



outstanding visual effects.

our camera, of course, includes a photo-electric cell which is situated behind the lens. In addition it has other, even newer features, A blobby sensitive galvanometer further improves its handling qualities, and, a perfected rewinding system enables you to achieve

ith Paillard-Bolex equipment you also buy the service that lies behind the product, for Paillard is backed by a world-wide organisation that can offer expert service facilities almost everywhere. The Paillardamateur and professional fields - and it matches in all ways the excellence of the products themselves. Should you write to a Paillard-Boley distributor or dealer, do not forget to mention the serial number of your camera, engraved on the base.

PAILLARD S.A.



Get to Know Your Camera -How to Load Your Camera - Winding

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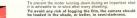


HOW TO LOAD YOUR CAMERA

Before loading your camera, try out the important controls without film: winding, release selector filming speeds, variable shutter, rewinding functioning of the built-in lightmeter. release. Familiarize yourself with your camera in order to avoid wasting film. While it is not difficult to operate the camera, a certain amount of experience is necessarily required

> Important - When your camera is not loaded, never let it run at more than 32 f.p.s., as this could cause damage to the

WINDING Lift the winding key and move it back and forth until a definite will run off about 7 ft, of film. This gives you about 31 seconds of filming at a speed of 18 frames per second



TO OPEN THE CAMERA

Lift up the inged semi-circular ring, turn it to position O and lift









TO INCEST THE EILM IN THE CAMERA

Place the open camera with the hinged door towards you and open the pressure-pad by moving the lever (fig. 1).

Hold the full spool in your right hand in such a manner that the film cannot become loose. Unwind about 10 inches of film, and slip the full spool on its spindle, guiding the

film through the gate as illustrated (fig. 2). Close the pressure, and by pushing the lever while holding the full shool in its place will pressure-pad is closed.

Now take the empty spool with the side marked I facing you and (fig. 4). Wind 2 to 3 turns of film on the spool, turning it in a

Place the take-up spool on its spindle either way round (fig. 5). The dark, shiny side of the film must be facing towards you, and the light side towards the lenses.



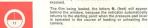


Before closing the camera door, press the release for a fraction of a second to check that film is running correctly.

Now close the door and fasten it by turning the semi-circular ring to F. Push the ring back so that the single point mark is uncovered to indicate that the film is on its first 25 ft. run.

N. B. When the first half of your double-run film has been exposed, turn the film over in order to expose the other half.

FILM FOOTAGE COUNTER The film footage counter on the back of the camera automatically indicates the amount of film that has been



returns to the starting point when the pressure-pad lever is operated in the course of loading or unloading the

Press the release and run the film until the figure 0 appears opposite the white notch. The 4 ft. film leader



HOW TO INVERT YOUR FILM

trailer is now fully wound on the take-up spool.

An audible end of film signal indicates that the full length of the film has now been exposed (the indicator shows 25 ft.). The spool should now be turned over to expose the other half of the film.

Proceed as follows:

The motor should be allowed to run until 10 clicks of the audible warning signal base been counted. The

Open the camera out of the direct rays of the sun, as otherwise there is a risk that the film may be partly fogged.

The two spools may then be taken out and the camera can be reloaded by placing the After closing the camera door, push the semi-circular ring back so as to leave the 2 points

HOW TO UNLOAD YOUR CAMERA

When the film has been fully exposed, the original Paillard-Roley spool supplied with the camera, now on the upper spindle, will be empty again,

Remove the full spool, observing the same caution as you did while inverting the film. Send it to the processing laboratory in accordance with the manufacturer's instructions.



consumption of film is negligible.

The speed control dial has seven settings - 12, 16, 18, 24, 32, 48 and 64 frames per second.

The usual filming speed nowadays is 18 frames per second. It replaces 16 f.p.s. as the international standard for filming as well as for screening. Movements are thereby reproduced with more clarity and without dazzle, and if a magnetic sound track is to be added to the film. the sound will be purer and clearer. The increase in the

When the film is projected at normal speed, films shot at a slower speed (12 f.p.s.) produce an illusion of accelerated motion on the screen, while films shot at higher speeds (24/64 f.n.s.) will produce a slow motion effect.

To set filming speed, turn speed control dial to corresponding setting in front of the notch.

Do not forget that altering the filming speed necessitates a change of diaphragm. Therefore, adjust the galvanometer guidemark (see page 23),

RELEASE SELECTOR

According to the effect desired, use either normal, continuous

O Locked camera

Normal position when the camera is not in use.

