The Practical Accessories

This camera manual library is for reference and historical purposes, all rights reserved.

This page is copyright by mike@butkus.org, M. Butkus, NJ.

This page may not be sold or distributed without the expressed permission of the producer

On-line camera manual library

If you find this manual useful, how about a donation of \$3 to:

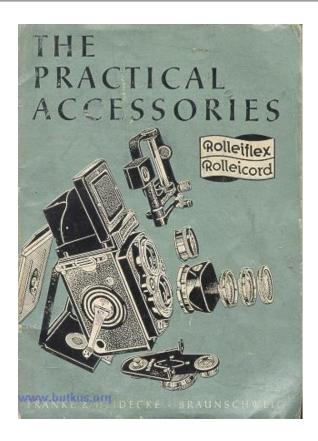
M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your e-mail address so I can thank you. Most other places would charge you \$4.50 for a electronic copy or \$7.00 for a hard to read Xerox copy.

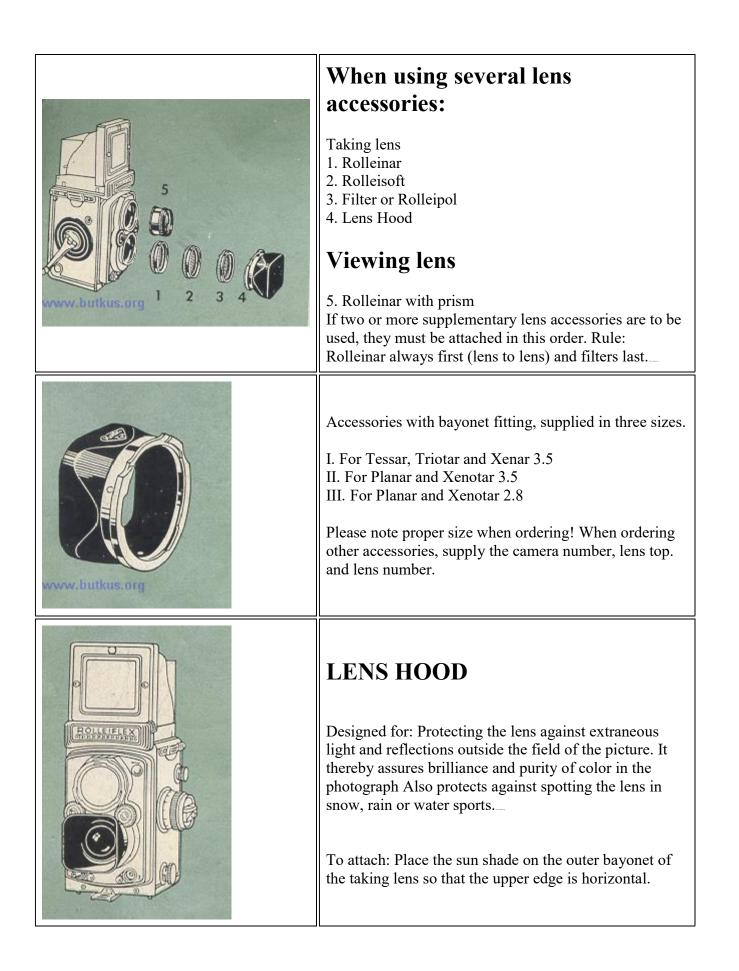
This will help me to continue to host this site, buy new manuals, and pay their shipping costs. It'll make you feel better, won't it?

If you use Pay Pal, use the link below. Use the above address for a check, M.O. or cash.

PayPal DONATE www.PayPal.me/butkus

Back to main camera manual page www.butkus.us





ROLLEIGRID

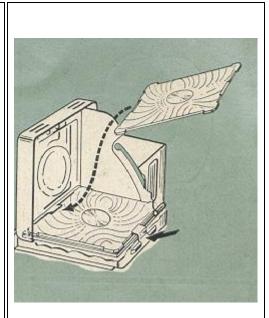
(Not necessary when using Rolleikin) Designed for: Brightening the corners of the ground glass image in unfavorable light.

To install: Place the Rolleigrid, small beveled edges upward, on the ground glass screen. Let it slide forward under the retainer tab, then close the rear edge and fasten by means of the push-button at the rear of the focusing hand (see also p. 13, B s). The condensing lens must be placed an the ground glass with the grooved side dawn.

To Remove: Turn the camera over, push the button, letting the Rolleigrid fall out of the hood.

To clean the Rolleigrid:

Use only a wad at cotton and a mild water and soap or detergent solution, squeezed almost dry.____



EXTENSION HOOD

Designed for: Extending the focusing hood to normal viewing level; minimizes light reflection from top of ground glass; allowing observation of image without distraction.

To use: Slip over the opened focusing hood so that the upper rounded edge rests on the forehead and the inner raided 'breath guard. rests an the bridge of the nose.



ROLLEINARS 1 and 2



Designed for: Close up shots at distances closer than 1 meter,

Use: With the two Rolleinar sets 1 and 2, the Rollei is converted for a focusing range from 39 1/2--17 3/4 (18 1/2) in. and 19 3/4 --12 1/8 (12 1/2) in., see page a. Each set is composed of two optically matched frontal lenses with different mounts. The Rolleinar with the thicker mount is for the viewing lens (Heidasmat) and contains a built-in prism for parallax correction. As a result the field of view in the ground glass coincides with the photograph even at very short distances. A red dot an the mount indicates the uppermost side of the lens for correct positioning in use....

The same instructions apply to the Rolleinars with bayonet size I (see page 2) using a separate Rolleipar parallax corrector for each set. Here too the Rolleipar is always attached to the viewing 1ens Rolleinar red dot up.

Focusing is accomplished as usual an the ground glass screen. The depth of field being rather limited at close range, considerable stopping down is advisable with Rolleinar lenses. The depth of field table indicates the most advantageous stops for the 25 1/4 X 2 1/4 - and 1 X 1 1/2 inch size.

The advantage of a large reproduction should not mislead to indiscriminate shortening of the camera-to-subject distance with close-ups, as this practice would entail danger of distortion. It is less great with objects having a shallow depth of field. For the same reason portrait heads should, if possible, not be taken at distances closer than 40 in.

Rolleinar Lenses require no increase of exposure.

