



ERNST LEITZ GMBH WETZLAR

THE *Leica* M 3

INSTRUCTION BOOK

LEITZ

WETZLAR

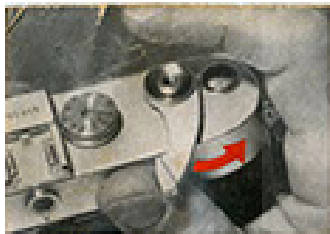
Printed in Germany

K. W. Schmidt, Wetzlar

Anderson's 965 4500

Old's Camera Costa Mesa

714-446-9313



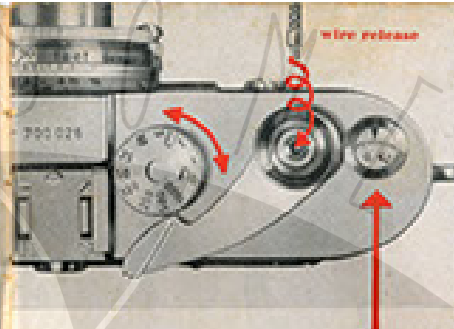
The Film Transport and Shutter Winding Lever

Hold the camera steady in both hands, the rounded ends of the take resting in the palms while the thumbs are at the back of the camera body. Move your right thumb sideways to the right to shift the lever against its stop. Repeat this full lever movement, then allow the lever to recede slightly. This double movement transports the film across

the negative frame for the next exposure while the focal-plane shutter is wound at the same time, thus obviating the danger of double exposures. The method of using two short lever movements is advantageous in that it ensures smooth and safe advance of the film while being more rapid in operation than other devices.

The Shutter Release

Gently press the flat release button which is conveniently situated at the pivot of the film transport lever, using the tip of your right forefinger and avoiding camera shake. The shutter itself then runs very smoothly. Relieve pressure on the button before operating the film transport lever and winding the shutter for the next exposure.



Wire release

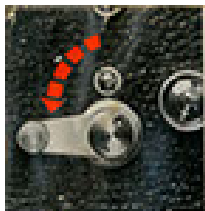
The Shutter Speed Dial

controls the time of exposure. The dial engravings stand for 1 second and fractions of a second. For instance $5 = \frac{1}{5}$, 100 = $\frac{1}{100}$, 1000 = $\frac{1}{1000}$ second. The dial has click stops at the various speed settings and remains stationary so that speeds can be set before or after the shutter has been wound. At the setting "B" the focal-plane shutter remains open for time exposure as long as the release button is pressed. Long time exposures should, of course, only be made with the camera firmly supported (see page 22) and with a wire release with fixing screw and tapered thread fitting the female thread in the centre of the release button.

The Exposure Counter

A brief check shows that the dial of the exposure counter (up to 40 exposures) automatically records every shutter release and returns to its initial position (2 markings below zero) when the take-up spool is removed from the camera for reloading.

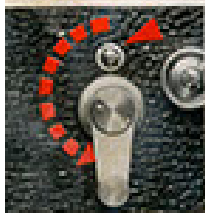
3



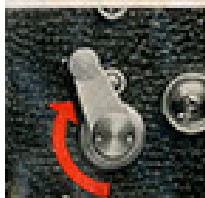
approx. 1 sec. delay

The Delayed Action Release (Self-timer)

Wind the shutter and turn the small lever at the front of the camera body downwards. Do not use the main release on top of the camera but press the small knob above the lever; when the operation of the clockwork delay mechanism will be heard. Meanwhile the lever slowly moves upwards and eventually releases the shutter. Even if the shutter movement is not heard, the moment of exposure can still be observed by noting when the lever returns to the original upset position.



approx. 10 sec. delay



delayed release

The delayed action release operates through all shutter speeds from 1 - $\frac{1}{1000}$ sec. The delay before the shutter is released can be varied between approximately 5 and 10 seconds depending on the lever adjustment. 5 seconds are obtained from the horizontal lever setting and 10 seconds from the downward vertical position.