A Single-frame exposure Used for titles, cartoons, scientific films, trick effects, particu-

larly extreme speed-ups (clouds, sunsets, comical effects, The exposure is made as the release is pressed. O Normal running Normal filming position. The camera runs as long as you press

O Continuous running

will run as long as the motor is wound. Used mainly for self-filming. Cable Release: see page 4.

When the camera is running normally, push the release selector downwards. The camera Exposure times: see table page 31.





WEINDED

The viewfinder allows you to choose the framing best suited to the scene to be shot.

The viewlinder is continuously adjustable by means of a knob to match the field covered by lenses of 12.5 (standard) to 35 mm (telephoto) focal length.

Because the needles of the galvanometer only appear perfectly sharp at the 12.5 mm settling, frames corresponding to the focal lengths of 25 mm (outler frame) and 35 mm (inner frame) have been engraved on the aperture to permit you to determine the exact field of view for telephoto lenses even when the viewfinder control button is left on position 12.5.

The lever (L) (field adapter) controls an additional lens placed inside the galvanometer housing. When in vertical position, it adjusts the viewfinder field to match the field of a wide angle lens while the viewfinder control button remains on position 125.

The circle which then shows inside the field of view serves as a reminder that the additional lens is in action.

To adapt the viewfinder for movie makers who wear glasses, the viewfinder eyepiece can be replaced by a special lens. Any enquiries should be addressed to the Paillard-Bolex distributor through your dealer, specifying the strength required in diopters.

PARALLAY CORRECTION

The area covered by the lens is slightly different from the area seen by the viewfloder; this difference is called parallar. Perallax becomes noticeable in shots thake not short distances (i.e. less than 8 ft, with a standard inen), For exact correction of the parallax periods not proposed to the parallax periods of the parallax periods of

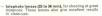
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The turret of your camera takes a wide range of standard-

- standard lenses (12.5 or 13 mm) for use in normal





The lenses can be interchanged. However, it is preferable to screw wide-angle lenses in the seat indicated by an engraved dot.

Screw the lenses into their mount, holding them by the fastening ring A.

Another ring adjusts the diaphragm; in other words, it controls the amount of light which passes through the lens and exposes the film.

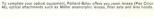
Some lenses have a third ring which is used for

The handling of the diaphragm ring gets easier with a control lever.

This device is available from your Paillard-Bolex









DISTANCE SETTING

The outstanding quality of lenses and film makes it possible to achieve remarkable sharpness in 8-mm filming. In sunny weather, with a standard lens set at 6 ft, you can

in average circumstances.



In order to obtain the best results when using a lens with an adjustable focusing mount, we advise you to estimate the average distance at which the subject will be filmed and to adjust the focusing ring of the lens

On the Kern-Paillard lenses, a red number indicates the distance most frequently used, which will give you

For close-ups it is, however, necessary to set the exact distance between subject and film. This is also advisable when filming with a telephoto lens or with the lens diaphragm wide open. (For example: distance of 3 ft.

The distances are measured from the film plane (see page 4).

The depth of field, that is to say the zone in which the subject is sharp, varies according to the lens focal length, diaphragm aperture and filming distance.





With a long focal length lens, open diaphragm or short filming distance the depth of field is small.

With a short focal length lens, closed disphragm or long filming distance the depth of field is large.

On most lenses, a depth-of-field scale indicates the limits within which the filmed subject will be sharp. The illustrations show two Kern-Paillard lenses, one with the "Visifocus" scale (orange dots) and the other with the "mobile compass" (white curve).

Lenses are always supplied with a depth-of-field chart.

RIE SHITTER

Your camera is equipped with a variable shutter. By reducing the opening angle, the film exposure time is reduced proportionately without

The control lever can be moved while filming, or it can be set in one of the positions shown on illustration opposite.

The shutter can be locked in the open and half-closed positions by pushing the grooved slide (a on illustration opposite) in the direction

Exposure times for different settings of the









USE of the VARIABLE SHUTTER

- If the light is particularly strong (reflection from snow or water), the variable shutter can be adjusted so that exposure is reduced and the use of a neutral density filter becomes unnecessary.
- A wide-open diaphragm eliminates unwanted backgrounds, yet with the variable shutter half-closed, the exposure remains correct.
- The variable shutter increases picture sharpness of moving subjects by reducing the exposure time. This is particularly true for films shot at 25.5.s. or more (slow motion). On the other hand, if filmed at normal or slower speeds with the variable shutter half-closed, the rapidly moving subject will seem jerky when projected.
- The variable shutter allows you to produce a number of professional effects, e.g.:

a) FADE-IN

A fade-in is made by gradually lighting up a shot to make it go from dark to normal brightness on the screen.