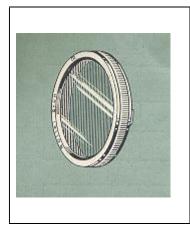
Distances are measured from lens board to subject. The figures given in the tables are, for all practical purposes, usable with both 75 and 80 mm. lenses. Permissible circle at confusion = approx. 1/1000 of the focal length at 75 and 80 mm. respectively.

* Figures given in parenthesis apply to a focal length of 80 mm.

Rolle				1		2		
Focal l	ength	80 mm		76 mm		72 mm		
Focusing-Ronge (in inches)		∞ – 40		$39^{1/2} - 18^{1/2}$		19 ^{3/4} - 12 ^{1/2}		
eld-Siz	e and So	ale of F	leprodu	ction				
Focused Distance		31 1/2 in.		19 ^{3/4} in.		13 in.		
Field-	$2^{1/4} \times 2^{1/4}$	22 x 22		13.8/4 x 13.8/4		8	8 ^{3/4} × 8 ^{3/4}	
Size (in Rollei- inches) kin		9 x 12 1/2		5 ¹ / ₂ x 7 ⁷ / ₈		3	3 ¹ /2 x 5 ¹ /8	
Scale of Repro- duction approx.		1:10		1:6.3			1:3.9	
epth of	Field w	th Kolle	inar Lei	ises				-
epth of Rolle		th Kolle	inar Lei 1	nses	:	2	1	
	inar sed ince	31 ¹ /2		19 ⁸		2 15 ³ /4	f/S	lop
Rolle Focu Disto Lin In	inar sed ince		1		8		f/S	-
Rolle Focu Disto Lin In	inar sed nce ches) from	31 ¹ / ₂ 29 ¹ / ₂	1 23 ^{1/2} 22 ^{1/2}	193	4			-
Rolle Focu Disto Lin In	inar sed ince ches) from to from	31 ¹ / ₂ 29 ¹ / ₂ 33 ¹ / ₂ 28 ³ / ₄	1 23 ^{1/g} 22 ^{1/g} 24 ^g /4 22 ^{1/4}	19 ³ 18 ⁷ 20 ¹ 18 ³ /	4 8 2 4 8	15 ³ /4	5.6	Rolleikin do
Rolle Focu Disto	inar sed ince dies) from to from to from	31 ¹ / ₂ 29 ¹ / ₂ 33 ¹ / ₂ 28 ³ / ₄ 34 ¹ / ₄ 28	1 23 ^{1/2} 22 ^{1/2} 24 ^{3/4} 22 ^{1/4} 25 ^{1/4} 21 ^{5/8}	19 ³ , 18 ⁷ , 20 ¹ , 18 ³ , 20 ⁷ , 18 ¹ ,	4 8 2 4 8 8 4 4	15 ³ / ₄ 15 ¹ / ₈ 16 ¹ / ₂ 15	5.6	1

Taking-distance measured from lens panel to object. Permissible circle of confusion in this special case (due to the large image and less need for enlarging) = approx. f/1000. For increased sharpness further stopping down is required.

ROLLEI FILTERS



A. Filters for black and white photography

N

Designed for: Enhancing the contrast and separation at colors, correction at film sensitivity to the various colors and, at times, the elimination of certain undesirable portions of the spectrum.

Explanation: By elimination or modification of certain portions of the spectrum, the particular complimentary color darker. Colors which show little or no difference in brilliance are thus rendered with a greater black and white contrast or tone separation. Thus with two colors, either can be rendered darker depending on the choice of the filter.

Use: (see page 8) Yellow and also green filters are especially useful for improved rendering of clouds. Orange and red for cutting through the bluish haze in the distance. Blue color improving the otherwise too pale flesh tones in studio portraits using panchromatic emulsions with high red sensitivity. Infrared for the exceptionally revealing qualities at the red and the invisible infrared rays. Ultraviolet protective filter for the absorption of the photographically harmful ultraviolet rays.

B. Color conversion filters

Designed for: Adjustment of the light composition (color temperature) to better match the color balance of color films (especially transparency films).

Explanation: Every color film is balanced to a definite color temperature depending an its intended use. At this color temperature, the film produces true to nature colors. With ascending temperatures, however, an average blue color cast appears, whereas with law color temperature, an average reddish cast predominates. Color conversion filters serve to eliminate these undesirable color casts.__

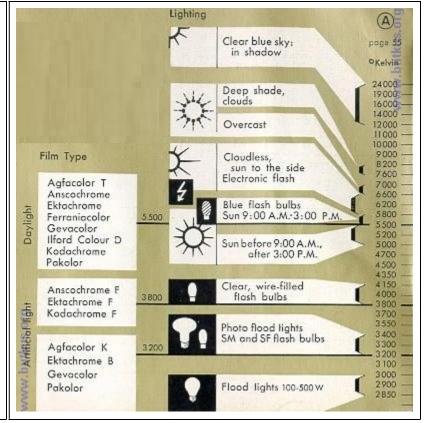
Use: The red-brown colored filters when blue predominates, and blue colored filters when red predominates in order to reestablish the balance of the light reaching the film. Each filter type is supplied in these three strengths. 2, 5 and 11, (abbreviated forms of 20, 50 and 110 Mired). Intermediate gradations can be formed by combining any two filters.

Modern color temperature meters will indicate the proper filter to use, taking into consideration the type of film and the prevailing light conditions. The most commonly encountered ranges of color temperature are also covered in the double table A + B (page 7 and 9).

Example: Ektachrome daylight film, overcast sky . . . which filters?

Solution: 1. Film: Look up film type (brand) being used. (Ektachrome-daylight = upper part of page), follow appropriate guide line to edge of page (5500' Kelvin), slide page 7 to the left until guide line A (5500 K) and B meet. Hold pages in this position!

2. Lighting: Observe the type of lighting and its color temperature range overcast = 6600 --7000



3. Filter: The adjacent gray bar of table B indicates the filter (R 2) with light value correction (-0.5) and the extension of exposure, 1.5 times.