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Preparing the Lenses for Action

The interchangeable lenses ELMAR 50 mm, SUMMICRON 50 mm and one form of the ELMAR 75 mm can be partially pushed into the camera body for greater comfort in carrying when not in use. To position these lenses for taking, pull out the barrel as far as it will go and lock securely by turning to the right. The focusing mount of the collapsible 50 mm ELMAR will not operate until the pulled out barrel is properly locked. (A slight left-turn will free the lens barrel for pushing in.)

Use a lens cap whenever the camera is not in action but do not forget to remove it when you are going to make a shot.

All modern LEICA lenses are effectively anti-reflection coated noticeable by a bluish sheen (through the colour in itself is not a measure of effectiveness). Coating adds to the light-transmitting power of the lens and enhances contrast, at the same time eliminating the danger of undesirable internal reflections.

Note: Every genuine LEICA lens bears the name of its maker and an individual serial number which should be kept for reference together with that of the LEICA body since the factory and LEITZ agents keep a check on numbers and can help in the recovery of equipment in the case of loss.

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The Aperture Iris Diaphragm

When holding a LEICA lens towards the light and actuating the aperture scale you will notice the opening and the closing of the diaphragm varying the aperture of the lens just as the iris of the human eye adapts itself to the prevailing lighting conditions. In bright light, ample exposure is obtained with the lens stopped down but when lighting conditions are poor, the diaphragm has to be opened to the appropriate degree. A second function of the adjustable aperture diaphragm is the regulation of depth of field according to requirements (see pages 8-10).

The aperture of f-numbers 2, 2.8, 4, 5.6, 8, 11, 16, 22, 32 (the range of this scale depends on the type of lens) indicate the amount of light reaching the film at the various lens stops. They are so arranged that the illumination on the film, when stopping down from one figure to the following higher one on the scale, is decreased to one half, one quarter, one eighth etc.

Conversely, on opening the aperture diaphragm and setting it to progressively lower f-numbers the illumination will be increased to double, four times and eight times, and so on, compared with that provided by the initial setting. Hence, the transition to higher f-numbers approximates longer exposure times and vice versa. The aperture scale has click stops, facilitating adjustment in poor light or even in darkness, as in some flash photography.



Distance Scale

The focusing mounts of several LEICA lenses are fitted with a catch at the infinity (∞) setting which, before focusing at shorter distances, has to be released by pressure on a knurled button. The infinity catch is incorporated in the focusing lever of the following lenses:

- 35 mm SUMMARON,
- 50 mm ELMAR,
- 50 mm SUMMICRON,
- 50 mm SUMMARIT.

An infinity catch is also provided on the new collapsible 50 mm ELMAR, but it takes the form of a press button in the milled focusing ring.

Never forget to pull out and lock the lens (by a clockwise turn) before focusing (see also page 5).

A distance scale (graduated in either feet or meters) moves about a fixed index and although, in the normal course of events, it is not necessary to consult the scale — correct focus being automatic by means of the coupled rangefinder — it plays an important part in the advantageous use of the depth of field scale (see pages 8-10). The "R" index is used when taking photographs on infrared film.



Catch locking the lens at the infinity setting



Releasing the infinity catch for focusing

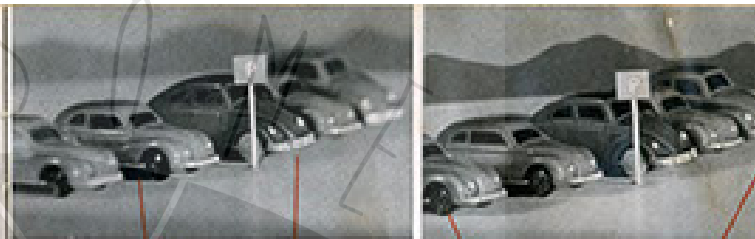
The Depth of Field Scale

Optimum sharpness exists only in the plane to which the lens is actually focused and which is parallel to the film. The decrease of sharpness in front of and behind this plane is, however, gradual so that there is a certain depth of field in which subjects are acceptably sharp. The range of this depth of field varies with the focal length of the lens, the distance to which it is focused, and the lens stop used.

Average photographic subjects are three-dimensional and one of the essential factors for successful results is to select a stop to provide the depth of field the subject demands.

The LEICA lenses are made with depth of field scales symmetrically engraved on either side of the index for the distance scale and bearing the usual aperture (f) numbers.