To produce a fade-in, start from the position as illustrated; (lever at extreme right notch - Letter S = Stop); press the release and turn the shutter lever smoothly all the

way down (symbol goopsite the notch) and continue filming. As a rule, this operation should not take much than about 2 seconds.

N. B. The camera will not start while the shutter control lever is in the position illustrated

N. B. The camera will not start while the shutter control lever is in the position illustrate (lever at extreme right)

b) FADE-OUT A fade-out is a gradual darkening of the shot until it has disappeared completely. To produce a fade-out, the same procedure as for a fade-in is carried out in reverse. Start with the shutter lever in a horizontal position (symbol D opposite the notch) and then move it slowly up until the camera stops.



c) LAP DISSOLVE A lap dissolve is unquestionably one of the most pleasing transitional effects between two sequences and is made by superimposing a fade-in on a fade-out; thus a remarkably soft transition is achieved.

How is it done? Although the variable shutter is essential for this, it alone is not enough. A special



rewinding system has to be provided.

REWINDING THE FILM

Engage the small hand crank in its lodging (see illustration page 4), and turn clockwise. As each frame passes, you will hear a clicking sound. You may rewind sixty frames or so without affecting the correct running for your film. Before starting, check that the spring motor is not fully

The footage counter subtracts automatically the length

* It will usually be sufficient to count a hundred and one, hundred and two a for each

To produce a lap dissolve, proceed as follows:

- End shooting by a fade-out of 2 seconds.
 - Disengage the motor by moving the control lever slightly to the left (position « closed »).
 - Rewind 24, 32, 36 or 48 frames corresponding respectively to a filming speed of 12, 16, 18 or 24 f.p.s.
 - Frame the second scene
- Press the release knob, and make a fade-in of the same
 - Continue filming

SETTING THE DIAPHRAGM

Setting the diaphragm of your camera is as easy as it is accurate, thanks to

a lightmeter with built-in photo-electric cell an index number calculator (on the lid of your camera).

- a) Reading the index number calculator
- Set the calculator for the sensitivity rating of your film by means of the slide (a). Calibration is both for ASA and for *DIN.

- If you are using a PAN CINOR 40 lens, you will find the index numbers on the lower right-hand side of the calculator.
 If you are using a fixed focus lens (5.5 -
- Read the index number corresponding to the setting of your variable shutter;

shutter open shutter ¼ closed 37

The lens is now set for correct exposure.

b) Transfer the index number reading to the galvanometer dial by lifting the plastic disc and turning it so that the index number faces the filming speed you have selected.









You need not worry about your galvanometer setting as long as you film at the same speed and with the same shutter opening. All you have to do to ensure correct exposure is to press the cell control trigger before each filming.

EXAMPLE:

Colour film 10 ASA Fixed focus lens (5.5 - 36 mm)



- Bring the figure 10 into the upper window of the calculator facing the inscription ASA
 Take reading from lower left-hand side of calculator (5.5 36 mm)
- The reading corresponding to the symbol
 is

index number 4.

With the same film and shutter setting, the index number for a PAN CINOR lens would be 7.

IMPORTANT

The black triangle on the mobile disc must always be within the limits of the thick black half-circle of the fixed

CAUTION

When setting the diaphragm, see that you do not inadvertently cover the lens with your hand or any other object.

- For single frame exposures set the galvanometer dial as follows:
- Variable shutter open (
): index number against the speed of 12 f.p.s.
- Variable shutter half closed (**): index number against the speed of 16 f.p.s.

These positions of the galvanometer dial should be used regardless of the filming speed setting.

CHECKING THE GALVANOMETER ADJUSTMENT

The galvanometer is shockproofed and carefully adjusted at the factory. Nevertheless, it is advisable to check it from time to time for accuracy and to correct it, if required.

- Cover the lens or, if no lens is mounted on the camera, close the lens opening of the turret by means of a plug.
 - Hold camera vertically (normal shooting
 - Bring black triangle of the mobile disc exactly in front of the identical black triangle

The galvanometer indicator should be superimposed exactly on the red guide-mark.