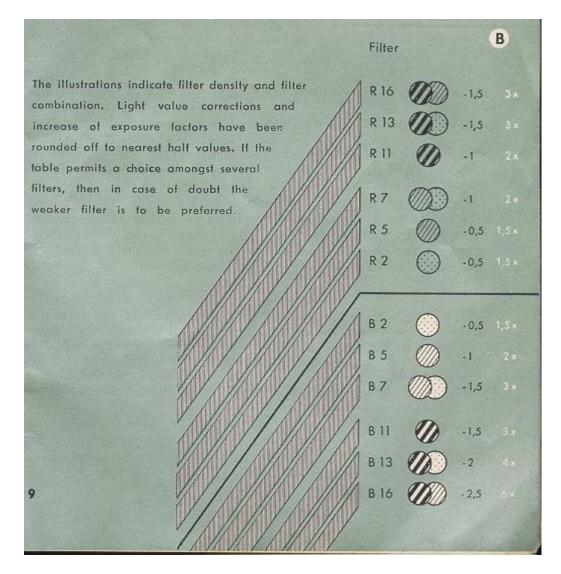
The guide lines hereunder listed require sliding page 7 somewhat further to the left.

Rollei Filler	Light value adjustment	Exposure increase	Application and effect		
Light yellow	-1 (-1.5)	2x (3x)	Landscapes, snow, clouds. Renders		
Medium yellow	-1.5 (2)	3× (4×)	yellow and green lighter, blu darker.		
Light green	-1 (-1.5)	2x (3x)	Landscapes, snow, clouds. Render green lighter, red (complexion) an		
Green	-1.5 (2)	3x (4x)	green lighter, red (complexion) and blue darker. For pan emulsions.		
Orange	-1.5 to -3	3—7 x	Hazy distant views. Renders yellow red lighter, blue darker, distar objects clearer.		
Light red	2 to 3.5	4—10 x	Hazy distant views. Renders red lighter, blue-green darker. Gives stronger effects than orange filter.		
Light blue	-0.5 (-0.5)	1.5 x (1.5 x)	Artificial light. Renders red darker. For ultra-pan emulsions.		
uv	-0.5 (-0.5)	1.5x (1.5x)	High altitudes above 6000 feet. Sea- scapes. Eliminates ultra-violet rays which reduce contrast.		
Infrared *	the type o used and		Special filter for infrared emul- sions. Transmits dark red above 700 mµ and infrared.		

Light value correction = exposure increase factor. General average values are given for pan emulsions (in parenthesis for ortho emulsions). These, however, can be modified according to the type and brand of the photographic material and according to the type of lighting.

Rollei filters provide maximum effectiveness

By using coating-adjusted fillers with the lenses, the brilliance of the picture is essentially heightened. This heightening of contrast is fully effected only when proper lens accessories are used.



Rollei optical lens accessories are supplied with anti-reflection coating which will not wear off. The Rollei filters, in particular, have an individual type at coating designed to enhance the effect of their particular color. They achieve maximum contrast in their specific range of operation.

ROLLEIPOL



For black and white and for color.

Purpose: Elimination or subduing al disturbing reflections (glare) from shiny, non-metallic objects or surfaces. Under certain conditions, filtering of the blue sky. Especially useful for regulation of the colors (colored reflections) and control of sky tone in color pictures.

Explanation: If the direction of movement of a light beam is imagined to be the axle of a wheel, then the spokes of the wheel correspond to the various plans of oscillation of the light waves (i.e., we are looking at the light beam in cross section). Polarization will reduce the many planes of osculation to merely one. Polarization takes place when light waves, striking at a certain angle, are reflected by shiny bodies (with the exception of metals). This polarized segment of light can be retained in full or in part by placing the Rolleipol filter across the plane at oscillation: the reflections disappear. (The filter itself has a polarizing effect an the light which passes through it.) Further, since there is also polarized light in the blue sky, this can be eliminated: the use at the Rolleipol filter results in subdued (darkened) sky portions.__

Not all reflected light is polarized. If reflections are to be eliminated, 1, the filter must be turned (an its optical axis) in the direction of the vibrations as required, and 2. the camera position must be changed to gain the best effect. This is attained when the beam of light striking the reflecting body and the line of camera view farm an angle at 60--74', (varies according to material at the subject).

Application: 1. For eliminating or subduing disturbing reflections when photographing reflecting objects (polish, porcelain, painted and lacquered finishes, etc., -- reproduction of textures and material), when photographing glass surfaces and the surface of water (the reflecting surfaces became transparent), 2. for filtering sky when photographing landscapes: the blue sky is darkened by absorption of the polarized light it captains. The *effect* may be observed in advance by looking through the filter. Light value correction about --1.5 = increase at exposure about 3 X.

For Use: Fasten the Rolleipol filter on finder lens (red dot at the top) and rotate the front ring of the Rolleipol until the desired *effect* is obtained an ground glass. Note the white number marking and transfer to the taking lens.

ROLLEISOFT LENS 0 AND 1



Purpose: Softening of super-critical definition producing striking fluffy haloeffects, especially with back-lighting.

Explanation: The taking lens Of the Rollei gives super-critical definition required for the majority of exposures. If, occasionally, softer definition is desired (e. 9. for portraits and certain dramatic *effects*) this is obtained by attaching the Rolleisoft Soft Focus Lens in front of the lens.

The Rolleisoft lens consists at a plane parallel glass disc with a few concentric ground-in grooves. While otherwise the lens permits only sharpness or softness through adjustment of the focus, the Rolleisoft lens obtains both simultaneously: Between these grooves the rays of light pass unimpeded to the film and produce a sharp impression, i. e., the basis of the image. At the grooves, however, the light rays are diverted with the result that an additional image of slightly softer definition is superimposed. Both together produce the soft focus effect: The exposure shows *fluffy* softened contours and sunny halo-lights; distracting fine details recede and the fatal impression of depth definition is improved. By means of the Rolleisoft the Rollei-lens becomes a soft focus lens...

