopters is inadequate for your eyesight, the following positive and negative supplementary correction lenses are available: 0.5, 1.0, 1.5, 2.0, and 3.0 diopters.

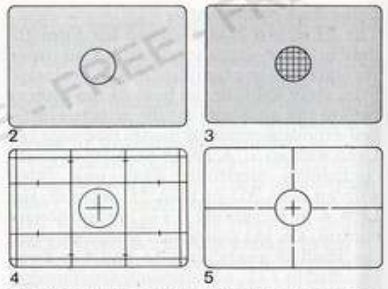
Eyecup
A flexible eyecup is available to shield the eye from stray light. This makes the viewfinder image still more brilliant and permits more accurate focusing.
The eyecup can also be used for fitting a correction lens.

Eyecup Order N° 14215

Eyepiece shutter
The silicon photodiode of the exposure-meter is located in the base of the camera, where it is protected from stray light. Normally, therefore, there is little likelihood of light entering the viewfinder eyepiece and affecting exposure-meter readings, except when you are not using the viewfinder, e.g. for taking photographs from a tripod, when direct sunlight or bright artificial light may enter through the eyepiece. To prevent this, turn the knob of the eyepiece shutter (29) at the left of the eyepiece in the direction of the arrow. When the shutter is in place, a white triangle appears in the eyepiece.

Focusing with the universal screen
Standard delivery of the LEICA R-E includes a universal focusing screen. This produces a bright, high-contrast image and is suitable for photography in most of the situations that are normally encountered.
To focus, turn the focusing ring (9) on the lens.
When the image is out of focus, the edges and lines of the subject are discontinuous in the upper and lower semicircles of the split-image rangefinder.

A ring formed by a screen of rectangular microprisms surrounds the central split wedge. When the image is out of focus, this screen appears to flicker. The outer circumference of this ring also marks the outline of the field in the selective exposure-metering mode.
The remainder of the screen looks like a ground-glass screen and is ideal for focusing telephoto lenses and for close-range photography.



Interchangeable focusing screens
In addition to the universal screen, four optional focusing screens are available for the LEICA R-E. Each of these is supplied in a case, complete with a pair of tweezers and a lens brush.

Note: To change the focusing screen, always use the tweezers supplied (see the instructions supplied with the interchangeable focusing screens). Do not touch any focusing screen with your fingers.

Special tasks require tailor-made systems for fast, accurate work. This is why four further focusing screens are available for the LEICA R-E: the plain ground-glass screen 2 for extreme close-range photography and very long focal lengths; the microprism screen 3 for maximum ease of composition; the full-field ground-glass screen 4 with a grid for architectural photography and the reproduction of documents, including marks for making slides for TV projection; and the clear-glass focusing screen 5 with cross-lines for scientific photography, such as photomicrography and astrophotography.

Using flash equipment
The LEICA R-E is designed for through-the-lens flash-exposure control. This uses a separate silicon photodiode, well protected from stray light, in the base of the camera next to the photocell for the selective/integral exposure-metering modes (see page 14). Used with an SCA 300 or SCA 500 system-compatible electronic flash unit fitted with an SCA 351 or SCA 551 adapter, the LEICA R-E permits TTL flash-exposure control, i.e. the viewfinder indicates when the flash is ready for use and has been switched to TTL, automatically synchronizes the flash with the X shutter-speed setting of 1/100 s. The amount of light produced by the flash unit is controlled through the lens.
Used with an SCA 350 or SCA 550 adapter, the LEICA R-E also switches automatically to X, but in this case the amount of light is controlled by the flash unit's own photocell. You may use any commercially available flash unit with a standard coaxial or central hot-shoe flash contact. To avoid malfunctioning, do not connect your flash unit to both contacts at the same time.

○ Synchronized flash may be used with any program.
○ In all the camera's programs, the aperture must be set by hand to the correct value for flash photography.