The depth of field is that range read off the distance scale between the two index marks with the same f-number. If, for example, the 50 mm SUMMICRON lens is focused on 15 feet, acceptable sharpness will extend from approximately 11½ to 22 feet at f/5.6 and from approximately 9½ to 28 feet at f/11.



To make clearer the effect of stopping down as regards depth of field, comparative examples are given in three illustrations, for which the distance setting is 15 feet, i. e. the parking sign. In the first photograph, the lens stop is f/5.6 and in the second f/11. Scales under each illustration indicate the corresponding depth of field limits.

General Rules for the Use of Lens Stops

- (1) For long distance views without foreground interest set lens to infinity (∞) and stop down to f/5.6 or f/8.
- (2) For landscapes with foreground mostly requiring a considerable depth of field, focus lens to the near and far points that are required sharp and move the distance scale in such a way that both distance figures ascertained register with the same stop number on the depth of field scale. This stop and the distance setting thus arrived at are the most favourable ones to use.
- (3) For architecture and interiors the same procedure can be employed as recommended under (2). Small lens stops will be found essential in most cases.
- (4) For portraits use lens at full aperture or only slightly stopped down and focus accurately on the eyes. The subject, then sharply defined, will tend to stand out, the background being softened by diffusion.
- (5) For action shots, when events do not allow accurate focusing, use a "fixed-focus" setting.

Examples:

Near range: stop down to f/8 and set lens to 10 feet; the depth of field then extends from approximately 8—15 feet.

Far range: stop down to f/8 and set lens to 25 feet; the depth of field then extends from approximately 14—60 feet.

Optimum sharpness is not a matter of stops alone but is also dependent on accurate focusing. Therefore, always focus carefully on the centre of interest of the subject. The measuring bright-line viewfinder (see next page) makes it easy for you.

Explanatory Notes on Rangefinding

The functions of the rangefinder, coupled with the lens adjustment, are most easily and quickly understood by practising sighting, through the large eyepiece, a subject with clear vertical features and not too far away. A bright sharply defined rectangle seen in the centre of the large viewfinder field then shows, as long as the lens is not in focus, two images of the object side by side. On focusing the lens by adjusting its helical mount (after the infinity catch has been released) the image on the left will be seen moving towards the stationary one. Accurate focus is reached when these images fuse into one. This procedure can also be checked by observing the parts of a vertical line of similar characteristic of a subject in the actual viewfinder field above and below the rectangular measuring field and adjusting the lens until the second movable image-position in the measuring field forms a straight



line with the upper and lower portions. These two methods are known as the coincidence and split-image principles. When full coincidence of the two rangefinder images is reached within the measuring field the subject distance has been optically measured and the lens focused to this distance simultaneously. Lowering the camera, you can, if necessary, also read off the actual distance on the scale of the lens.

The Use of the Coupled Rangefinder

should be practiced before the camera is loaded and the first photographs are taken. To facilitate becoming familiar with the measuring finder operation, select distinct objects on which to focus such as the edges of furniture, the corners of buildings, lamp posts, tree trunks, steeples, etc. If the moving rangefinder image does not at once appear in the rectangular measuring field turn the camera (when held horizontally) slightly sideways. Also make sure that you are not inadvertently covering one of the front windows of the rangefinder, especially the small window on the right. It can, however, intentionally be blocked when the entire field of the rangefinder is to be used for most critical observation of the entire subject.

When holding the LEICA for vertical photographs a slight tilt of the camera will bring the moving second image into the measuring field and allow the same manipulation as above. For rangefinder practice in this camera position it is preferable to choose subjects with clear horizontal features.

(The unique design of the measuring bright-line viewfinder excludes the risk of faulty measuring and focusing even when looking obliquely through the eyepiece.)

The Use of the Bright-Line Viewfinder

which is combined with the rangefinder for determining the field recorded on the negative, is made easy by the clearly defined bright-line frame. Even in the case of the large frame for all 35 mm lenses there is additional surrounding field area making this frame stand out even more brilliantly in the exact limit of the picture area. Oblique viewing through the eyepiece has no adverse effect upon the true determination of the field.