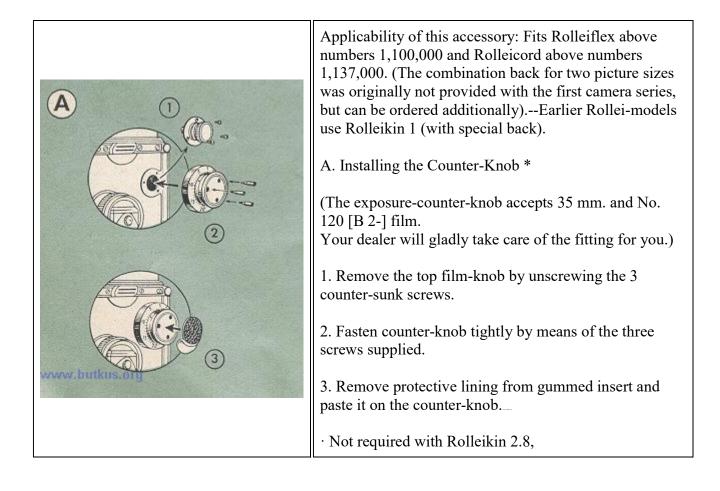
Application: Best results are obtained by using the entire surface of Rolleisoft, i. e., with full aperture. With Rolleisoft 1 (with increased number Of grooves) it is permissible to stop down to f: 5.6. Smaller apertures tend to decrease the soft focus effect.

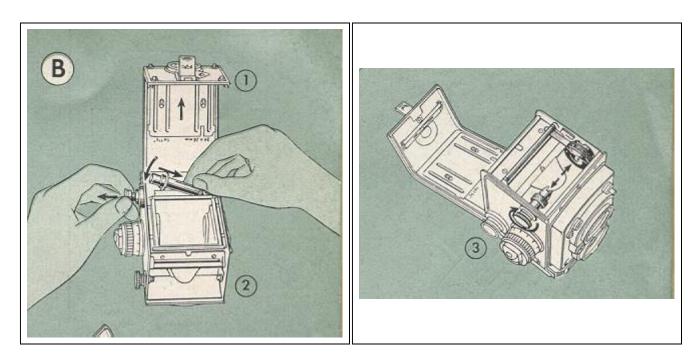
Rolleisoft 0 is used for weak soft faces *effect:* primarily for strong contrasts of light and glittering objects, i. e., chiefly for backlighted subjects. Rolleisoft t is used for greater soft focus effect: for soft lighting. -- Chief field at application generally: portraiture. Best suited tar: contrasting, highlighted subjects. Rolleisoft increases the plastic, sunny character of backlighted pictures. Speed and focal length remain unchanged. Generous exposures increase the halo-effect. The ground glass screen shows full focused sharpness when using Rolleisoft lenses. The Rolleisoft effect can be judged at any time an the ground glass screen by placing the Rolleisoft in front of the finder lens.

For Use: Fasten Rolleisoft to inner bayonet at the taking lens.

ROLLEIKIN 3.5 and 2.8

Designed for: Taking up to 36 exposures 1 X 1 1/2 inch, on 35-minfilm. Ideal for series of pictures and color photography on miniature film.
The attachment consists of: 1. Case 2. Film Guide Frame 3. Take-up Spool 4. Exposure-Counter-Knob 5. Extension-Spindle for Rewind Knob (two types, for previous and new Rollei models) 6. Inner Spool Knob 7. Focusing Screen Mask 8. Direct View Finder Mask 9. Lens Hood Mask.







B. Assembling the Rolleikin

1. Adjust film pressure plate by a sliding movement, pressing down at the same time, thereby bringing the inscription "24 X 36 mm. (1 X $11/\sim$ in.)" into view.

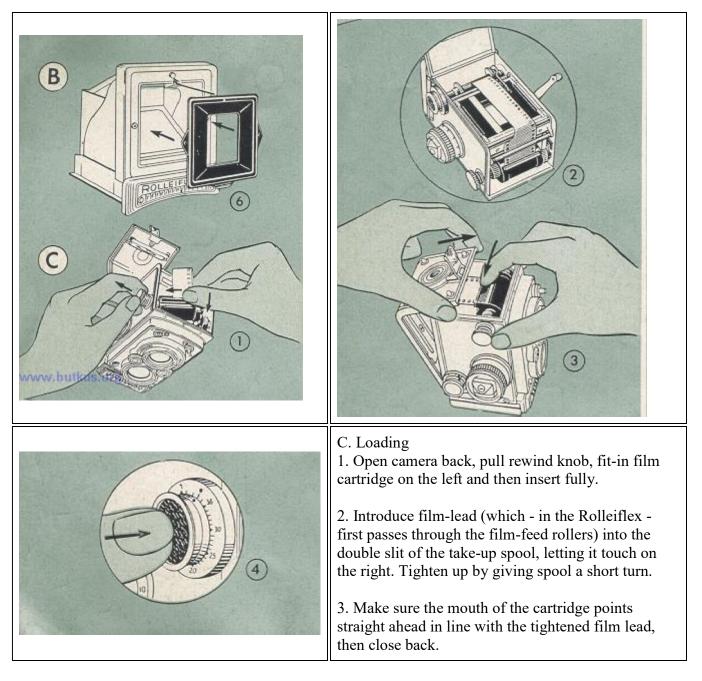
2. Pull counter-knob, fit-in take-up spool on the right and insert completely.

3. Rewind-Parts: Screw extension spindle on rewind-knob by rotating the latter. Snap inner spool-knob over opposite spool bearing pin, (slipping the metal tongue between the rollers of the film-feed when using a Rolleiflex).

4. Inserting the film guide. frame: Press spring actuated clamp-bar at an acute angle (as shown) against the bottom of the film gate and insert completely. To remove: Push frame downward (against the clamp-bar) and lift out.

5. First insert forward edge of focusing screen mask under the grip, snap down and secure by pressing the retaining device. Be sure the mask is properly centered inside the ground glass frame.