TTL flash-exposure control
The accessory shoe of the LEICA R-E has a central hot-shoe contact and control contacts for any electronic flash fitted with an SCA 351 or SCA 551 adapter. If you have switched the flash unit to TTL, the flash is measured and synchronized through the lens. You may use any aperture available on the lens, provided it is within the flash unit's range; for details, see the manual supplied with your flash unit. Regardless of the program or shutter speed set, except for X, B, and 100, the viewfinder automatically switches to the X shutter-speed setting of 1/100 s and indicates when the flash is ready for use.

Displays and functions when a system-compatible flash unit is used:

SCA system	SCA adapter	Functions			
		Display: Flash ready	Synchronized flash unit alters shutter speed	Display: Flash exposure control	TTL flash exposure control
300	350	x	x		
	351	x	x	x	x
500	550	x	x		
	551	x	x	x	x

The triangular LED at the top right of the viewfinder of the LEICA R-E flashes twice a second when the flash unit is charged and ready for use. If the flash unit is discharged and not ready or if it is switched off, the camera works in the preset program mode. To check after the exposure whether the flash was adequate, leave your finger on the shutter release. The upper triangular LED then indicates one of the following conditions:
○ Slow flashing (twice a second): Flash was adequate. Only slight discharge of the flash unit's condenser. Flash immediately ready for use again.
○ Fast flashing at eight times a second for two seconds, then slow flashing twice a second to indicate that the flash unit is again ready for use: Flash was adequate. Moderate discharge of condenser.
○ Fast flashing (8 Hz) for 2 s, then the upper triangular LED goes out: Flash was adequate; heavy discharge of condenser. If you now take your finger briefly from the shutter release when the LED is extinguished, the exposure meter's display on the right-hand side of the viewfinder returns to the preset program mode until the flash unit is recharged and the camera automatically switches back to X. When the flash unit is ready for use again, the upper LED flashes at 2 Hz.
○ If the upper LED does not light, this indicates that the flash was inadequate and the condenser was fully discharged. If you now take your finger briefly from the shutter release when the LED is extinguished, the exposure meter's display on the right-hand side of the viewfinder returns to the preset program mode until the flash unit is recharged and the camera automatically switches back to X. When the flash unit is ready for use again, the upper LED flashes at 2 Hz.

Note: The film speed set on the camera (see page 13) also governs TTL flash-exposure control. Settings on the flash unit are disregarded.
Regardless of the preset program mode, TTL flash-exposure control is always integral. The light reflected by the film is transmitted to a silicon photodiode next to the photocell for the integral/selective exposure-metering modes (see page 14). Though the appearance of the film emulsions used in standard 35 mm film varies, their reflectivity is about the same regardless of type, and this ensures that, as a rule, the exposure is correct. In exceptional circumstances, for example when you use Polaroid instant film, you may have to correct exposure by manual override. Override correction is also necessary when the subject for flash photography consists mainly of light or dark details (see pages 20 and 21).

Caution: Some flash units indicate "flash ready" and automatically switch the camera to X when the flash unit is still only about 70% fully charged. If you use this type of unit for a flash exposure as soon as the "flash ready" sign appears, and the photograph requires the full power of the flash unit, the photograph will be underexposed. It is therefore always advisable in this type of situation to wait a few seconds longer, in order to allow the flash unit to recharge fully before the next flash exposure.

Automatic switching to X
The accessory shoe of the LEICA R-E has control contacts for SCA 300 and SCA 500 system flash units. When the camera is fitted with an SCA 350 or SCA 550 adapter, and when the flash is ready and the camera switched on, its electronic system automatically switches to the X shutter-speed setting of 1/100 s. This happens regardless of the preset program or the position of the shutter-speed setting ring, unless it is set to X, B, or 100.
When the flash unit is ready for use, the LEICA R-E indicates this by the triangular LED in the top right-hand corner of the viewfinder, which flashes twice a second. If the flash unit is not ready or is switched off, the camera automatically resets to the preset program mode.

Conventional electronic flash equipment
As a rule, for exposure with conventional electronic flash equipment, set the shutter-speed setting ring by hand to X, i.e. 1/100 s. This automatically blocks the other program modes.
Synchronized flash is still available when the shutter speed is set by hand within the range from 1/2 to 1/60 s and at the B setting. In automatic operation, flash synchronization is only available if you use a modern thyristor-charged flash unit.