Parallax Compensation which is necessary in view of the separation of the optical axis of the lens and the viewfinder requires extra manipulation in most cameras but is a fully automatic feature of the bright-line frames of the LEICA M3.

The bright-line frame always indicates exactly the extent of the subject as it will fill the negative, no matter what the distance setting of the lens may be. You will appreciate how much this simplification contributes towards the prevention of failures.

Full Observation with the Measuring Bright-Line Viewfinder

In addition to the features already outlined as regards accuracy and convenience in measuring and image assessment, this special part of the camera looks through the brightness of its field of view and the brilliance of its field frames. These enable the camera to be used successfully also for work under poor lighting conditions and for the most diverse subjects.

The additional area seen outside the viewfinder frames will not be recorded on the negative but is most advantageous for anticipating possible interferences in the selected subject field by pedestrians, motor cars, etc. Therefore, this type of optical finder also offers the special advantages hitherto expected only from mechanical sports or frame finders. It surpasses these, however, in that even oblique observation through the eyepiece does not give a wrong impression of the field covered by the negative. For users with defective eyesight screw-on correction lenses are available.

The almost natural size in which the subject is seen through the viewfinder enables the camera user to watch the scene with both eyes without the confusion that would be caused by the noticeable diminution of many camera viewfinders.



This is how the subject appears in the bright-line viewfinder when the 35 mm lens is in position



The Interchangeable Lenses of the LEICA M3

A complete range of interchangeable high quality lenses from 35 to 400 mm focal length and with apertures as wide as f/1.5 is available in choice from the heavy equipment. This equipment makes the LEICA truly successful as image working distance, subject selection and perspective rendering, quite apart from offering almost complete independence of lighting conditions. Although you may have acquired a heavy camera with only the possibility of building up an even more versatile outfit will be appreciated in the more varied fields of photography an extended, Varose type of

LEICA lens you use in your LEICA M3 equipment, you can be sure that is the outcome of the most sophisticated optical research and advanced production methods.

Here is the complete range:

ELMAR	50.5 35mm	SUNSHADOW	115.5 55mm
SUNSHADOW	75 35mm	ELMAR	75 35mm
SUNMARKET	75.5 35mm	HEXCON	145 135mm
HEXCON	294 125mm		
HEXCON	145 125mm	With screw-thread	
TELYT	145 200mm	fitting the VEROPLEX	
TELYT	50 400mm	flangeless housing	

Changing the Lens

has been made easy for the user of the LEICA M3. The camera is held in the left hand, the thumb pressing the circular button of the bayonet lock; the right hand, holding the lens mount close to the camera body, meanwhile imparts a slight anti-clockwise turn until the red dot on the rear of the lens mount is opposite the lock. The lens, which should be kept locked in its infinity catch during this operation, is now freed for removal.

When attaching a lens, always fit it to the camera body with its red dot exactly opposite the one by the locking button and give the lens a short clockwise turn when it will click into position. Lenses should not be interchanged in strong light. Turn away from the sun or an artificial light source and work in the shadow of the body. When carrying extra lenses, fit a lens cap over the front and a rear dust cover to protect the precision coupling mount.



**Automatic
Viewfinder
Adjustment
for 90 and
135 mm
Lenses**

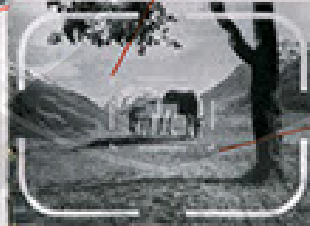


The illustrations on the preceding page show the viewfinder image with the additional bright-line frame in position and the magnification effect produced by a 90 mm lens while the viewfinder arrangement and the effect with the 135 mm long-focus lens are shown below and on the right.

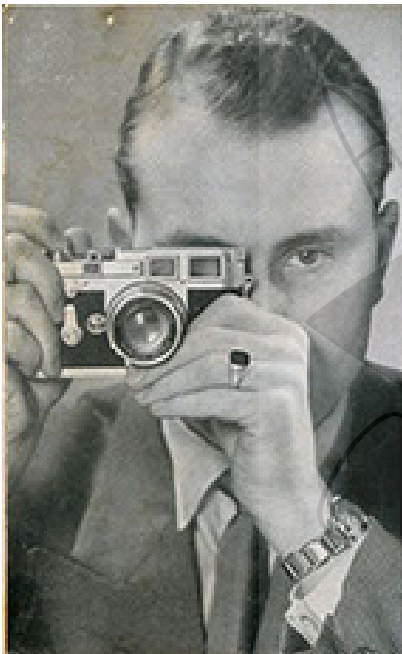


Fit a 90 or 135 mm lens to the camera in place of the 50mm standard focal length (as described on page 17) and check the viewfinder.