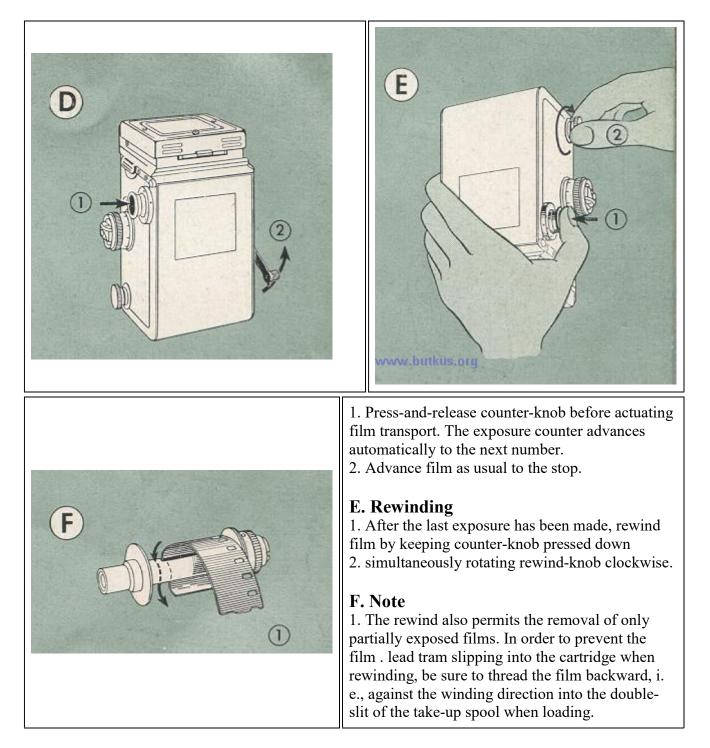
6. Insert the frame-finder mask underneath the button above the frame-finder in such a way that the edge (marked with a white dot) is pushed-in first, then press the two lateral fixing buttons into position.__



4. Press-and-release counter-knob until the red dots of the Rolleikin counter face each other. (Disregard counter for No. 120 [B 2-] film completely.)

5. To set counter for the first exposure: Advance counter dial to No. l by actuating film transport three times (see page 15).

D. Film transport



When reloading a partially exposed cartridge, advance film two frames beyond the last exposure (skipping one frame for safety).

2. Always adjust film pressure plate properly (see B 1). (A sure sign of inaccurate adjustment when using the Rolleikin: Camera back will not close all the way.)

4. Shutter cocking as usual: with Rolleitlex, normal swing of the crank.

5. Double exposure device is in operation in the Rolleitlex and cannot be disengaged when using Rolleikin. With Rolleicard it must be disengaged in order to unlock shutter.

PLATE-ADAPTER

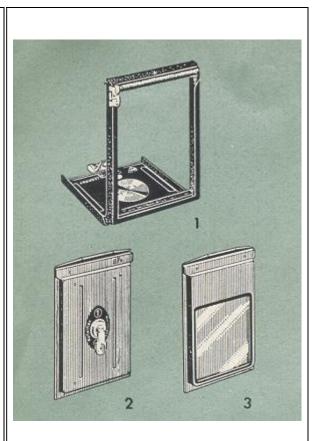
Designed for: Single 2 1/4 X 2 1/4 inchexposures on 2 1/4 X 3 1/2 inch plates of sheet-film. A desirable facility for the use of special emulsions, immediate or individual processing and such special tasks as studies of portraiture, trick photography, reproductions, technical tests etc.

The outfit consists of:

- 1. Adapter back (1)
- 2. Cut-film or plate holders (2)
- 3. Cut-film sheaths

Also available: Focusing-screen slides (3) Leather case for two holders

All parts are available separately. Focusing is done as usual on the reflex focusing-screen and only in special cases (i.e. when using two Rolleinars combined, or utilizing the picture area to the fullest extent) on the adapter focusing-screen.