Even if the camera's batteries are flat or otherwise unserviceable, you can still use your camera for flash exposures. To do so, simply set the shutter-speed ring to 100 (see page 22).
However, without the camera's batteries the TTL flash-exposure control in the LEICA R-E cannot work, and in such a case you therefore have to switch the flash unit manually to another suitable operating mode.

Coaxial plug
Any commercially available electronic flash unit and studio flash equipment with a standard coaxial plug is suitable for use with a LEICA R-E. Connect the plug to the X synchronized-flash cable socket (4) on the left of the prism housing. If you use a commercially available multiple-plug adapter, you can connect several flash units to the X socket.
To avoid malfunctioning, do not connect flash units to both contacts at the same time, as their flash voltages are likely to be different, for example without thyristor control.

Hot-shoe contact
Connect conventional electronic flash units to the X hot-shoe contact in the accessory shoe.

Depth-of-field lever
When you use a lens with an automatic diaphragm, the exposure meter of the LEICA R-E works at full lens aperture. Press the depth-of-field lever (6) to close the lens diaphragm to the preset value; when it is in this position, you can visually check the depth of field. This is particularly useful for close-ups.

Caution: To avoid misleading exposure-meter readings, do not press the depth-of-field lever while taking a reading.

Depth-of-field scale on lens
The depth-of-field scale (10) on the lens indicates the depth of field available for the focusing distance at the aperture you have set.
For example, if you focus a 50mm f/2 SUMMICRON® R lens at 5m, the depth of field at stop 11 is from 3m to about 20m. At stop 4, the field is in focus from about 4m to 8m.
The LEICA Depth-of-Field Table 110-57 contains full details of the depth of field available at any focal length.

Self-timer
To set the self-timer, cock the shutter and turn the self-timer button (8) through 30° clockwise in the direction indicated by the arrow. To start the self-timer, gently press the shutter release or the locking button for the program selector; the camera remains switched on and the shutter is released after a delay of about 9 s. To indicate that the self-timer is activated, the LED (3) flashes; about 2 s before the self-timer releases the shutter, the flashing changes to continuous light. Throughout the countdown you can stop the self-timer at any time by turning back the self-timer button (8) to its original position; to prolong it by restarting, simply press the release button again.

Multiple exposures
Take the first exposure, press the rewind-release button (37), and move the quick-wind lever. The same frame is now ready for a further exposure.
At the end of its travel, the quick-wind lever automatically resets the rewind button. To expose the same frame yet again, simply press the rewind-release button (37) each time before you move the quick-wind lever. The Motor-Winder and Motor-Drive also permit multiple exposures. For details, see the manuals supplied with these accessories.

Lens hoods
A functionally designed lens hood is an essential part of every LEICA R-Lens. Use the lens hood whenever you use the camera, because it protects the lens against stray light and glare, rain drops and fingerprints. Most LEICA R-Lenses are supplied with a fixed telescopic lens hood.
Some lenses have a removable lens hood. Fit the hood, white dot against white dot, and turn it clockwise to lock into place. To remove it, raise it slightly and release by turning it anticlockwise. These lens hoods also serve as filter holders for standard filters.

Holding the camera correctly
To give the camera steady three-point support, and for fast focusing and film transport, hold the camera with the right hand, the index finger resting on the release button (4) and the thumb inserted behind the hinged-out quick-wind lever, while the left hand supports the lens from below.

For upright (portrait) exposures, simply turn the camera through 90°, with your hands in the same position as before, ready to transport the film and focus the lens.

Construction of LEICA R-Lenses
The layout of the controls is standard for all LEICA R-Lenses fitted with an automatic diaphragm. This ensures that no matter what focal length you use, the left hand can work fast and reliably. These controls are the aperture-setting ring (12), the fixed depth-of-field scale (10), and the focusing ring (9).