In addition to the permanently visible 50 mm frame, you will see a smaller bright-line frame for the field covered by the longer focal length lens fitted. In either case, the additional surrounding field enables possible overexposure of the subject field to be noticed in time, thus helping to prevent wasted exposures.



Parallax is automatically compensated as in the case of 50mm lenses. Unlike cameras with attachable viewfinders requiring manual parallax correction and field adjustment the LEICA M3 excludes failures caused by forgetfulness or wrong settings. The appropriate field of view frame is always reflected into the viewfinder field and is adjusted for parallax entirely automatically.



Holding the LEICA

Grasp the camera body with the right hand so that the rounded end of the handle fits in the palm. The forefinger should rest lightly on the shutter release button.

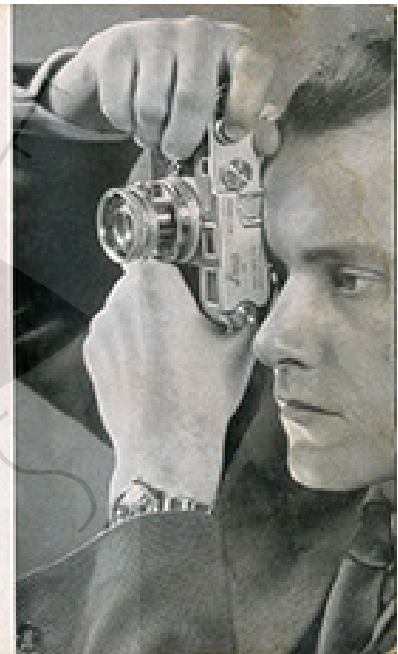
The other end of the camera is gripped in the left hand with the forefinger on the focusing lever of the lens. Hold the camera steadily against the head with the eyepiece as close as possible to the right eye, while the left eye may be kept open for a general assessment of subject positions. Press the elbows to the chest and stand with feet well separated to avoid all vibration or shake to the camera. This is an essential requirement for negatives of optimum sharpness and the full utilization of the high-grade lenses. Also make sure, when releasing the shutter, that the camera does not give way to the pressure but remains firmly cupped in the hair of the right palm. For the beginner it is not advisable to make use of longer exposures than 1/25 sec. without a firm support (preferably tripod) since otherwise blurred pictures might be the result.

If preferred, the camera can also be operated successfully with the left eye held close to the eyepiece, instead of the right.

When a change-over from horizontal to vertical pictures is desired, turn the right hand end of the camera upwards around the axis of the viewfinder. The holding method thereby remains practically unchanged, with the film transport lever remaining fully accessible. For vertical photographs, an alternative holding technique with the left eye close to the eyepiece can be adopted whereby the camera can rest even more rigidly on the forehead.

Another possibility for vertical operation is to lower the right hand end of the camera around the viewfinder. Though in this case the prism will have to be operated by the right thumb and the transport lever will be less accessible.

Unlike other cameras, the LEICA M3 always remains in the eyepiece shooting position whilst the film is moved on and the shutter wound by quick double lever-action.



Slow Speeds and Time Exposures

Taking photographs is simple, and even simpler with the LEICA M3. Yet it should always be borne in mind that miniature negatives are normally exposed in anticipation of considerable enlargement. Although you may be sure that your LEITZ lenses are capable of unrivalled sharpness, this can only be turned to good account provided the camera is always kept steady during the release of the shutter.

Whenever time exposures have to be made, place your camera on a rigid tripod, preferably fitted with a strong ball-and-socket head. With considerable practice, hand-held exposures at such speeds as 1/16 and 1/32 sec. may be made but, even so, some firm support for the camera (such as a chair back, a table or a tree) is essential. With a little ingenuity reasonably reliable methods to avoid camera shake (in the absence of a tripod) will be found indoors and out of doors.