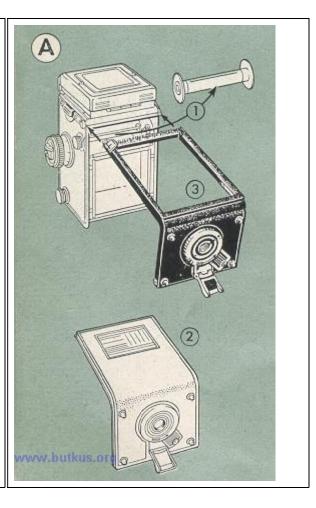


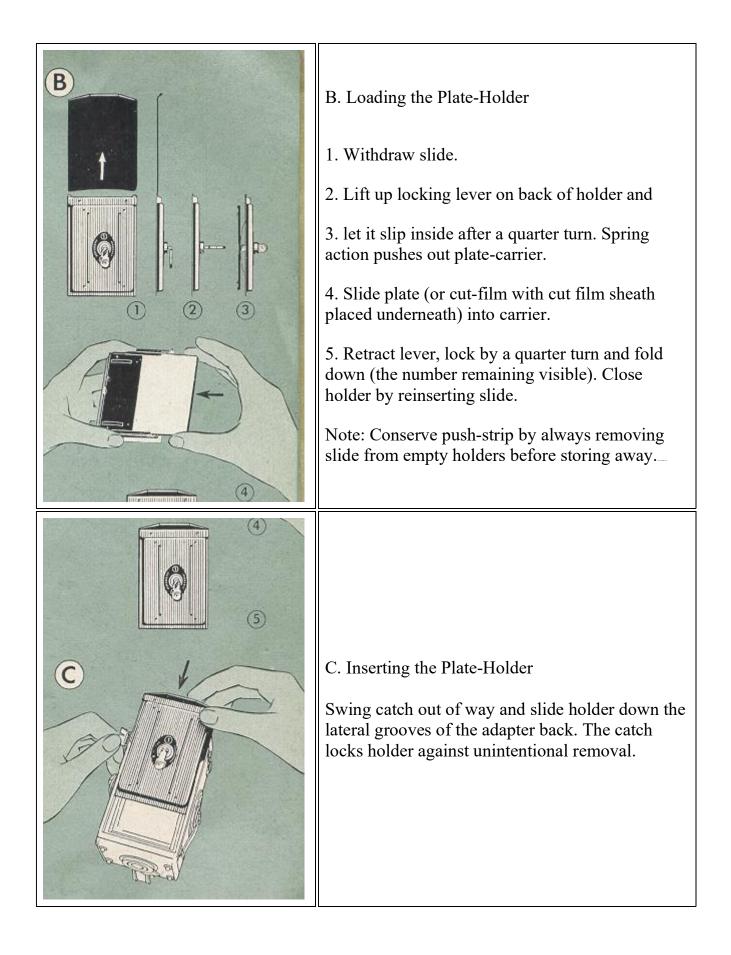
A. Attaching the Adapter Back_

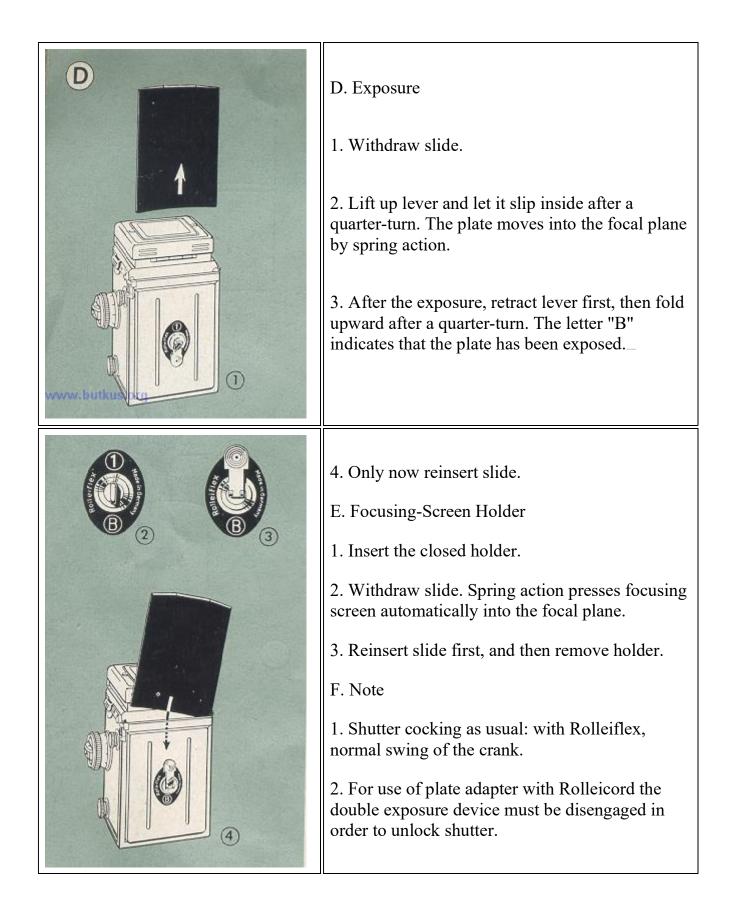
1. Remove take-up spool from camera.

2. Take off camera bade. 3. Attach adapter back

(without plate holder!).







PANORAMA HEAD

Purpose: Panorama pictures, composed of two or more individual pictures. Complete circle (360°) may be had with 10 exposures.

For Use:

1. Screw panorama head at first only lightly into tripod socket.____

2. Match pins and sockets of panorama head and camera, then press together.

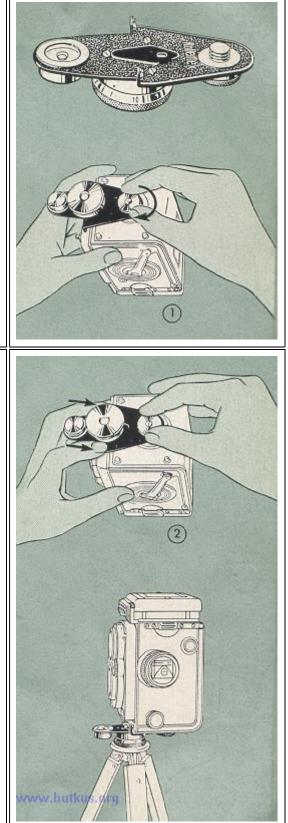
- 3. Tighten screw firmly.
- 4. Mount on a sturdy tripod.

5. Level off horizontally by centering bubble of spirit level.

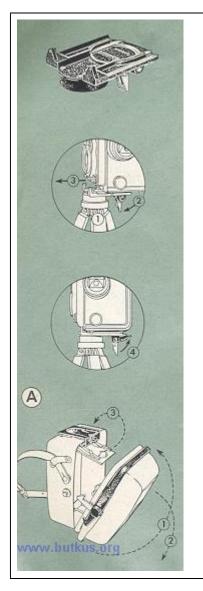
6. Start exposures at left of proposed view-swing camera one number or click to right for each succeeding exposure.

7. Care should be used when trimming pictures for mounting --sufficient overlap is provided to make matching easy. If moving clouds are included in pictures, exposures must be taken in rapid succession.

8. Make full use of entire negative area and be sure that prints match in contrast and tone. Line the pictures up accurately and cut them. Mount on cardboard with matching edges together and panorama is ready.



ROLLEIFIX TRIPOD HEAD



Can be used for all Rollei models with grooved edge an the tripod socket.

Designed for: Quick fastening at the Rollei to the tripod or to the bracket of an electronic flash unit.

Operation:

1. Screw the Rolleifix firmly to the tripod.

2. Raise the catch on the under side of the lock-lever and push lever downward.

Place the camera on the Rolleifix and slide it forward so that the tripod socket reaches the forward end at the retaining grooves.
Throw the locking lever upward to secure.

METAL EVER READY CASE

For use with all Rollei models provided with groove an the edge at the tripod socket.

Designed for: Complete protection: Air, dust, water-tight. For storing the camera in a floatable splash-proof, light metal container; unique pivoting bracket provided for fast shooting.

A. To open:

1. With a circular movement raise the clamp handle.

2. Push the front part of case down.

3. Push the camera case back and press down firmly until it is fully opened.

4. Swing the camera up and back in the retaining grooves until the tripod socket until the catch locks.

When taking pictures the case may either remain open (far photography at eye level the two sides serve as handles) or can be almost closed.

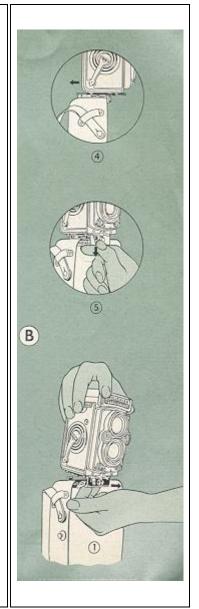
B. To close:

1. Grip with two fingers behind the pivot of the camera harder, unlatch it by pulling forward and move the camera forward and downward.

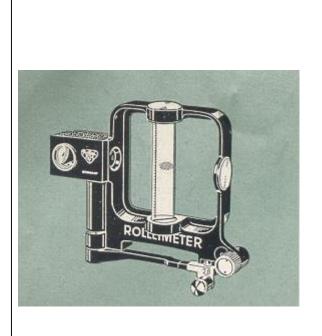
2. Raise the lower part, close the case and pull the clamp handle around and down until it locks. Make certain that the two catches close properly.