Automatic spring-back diaphragm
Most LEICA R-Lenses have an automatic spring-back diaphragm, i. e. before and after exposure the viewfinder image is always at full aperture and thus at maximum viewfinder brightness. Just before the exposure or when you press the depth-of-field lever, the lens diaphragm closes to the preset value.
Some LEICA R-Lenses do not have an automatic diaphragm. These are the 28 mm PC-SUPER-ANGULON®-R f/2.8, 35 mm f/4 PA-CURTAGON®-R, the 400 mm f/6.8 TELYT®-R, the 500 mm f/8 MR- TELYT-R, the 560 mm f/6.8 TELYT-R, and the 800 mm f/6.3 MR-TELYT-S. See page 18: Using the exposure meter at working aperture.

Using existing LEICA R and LEICAFLEX lenses and accessories
All lenses and accessories for LEICA R cameras can be used without modification with the LEICA R-E.

To avoid damaging the camera body of your LEICA R-E, do not attempt to use it with lenses and accessories for LEICAFLEX® models without a control cam. To use your LEICAFLEX lenses with the LEICA R exposure-meter system, you can have them fitted with a control cam (see illustration) at any time. You can continue to use such modified lenses and accessories without restriction on all LEICAFLEX models.

LEICA M lenses on the LEICA R-E
You can use the LEICA R-E with any lens of the LEICA M range which is suitable for the VISOFLEX® adapter. The operating conditions, such as focusing distance and object field obtainable, are the same as those that apply to the use of these LEICA M lenses with the VISOFLEX. A special adapter (Order N° 14167) ensures compatibility of these two LEICA 35 mm camera systems, but because these lenses have no automatic diaphragm, the exposure meter has to use the working aperture (see page 18).

Filters
Any LEICA R lens with a fixed telescopic lens hood is suitable for screw-in and standard filters. For standard filters, a filter holder must be used. These are available as optional accessories.
Generally, screw-in filters are preferable, because they are easy to use. This applies particularly to circular polarizing filters. Removable lens hoods also serve as filter holders for standard filters. First insert the filter in the lens hood, then attach the hood and filter to the lens (not applicable to the 19 mm f/2.8 ELMARIT®-R lens). The 24 mm and 28 mm f/2.8 ELMARIT-R and the 35 mm f/4 PA-CURTAGON-R have a

turning mechanism for turning circular polarizing filters.

Screw-in filters and filter holders are easy to remove. To prevent strain on the filter, hold it on one side only and unscrew.

Filters and their use
In TTL systems, the exposure meter automatically takes into account the reduced amount of light absorbed by the filter in use and that still passes through the lens, but sensitivity in various parts of the spectrum may vary according to the type of film emulsion used. Extreme and dense filters may therefore cause deviant readings. For example, an orange filter as a rule needs about one extra stop and a red filter an average of about two stops more than the exposure-meter reading obtained. However, the red sensitivity of black-and-white film can vary widely, and no generally applicable values can be given.

In the case of the circular polarizing filters we supply for LEICA lenses, determine the exposure as you would do with any other filter, in either integral or selective mode. The high-efficiency multiple coating on the semi-transparent swing mirror of the LEICA R-E acts as a powerful polarizing surface. As a result, the use of linear polarizing filters is not advisable, because their positioning to inhibit and transmit light may seriously affect the accuracy of the exposure meter.

Hints on the care of your LEICA R-E and its lenses

Carefully remove dust and fluff on the mirror by means of a soft, dry sable brush from which you repeatedly remove any grease with ether before and during cleaning. For cleaning, the brush must be perfectly dry. Avoid mechanical damage to the focusing screen: do not allow the metal ferrule of the brush to touch the screen.

To avoid forcing dust into the camera's interior, do not blow into the mirror chamber.

To remove dust on external lens surfaces, carefully use a soft sable brush or a clean, dry, soft cotton cloth. Do not use spectacle-cleaning tissue or cloth impregnated with chemicals that may attack the glass of your camera lens; the composition of glass used for spectacles is different from that of high-performance camera lenses.

In unfavourable conditions such as the seaside, a colourless ultraviolet filter protects the front lens from damage by seawater spray, sand, etc. Although such a filter is optically flat, it forms an additional pair of surfaces which at a certain angle of incidence may cause unwanted light reflection in the image, particularly in photography against the light and with high-contrast subjects. Do not use a filter in such conditions; the lens hood also provides some protection against fingerprints and raindrops.