Viewfinder

The Viewfinder Case

Insert the LEICA M3 with a 90 mm lens or a detachable lens BGM38 a lens hood (purchased on its own) and an exposure meter attached in the working position. The apparatus is held securely in the case by means of a rotating screw with female tripod thread contacts. This case effectively protects the camera against the weather and prevents damage by knocks and yet enables the camera to be used instantly.



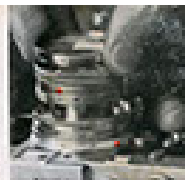
Filters

Filters improve the colour rendering in black-and-white pictures. A complete range of filters is at your disposal. Cloud filters are obtained that by remove the average blueness. Polarising filters are also available in the LEICA lens set, without having adverse colour effects, largely eliminate disturbing glare when photographing glass, water or polished surfaces at oblique angles to the sun. Also, contrast in a cloudy sky is pleasantly emphasized. All lenses of the LEICA M3 take screw-in filters fitting to the front element.

Lens Hoods

are important accessories for photographs of maximum clarity and brilliance only essential when the front of the lens is protected from strong light coming from outside the actual subject area. Also, the lens must be protected from rain or snow which settles on the surface will obviously cause image distortions. Therefore, effective lens hoods designed for constant in carrying and handling are essential for all lenses.

To fit the hood to the lens, hold it with the tabular part in your palm and push it onto the raised rim of the lens while the spring buttons are pressed down. On releasing the hood will be securely held in position by the spring buttons. This hood does not obstruct the use of screw-in filters.

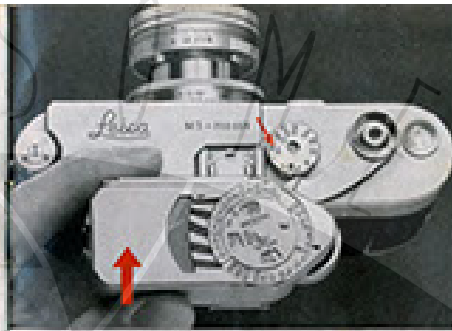




Before slipping the LEICA-METER into the accessory shoe of the LEICA M3, set the shutter speed dial to "B" and rotate the knurled control of the exposure meter anti-clockwise (when viewed from above) as far as it will go. The index line on the control dial registers with a similar index on the meter housing. Then push the knurled control to its end upwards and continue in the anticlockwise rotation. One of the spaces between 4 and 500 will then appear opposite the triangle marking on the instrument indicating full seconds for film exposures when the exposure meter will not engage the shutter speed dial.

The LEICA-METER M

is a new exposure meter which attaches to the accessory shoe of the LEICA M3 at the same time coupling with the shutter speed dial so that measuring the exposure time and setting the shutter speed are a single operation. The features and the application of the LEICA-METER M, which can also be used independently of the LEICA M3, are fully outlined in special directions issued by the manufacturers, Metallwerk A.G., Nuremberg.

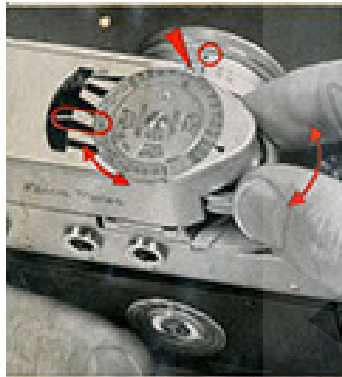


By using the LEICA-METER M features due to wrong exposures, especially in the case of colour photography, will be avoided. With black-and-white film, uniform well-exposed negatives will be the basis for enlargements of the best quality.

After the necessary preliminaries slip the LEICA-METER into the accessory shoe of the camera with the hinged cover with narrow slot facing the subject. Then turn the knurled control clockwise again until it audibly settles into the groove of the shutter speed dial. Camera and exposure meter are thereby coupled and ready for use.