If this is not the case, slightly turn the adjusting screw inside the galvanometer housing



SOME WORDS OF ADVICE BEFORE SHOOTING

firm. If you follow a moving object thing: film slowly and without ic must be used with telephoto and variable focus lenses.



Remember that it is the movement of the subject which will make your film look alive and interesting. Change your shooting angle frequently. Remember that close-ups produce the 5 seconds are usually enough.

Make it a habit to rewind your camera after each take - even a

When taking indoor shots, use "artificial light" type film. In outside night shots do not rely too much on the lightmeter reading. Open the diaphragm completely and film at 12 f.p.s.







FILTERS

You can improve your movies by using Paillard-Bolex filters with mounts corresponding to ASA standards,

For black and white film Yellow, neutral and anti-UV filters

For colour film Neutral, anti-LIV and conversion filters.

To determine the exposure index, use the sensitivity and not the sensitivity as corrected for the filter (e.g. 10 ASA for Kodachrome type A with conversion filter). Regardless of the filter or lens hood used, no cor-

rection need be made. The Paillard-Bolex photoelectric cell automatically takes account of any filter



These attachments protect the lens from direct light, which would cause snots on your film. They are therefore indispensable for filming with half-side light.



HPKEEP CAMERA

Do not, in any circumstances, take the camera mechanism apart. Should you do so, you lose any rights under the

The interior of the camera must be kept absolutely clean. A certain amount of gelatine and dust may sometimes be left in the gate and on the pressure-pad after a length of

- For cleaning the interior of the camera proceed as follows:
- unexposed film has been run through. 1. Open the pressure-pad, as shown on page 7, fig. 1. 2. Remove the pressure-pad by pulling it towards you.
- 3. Using a clean cloth twisted around the end of a small wooden stick, clean
- 4. Put the pressure-gad back in place by carefully introducing it at an angle
- 5. Close the pressure-pad by pushing the layer back into position.









LENSES

in whote stores. Lenses should not be constantly rubbed, as this might damage the anti-reflex coating.

Always nut the lens caps on the lenses between shots. When the camera is not used for some time, put the lenses away in their Paillard-Rolex cases which are protected against humidity. Special care should be taken to avoid getting dust or finger prints on the glass surfaces (perspiration is harmful to glass).

LUBRICATION

Like a high-quality watch, the camera rarely needs to be lubricated. When new, it contains a reserve of grease and oil sufficient for 2 to 3 years. Thereafter it is advisable to turn in the camera to a Pallard-Bolex distributor for fresh lubrication.

CARE OF CAMERA IN TROPICAL REGIONS

Certain precautions must be taken to protect both camera and film against heat and Airtight boxes and protective chemicals for your camera are available on the market. Be extra careful with your equipment when in tropical regions.

EXPOSURE TIMES

Firning Speed	Variable Shutter Open		Variable Shutter Half-Closed	
	Normal or Continuous Running	Single-Frame Exposure	Normal or Continuous Running	Single-Frame Exposure
12 f.p.s.	1/29 sec.	1/27 sec.	1/58 sec.	1/64 sec.
16	1/38	1/30	1/76	1/75
18	1/43	1/30	1/86	1/75
24	1/58	1/30	1/116	1/75
32	1/76	1/30	1/152	1/75
48	1/116	1/30	1/232	1/75
64	1/152	1/30	1/304	1/75

By setting the variable shutter control approximately mid-way between the half-closed and the closed positions, the exposure time is again reduced by half. It will then be

1/150 sec. at 16 f.p.s. 1/300 sec. at 32 f.p.s., etc.

THE PAILLARD-BOLEX 18-5 PROJECTOR

quality and as accurate as your camera. The Paillard-Bolex 18-5 Projector is the ideal partner for your camera.

18-5: this formula stands for out ighest quality. Lenses of three focal lengths are available: 15 mm, 20 mm

This projector excels by its easy handling qualities, its high power and

and 25 mm, all with 1: 1.3 apertures. Ask your dealer for a demonstra-tion - it will convince you.

WARNING.

If service covered by guarantee is required, the equipment must be returned to the official Paillard-Bolex Distributor in the country concerned. For convenience sake, it can be handed to a Bolex Depler with instructions for its return to the official Paillard-Bolex Distributor, who alone is authorised to carry out this service.