When pointed at the sun, a camera lens acts as a burning glass. To protect your camera, always use a lens cap, keep the camera in its bag, and place it in the shade.

In addition to its designation by type and model, each lens has a serial number. Make a note of the serial numbers of all your lenses and of your camera (on the camera baseplate); this information may be important in case of loss.

MOTOR-WINDER R
MOTOR-DRIVE R

A MOTOR-WINDER R or MOTOR-DRIVE R fitted to the LEICA R-E automatically transports the film and cocks the shutter after each exposure. The Motor-Winder transports the film at up to 2 frames per second. The Motor-Drive can be set for single exposures, 2 fps, or 4 fps. Either unit is suitable for all shutter speeds available on the camera. The Winder is powered by six standard NiCd rechargeable batteries or non-rechargeable alkaline batteries; the drive requires ten such batteries.

MOTOR-WINDER R, (Order N° 14208)
MOTOR-DRIVE R, (Order N° 14310)

The handgrip with its adjustable leather loop lets you hold the LEICA R-E with Motor-Winder or drive more securely and more comfortably.

Handgrip (Order N° 14308)

RC LEICA R electronic Remote-Control unit

This handy electronic remote-control shutter release for the LEICA R-E has a digital frame counter that indicates each exposure by feedback from the camera. The RC LEICA R also acts as a timer for sequences of exposures at preset time intervals, from about two exposures a second to an exposure about every ten minutes. You can fit the RC LEICA R electronic remote-control unit to a Motor-Winder R or a Motor-Drive R.

RC LEICA R Remote Control (Order N° 14277)

DB-2 LEICA R Databack

The DB-2 LEICA R databack is a quartz- and microprocessor-controlled camera back for projecting data on the film during exposure. It is interchangeable with the standard LEICA R-E camera back supplied. No cable link is necessary between camera and databack.

The following data can be projected into the lower right hand corner of the frame:

- Day, hour, minute
- Automatic calendar to 31 December 2099, with day, month, and year in any preferred order
- Any six-digit figure
- Automatic numbering of exposures, in ascending or reverse order

DB-2 LEICA R Databack (Order N° 14216)

Camera cases

Two ever-ready cases are available for the LEICA R-E, one with a standard front flap and one with an extra long front flap. To detach the front flap, slide up the press stud at the back of the case to unlock. These cases are suitable for use with the following lenses:

	Standard ever-ready case (Order N° 14510)	Ever-ready case with long front flap (Order N° 14515)
16 mm f/2.8	–	yes
19 mm f/2.8	–	without lens hood
21 mm f/4	without lens hood	without lens hood
24 mm f/2.8	without lens hood	without lens hood
28 mm f/2.8	without lens hood	yes
35 mm f/2	yes[1]	yes
35 mm f/2.8	yes[2]	yes
35 mm PA f/4	without lens hood	yes
50 mm f/1.4	yes	yes
50 mm f/2	yes	yes
60 mm f/2.8	–	yes
80 mm f/1.4	–	yes
90 mm f/2	–	yes
90 mm f/2.8	–	yes
35 mm to 70 mm	–	yes

[1]) from serial No. 2791417
[2]) from serial No. 2928901

In addition, there is a wide choice of combination bags for camera outfits that include several lenses and various accessories.

Interchangeable lenses

The LEICA R system provides perfect solutions for any photographic problem, whatever the task or situation. There is a large choice of lenses, from fisheye to zoom and shift lens, from distortion-free 15 mm ultra-wide-angle to 800 mm telephoto.

Spare parts for your LEICA R-E

Protective cap to bayonet fitting of camera	14103
Carrying strap	14253
Flash-contact cap	14315
Universal focusing screen	14303

Focusing screens

Plain ground-glass screen	14304
Microprism screen	14305
Ground-glass screen with superimposed grid and TV marking	14306
Clear-glass screen with central cross-lines	14307

Enlargers

When you use a superb camera like the LEICA R-E, the reproduction equipment should match the camera's quality and performance. The LEICA FOCOMAT® V 35 autofocus enlarger is the perfect complement to your LEICA R-E.