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The LEICA-METER M must be adjusted to the speed rating of the film material used before measurements are carried out. As to sensitivity, 3 measuring ranges are provided. The instrument itself has two ranges while a third can be introduced by an attachable amplifier (for details see separate directions). The LEICA-METER is always ready for measurements in bright light. Hold the camera and exposure meter towards the subject and adjust the knurled control until the selected stop number (f-number) on the black scale of the instrument comes opposite the black or white channel against which the pointer registers. When the pointer is brought into relation with a particular stop number, the shutter speed has been set automatically (see that lens aperture. A slight correction to make the speed dial click into its nearest speed setting may be required.)

In poor light the measurement pointer may remain stationary. Then the full sensitivity screen of the photocell may be used for a 100 times amplification. To open the photo-cell cover, slightly press the side of the largest front cover in the direction of the red arrow and proceed in the same manner as above but making readings from the red stop number scale only. When the instrument indicates longer exposures than 1 sec. it automatically disengages the shutter speed dial to allow the appropriate time exposure. The attachable amplifier increases the sensitivity a further four times.



Choice of Negative Material

Film manufacturers in all parts of the world offer perforated 35mm film for the LEICA Camera. Suitable material can be obtained in several forms:

Daylight Cartridges, containing a length of film for 36 or 20 exposures 24 x 36mm in a lightproof shell, can be loaded into the camera in daylight, the special M3 cassette not being required in this instance. (All colour films are supplied in this form.)

Daylight Spools offered for the same number of photographs have their length of film wound on to a centre spool and covered with a black paper leader so that they can be placed in the M3 cassette in daylight.

Darkroom Spools are ready cut lengths of film which are specially made for cassettes including the M3 type but which must be loaded into a cassette only in a darkroom.

35mm Bulk Film (in lengths of 10-200 ft.), preferred by many amateurs and professionals for reasons of economy, must be cut to suit the number of photographs intended and loaded into the M3 cassette in a darkroom. Special purpose films can usually be had in this form only. Separate directions contain details on the handling of cassettes.

There is a variety of films with different characteristics but reference will be made here only to the importance of speed, this being decisive for the correct times of exposure. For general purpose photography medium speed films (1/125 DIN = 32 ASA = 24 Weston) are particularly recommended.

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Loading the LEICA M3

Daylight cartridges and properly closed M3 film cassettes are reasonably light-proof. Nevertheless, direct sunlight or strong artificial light sources should be avoided when loading or unloading the camera. In the open it is a sufficient protection to manipulate in the shadow of your body. Cartridges or cassettes containing sensitive film should never be kept without protection against the light for any length of time. Storage in a container is strongly recommended.

Before opening the camera make sure that it is unloaded or the film is wound back into its cartridge or cassette. Check this by pulling out the back winding knob and turning it in the direction indicated by the arrow. If a resistance is felt, the film should be wound back and taken out of the camera (as described on page 32).



The cassette will not be required when you use daylight cartridges as mentioned in this booklet. Special directions will furnish full information on the handling of LEICA M3 cassettes which are now listed as the model N easily recognisable by a chrome knob. The N cassette will also fit all other LEICA models.

Place the open camera, top plate downwards, gently on to a table or other suitable support. Pull out the take-up spool and swing open the hinged back plate of the body. Hold the take-up spool in one hand and the film cartridge in the other with both knurled heads pointing upwards. Insert the leader of the film under the clamping spring of the take-up spool as far as it will go. The edges of the film should abut the spool flanges and the emission side must face outwards.

Draw the film leader from the cartridge to such an extent that cartridge and take-up spool can be introduced into their respective recesses of the camera simultaneously, the knurled heads being uppermost.

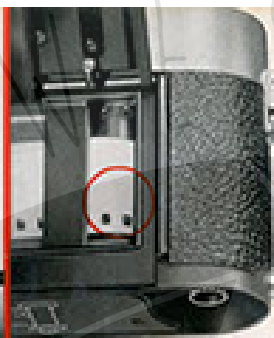
Make sure that the film is positioned exactly as shown in the diagram and that the reel emission side faces towards the lens.

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Turn camera upside down, raise baseplate locking screw and turn it from CLOSE to OPEN when the baseplate can be taken off and put aside. Turn camera right way up again and allow the M3 cassette (which differs slightly from former models by which it cannot be replaced) to drop out into your hand.