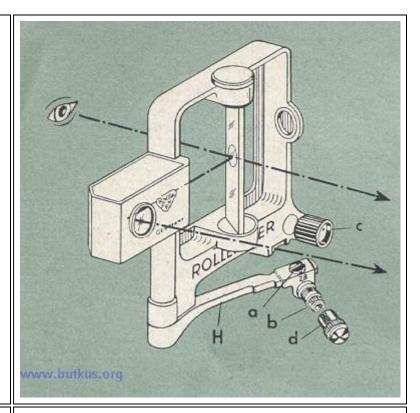
C. Notice:

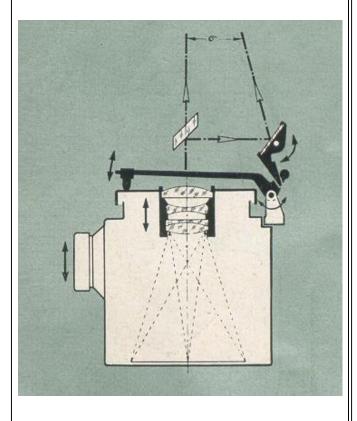
 In order to use the Rolleicord in the case, an extra (provided) rubber pad is glued an the corresponding pad in the case.
In the two spring steel clips of the case, 1--2 extra rails of film or Rollei desiccant tubes (for absorption of the moisture within the case), can be placed. The discoloration of the deep blue silicon crystals indicates the extent of saturation. Repeated regeneration is possible by heating the tube (for example over a hot plate).__



ROLLEIMETER for Rolleiflex







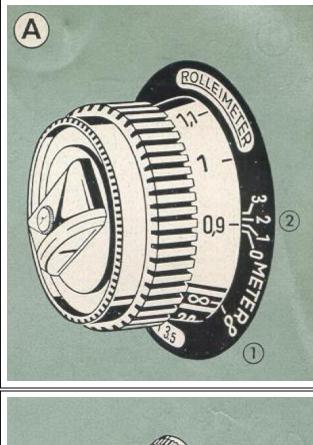
Purpose: An optical coupled range finder for use with the direct view finder of the Rolleiflex particularly suitable when shooting sports or flash pictures in poor light,

Description: The Rolleimeter uses the superimposed image principle and is actuated by and coupled to the moving front panel of the camera. It is attached to the nameplate directly in front of the direct view finder. A vertical glass rod with focusing spot far the two images can be seen when lacking through the tinder. Focusing the camera by superimposing the two images so that the outlines exactly coincide insures sharp focus. Framing and focusing are accomplished while looking through the tinder, without making the eye train one position to another.

Before using the Rolleimeter two simple adjustments are required:

1. A one time adjustment of the actuating lever (screw a) to suit the focal length of the lens employed.

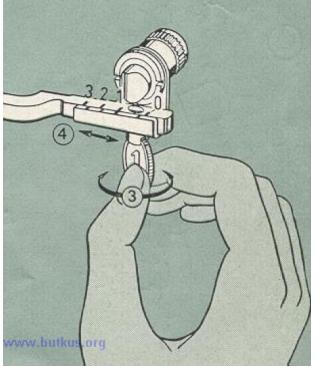
2. Adjustment of the lever button (screw b) so that the range finder indicates sharp focus at infinity (oo) when the camera is in focus at the same distance. This adjustment should be rechecked from time to time.



A. Adjustment to focal length

(This is done before attachment to the camera and is required so that the Rolleimeter and camera will agree even at close distances, such as three to five feet. See note 2.)

For this adjustment a special plate is provided, suitable for cameras calibrated in either feet or meters. For the focusing knob with exposure meter, a second 'adjusting' plate of greater diameter is included. By its use the relationship between infinity and the close distance readings of the focusing knob scale may be observed and the Rolleimeter's actuating arm properly adjusted.



1. Place the adjustment plate over the focusing knob and line up the infinity marks, note whether meters or feet.

2. Note the figure on the adjustment plate which is directly opposite the marker for the closest focusing distance at the knob. Rolleiflex will have 3 feet as this distance.

3. Swing actuating lever **H** outward and loosen the coin-slotted screw **a**.

4. Move the slide to the previously observed adjustment plate figure and tighten screw **a**.

B. Attaching Rolleimeter to Camera

1. Set camera at infinity (oo).

2. Turn mounting screw C counter-clockwise until it stops.

3. Hook the Rolleimeter over the *left* edge of the nameplate and push it back so that the right side fastener can be engaged. Be sure that the actuating lever rests on the camera's movable iron panel.

4. Hold Rolleimeter firmly in position with thumb and turn screw C clockwise until tight. Removal is *effected* by complete counter-clockwise turning of mounting screw C and lifting off.

C. Adjustment to Infinity

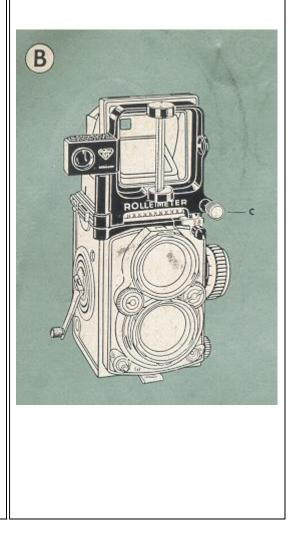
(This is done after mounting Rolleimeter)

1. Set focusing knob to infinity (on), open focusing hood and direct view tinder.____

2. Unscrew protective cap D and remove.

3. Select and observe some object (building, tree, lamp post, etc.) at least 600 feet distant. Looking at the focusing spot in the glass rod, turn screw B until the outlines of the two images coincide and the images become one.

4. Replace protective cap **D**, tighten, and double-check the coincidence of the two images. This adjustment should occasionally be rechecked.



D. To Use

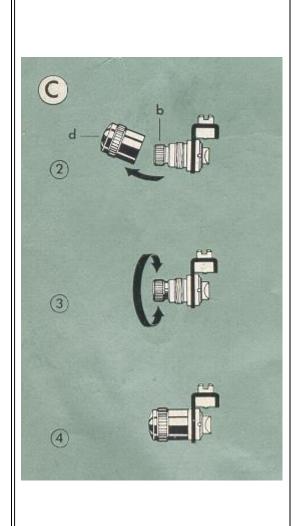
Locate the abject an the focusing spot of the Rolleimeter's glass rod, as seen through the open direct view tinder, and turn the camera's focusing knob until images coincide. The Rolleiflex will be sharply focused to the exact distance of the abject selected.