Projectors

For your LEICA R-E slides there is a comprehensive range of versatile, easy-to-use projectors, with a large choice of options. The LEICA P2000 PRADOVIT and the LEICA P150, LEICA P155, and LEICA P255 offer total user convenience and a versatile range of optional modules.
Superb optical performance in combination with traditional Leica precision mechanics are the common denominator of all LEICA projectors.

Binoculars

Superb optics are the most outstanding single feature of all LEICA Binoculars. They are made of the same high-grade optical glass as the world-famous LEICA lenses. Their brilliant optical performance and exceptional resolution ensure that you obtain a vivid three-dimensional image even in poor light.

Technical service

Your authorized Leica agent's Technical Service (see warranty card) is available for servicing your camera and carrying out repairs in case of damage. Please contact your nearest authorized Leica dealer.

Technical data

Camera type: Electronically controlled 35 mm single-lens reflex camera with automatic shutter.

Lens mount: LEICA R-Bayonet.

Lenses: Choice of more than thirty LEICA R-Lenses with focal lengths from 15 mm to 800 mm.

To switch on the camera, press the shutter-release button, the locking button to the program selector, or the battery-test button. To indicate that the camera is switched on, the LEDs in the viewfinder light and the exposure meter works. When the shutter is cocked, they remain lit for about 12 s after you release whatever button you have pressed to switch on the camera.

Exposure meter: Selective and integral through-the-lens modes, functions linked to programs. Exposure meter works at full aperture with LEICA R-Lenses with automatic spring-back diaphragm, and at working aperture with lenses and accessories without automatic spring-back diaphragm.

Photocell: Silicon photodiode, protected from stray light in lower part of camera. In selective mode, the program selector automatically places a condenser lens in front of the photodiode.

Selective exposure metering: Measuring field 7 mm diameter, marked in viewfinder. In automatic shutter programs, press shutter-release button to pressure point to store exposure value in memory for up to 30 s.

Integral exposure metering: Centre-weighted mean of full-field measurement.

Measuring range of exposure meter: Selective mode from 1 cd/m² to 125 000 cd/m² at f/1.4, i. e. from Ev +3 to +20 for ISO 100/21° film, or from 1/4 s at f/1.4 to 1/2000 s at f/22.
Integral mode from 0.25 cd/m² to 125 000 cd/m² at f/1.4, i. e. from Ev +1 to +20 for ISO 100/21° film, or from 1 s at f/1.4 to 1/2000 s at f/22.

Exposure-metering modes: Program-selector switch. Shutter speed set automatically, with selective and integral modes; and manual setting of shutter speed and aperture, in selective mode only:

- Aperture Priority, selective mode.
- Aperture Priority, full-field integral mode.
- Manual setting of shutter speed and aperture, selective mode.

Exposure override: From +2 to −2 exposure values, with click-stops for steps of one-third of an exposure value. The viewfinder display warns when override is in use.

Film-speed range: ISO 12/12° to ISO 3200/36°.

Power supply: Two silver oxide button cells or lithium cell. Press test button to check battery voltage.

Viewfinder system: Built-in pentaprism. Five interchangeable focusing screens.

Viewfinder eyepiece: Setting ring for adjustment from +2 to −2 diopters. Built-in eyepiece shutter. Eyepiece mount for supplementary correction lenses, eyecup, and 90° viewfinder attachment.

Viewfinder field: 23 mm x 34.6 mm, i.e. 92% of frame size.

Viewfinder magnification: 0.8x at 0 diopter with 50 mm lens.

LED displays in viewfinder, depending on program: Program symbol indicates preset program, exposure value (shutter speed), "flash ready" and TTL flash-exposure control when camera is used with system-compatible flash equipment; when the exposure value is stored for aperture priority, the symbol is extinguished but the shutter speed continues to be displayed.

Data displayed in viewfinder, depending on program: Set aperture, set shutter speed.

LED warning indicators in viewfinder: Override, overexposure, underexposure, low-light warning; shutter setting to X, B, or 100 (exposure meter inactive).

Electronic flash synchronization: Standard X coaxial contact socket adjacent to prism housing, for bulb and electronic flash units. Central X hot-shoe contact.