Check the position of the film with the hinged back plate swung open. The sprockets of the transport roller must fully engage the perforation on either side. — Close the hinged back plate so that it clicks into position; hook the baseplate over the pin and lock it by turning the swivel to CLOSE.



Pull out the back-winding knob and turn it without undue pressure in the direction of the engraved arrow until a slight resistance is felt. This will tighten the film for proper transport (see also next page).

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The Exposure Counter returns to its initial setting, i.e. two times in front of the 0, whenever the take-up spool is removed from the camera. The length of film by which take-up spool and cartridge are separated is always exposed to the light during the loading operation so that it must be wound on in the closed camera before the first photograph can be taken on unexposed film. The film must be advanced three times and the shutter released twice before the exposure counter moves to "1" and the camera is ready for the first shot.

To check film transport observe the red mark in the centre of the backwinding knob. This mark must revolve when the film is wound on.

The Film Type Indicator at the back of the camera should always be properly adjusted for the film material inserted into the camera so that it will remind you with what film



it has been loaded. This is particularly useful when both black-and-white and colour film are exposed alternately or when photographs are taken only occasionally. The indicator can be easily adjusted by applying slight finger pressure and rotating it as required. The symbols of black-and-white film, daylight colour film (sun in red sector) and colour film for artificial light (bulb in red sector) can be so moved that they point to the sensitivity figure (in DIN or ASA) of the material in the camera.

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Unloading the LEICA M3

When the whole length of the inserted film has been exposed the film transport lever will no longer operate. The film has then to be wound back into its cartridge. To do this, set reversing lever on the front of the camera body to "R", pull out backwinding knob (see page 30) and turn it in the direction of the arrow until a marked resistance is felt. Overcome this resistance by another full turn of the backwinding knob thereby detaching the film from the take-up spool and releasing it from the sprockets.

Open camera (as described on page 28) and with one cartridge with the leader of the film protruding, the slot being light-proof to a higher degree. As a precaution against accidental reverse of the film, tear off the leader or mark it in pencil as having been exposed.

It is not essential to expose the whole length of film before removing it (as may suddenly be required for the insertion of different material). After, for example, 11 exposures the normal rewinding and film removal operation can be carried out. Later, the same film can be re-inserted though, naturally, it will be necessary to wind on and release 12 times (with the lens cap on) to account for the leader and the exposures already on the film.

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Cassettes for the LEICA M3

Film cartridges are easiest to handle but experienced photographers usually take advantage of bulk film from which suitable lengths for any number of negatives can be cut and loaded into the special M3 cassettes. These are light-proof to the highest degree, can be easily cleaned and prevent scratches on the film since they automatically open widely when baseplate is locked on the camera.

Metal cassettes of other LEICA models cannot be used in the M3 but the new type M3 cassette model "N" having a chrome locking knob ↓ fits any LEICA camera.



Developing LEICA Films

can be efficiently undertaken by any reliable photographic dealer but the procedure has been so much facilitated that many LEICA users prefer to do it themselves. With LEITZ developing tanks a darkroom is required only for inserting the film while the Agfa-LEITZ Rodinax 30 Tank allows not only daylight developing but daylight loading.

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Flash Photography

The LEICA M3 is designed for use with electronic flash equipment and practically all flash-bulbs available on the market, making photography largely independent of lighting conditions. The focal-plane shutter is fully synchronized for proper automatic flash firing no tedious manipulation being required.

Two contact sockets are provided at the back of the camera with symbols indicating their use. Electronic flash equipment and bulbs can also be connected and fired simultaneously.

Replacement connecting cables must be ordered specially for LEICA M3 since larger circular plugs are used than on other LEICA models.



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The contact socket on the left takes the connecting cable of electronic flash equipment and other flashguns when used with short-peak bulbs of the X or F class. The shutter may be set to 1/50 or 1/100 sec. but the actual exposure is determined by the flash duration.

The contact socket on the right is to be used for connecting flashbulb-attachments and all long-peak bulbs. Proper synchronization is automatically provided for all these bulbs at practically all shutter speeds.

The LEITZ flash attachment is fitted to the accessory shoe, or preferably the special bracket with adjustable holder, bringing camera and flashgun into a practical unit.

For data on the various flashbulbs, their guide numbers and the most suitable shutter speeds to be used, see special table.



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