E. Note

1. Far use with Rolleiflex 2.8 (80 mm. lens) the Rolleimeter 2.8 is supplied together with suitable adjustment plate.

2. Proper adjustment to focal length can be effected easily in the case at earlier Rolleiflex Cameras (whose knobs are not the right size to permit use of the adjustment plate) by means of the ground glass screen image. Following is the proper method:

First, make the infinity (oo) adjustment. Then focus the camera accurately an a suitable vertical abject at the closest distance. Check the Rolleimeter and if the two images do not coincide, remove it and loosen screw **a**. Relocate the slide at some point in the adjustment range, between 0 and 3, where the images do coincide. Tighten screw **A**. Cheek the setting again and finally double-check the infinity adjustment. Correct if necessary {see A).





ROLLEIMARIN

Underwater housing for Rolleiflex f:3.5. Waterproof even at depths Of more than 330 feet. Ground glass viewing and focusing through prism, with magnifier, in normal swimming position. All controls may be adjusted under water. Built-in rotating filter turret for two filters. Total weight: under water 3 lbs., above water 12 lbs. --Special accessories: carrying case, three filters (light and medium yellow, orange) in leather case, special flash unit (for both type-lamp bases) in sail clash bags.__

Full information an the use in the booklet "ROLLEIMARIN"

ROLLE I FLASH

Purpose: Synchronized flash exposures with the Rollei.

Applicable: Flashbulbs with bayonet base (swan).

B-C principle (Battery-capacitor firing).

A. "Mounting Rolleiflash

1. Fasten reflector on case by turning it clockwise in bayonet.

2. Fasten holding arm to bayonet of the viewing lens and

3. Secure by turning lack ring a clockwise. -- Before removing: first loosen lock ring by turning counter clockwise.

4. Pull out the cable and plug it into the flash socket an the camera. -- To roll up the cord: use turn-knob (on cover of case).

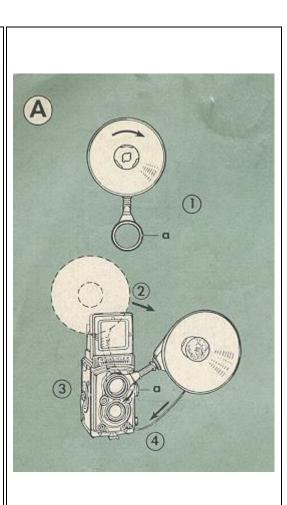
B. Exposure

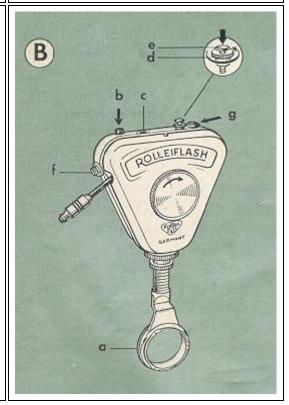
1. Insert flash lamp as far as necessary to seat in the bayonet socket.

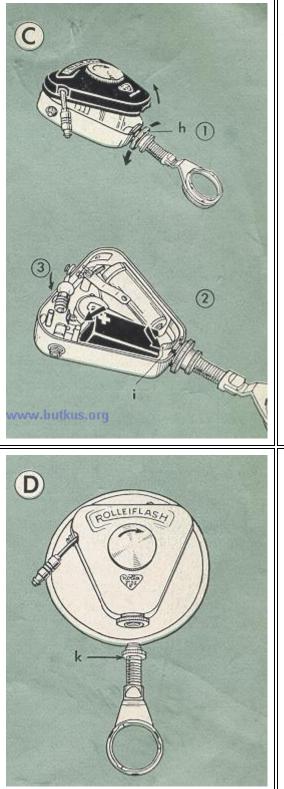
2. Test circuit (before connecting Rolleiflash comb.): Press test key **B** -- brief flash of the test lamp **c** indicates positive firing of flash lamp.

3. Synchronized flash-firing: by releasing camera shutter (see directions for using camera).__

Open-flash method (Firing by hand contact in making time exposures): loosen safety screw ring D, press hand contact E. Always secure hand contact when not in use!







The connector \mathbf{F} is for use with the supplementary flash unit Rolleiflash comb.

4. Lamp ejection: by pressing ejector button G -- the lamp is forcefully ejected.

C. Changing Batteries

1 Loosen screw ring H slightly, open case upwards and remove. -- To close the case: First attach cover with retaining pin on case, close tight, tighten screw ring **H**.

2 Changing the battery: Important !

The + pole must always point toward the test lamps Wrong insertion of battery would damage the condenser. Insertion of fresh battery (flat cell hearing aid battery 22.5 v.): press back contact spring I with the battery, snap battery in.

3. Changing test bulb: As replacement for detective lamps press same-type 6 v. glow lamp (0.05--0.07 amperes) between contact springs.

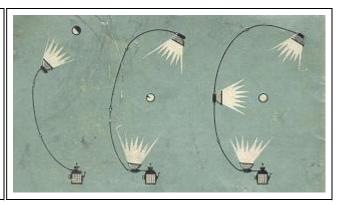
D. Flexible Arm

The flexible holding arm can be unscrewed from the case when the Rolleiflash attachment is to be fastened directly onto a tripod by the base thread. To replace holding arm: turn back screw ring **K** an holding arm as far as it will go, screw arm into case (up to correct position at bayonet ring) and secure by turning screw ring **K** clockwise.__ After attaching the cable: Pull flash bulbs in Rolleiflash first and then in Rolleiflash comb.

In order to conserve the battery: Insert the flash bulbs a short time before shooting. Detach the cable from Rolleiflash when not using.

E. Rolleiflash comb.

Screw the cable end connectors to the Rolleiflash and Rolleiflash comb. The Rolleiflash comb. can either be hand-held or fastened to a tripod by the socket provided. The second connector is for an additional Rolleiflash comb., if used. A total of three lamps may thus be fired simultaneously. Lamp distance can be extended to 33 feet by means of 10 feet extension cords at two types, for Rolleiflash and Rolleiflash comb.



F. To attach Rolleiflash Extension Cords

Unscrew protective cap to limit, insert flash card plug and tighten cap down over plug.