TTL flash-exposure control, with automatic switching to X: With electronic flash units designed for system 300 or 500 camera fittings, i.e. SCA 300/500 dedicated flash units with SCA 351/551 adapters, flash exposure is measured through the camera lens and the shutter is set automatically to X, i.e. 1/100 s, when the flash unit is ready. "Flash ready" and flash-exposure control are indicated by flashing LED in the viewfinder and the display of the shutter speed is switched off.

Override of automatic exposure control: Two additional stops above and below 0, in steps of one-third of a stop, with click-stops; simple one-hand control. Viewfinder displays override warning.

Automatic switching to X: With electronic flash units designed for system 300 and 500 camera fittings, i.e. SCA 300 dedicated flash units with SCA 350 and SCA 550 adapters, the camera's electronics automatically switch the shutter to X, i.e. 1/100 s, when the flash unit is ready. "Flash ready" and flash-exposure control are indicated by a flashing LED in the viewfinder and the display of the shutter speed is switched off.

Manual shutter-speed settings for synchronized flash: X = 1/100 s set mechanically, electronic shutter release. 100 = 1/100 s set mechanically, mechanical shutter release. All shutter speeds from 1/2 s to 1/60 s and B set manually. B = time exposure of any length.

Photocell for TTL flash-exposure control: Silicon photodiode, next to photocell of exposure meter, protected from stray light in lower part of camera.

Film-speed range for TTL flash-exposure control: ISO 12/12° to ISO 3200/36°.

Shutter: Electronically controlled metal-blade focal-plane shutter, vertical action.

Electronically computed shutter speeds: For automatic programs continuous from 15 s to 1/2000 s. Manual settings at predetermined intervals from 1/2 s to 1/2000 s.

Mechanical shutter-speed settings: X = 1/100 s for synchronized electronic flash, B for time exposure of any length, 100 (orange) when batteries are unserviceable.

Swing-mirror system: Semi-transparent swing mirror coated with 17 layers by vacuum deposition, reflects 70%

and transmits 30% light, backed by Fresnel reflector for selective and full-field integral modes; Fresnel reflector consists of 1345 micro-reflectors that concentrate light on exposure meter's photocell. Vibration-free mirror action.

Film transport: Single-movement quick-wind lever (130° movement), optional Motor-Winder R (2 fps) or Motor-Drive R (single frame, 2 fps, 4 fps).

Film plane: Mark at top of camera.

Exposure counter at top of camera. Counts up from start at S (frame – 2) to 36; film length for 20, 24, and 36 exposures marked in red. Automatic reset when camera back is opened.

Multiple exposures: Press rewind locking button. Automatic reset when shutter is cocked; exposure counter does not move on. Any number of exposures possible. Multiple exposures also possible with Motor-Winder/Drive.

Rewind lever: Hinged crank at top left of camera.

Shutter release: Shutter-release button with standard thread for cable release. Press down 0.3 mm to first pressure point to switch on: viewfinder LEDs light, exposure meter works. Press down 1 mm to second pressure point to store selective measurement of exposure value in automatic mode. Press down 1.3 mm for electromagnetic shutter release for electronically computed exposures and X (1/2000 s). Press down 2.25 mm to release by mechanical action: for mechanically set exposures, B, and 100.

Electromagnetic self-timer: About 9 s delay; flashing red LED on front of camera indicates that self-timer is set.

Camera body: Die-cast aluminium, camera top 1 mm die-cast zinc, bottom panel 0.8 mm brass. Camera back with right-hand thumbhold and film-cartridge window (shows type and speed of film in use), interchangeable with databack. Electric contacts for DB-2 LEICA R Databack. Lever at right of lens mount for visual check of depth of field. Standard 1/4" A thread for tripod screw. Eyelets at sides for carrying strap. Mechanical contact for Motor-Winder R or Motor-Drive R. Black chromium finish.

Dimensions and weight (camera body only, without lens): 89.1 mm (3.5") high, 138.5 mm (5.5") long, 32.2 mm (1.25") deep (camera body only; total depth 63.5 mm/2.5"); weight 625 g (1lb 6oz).

Alphabetical