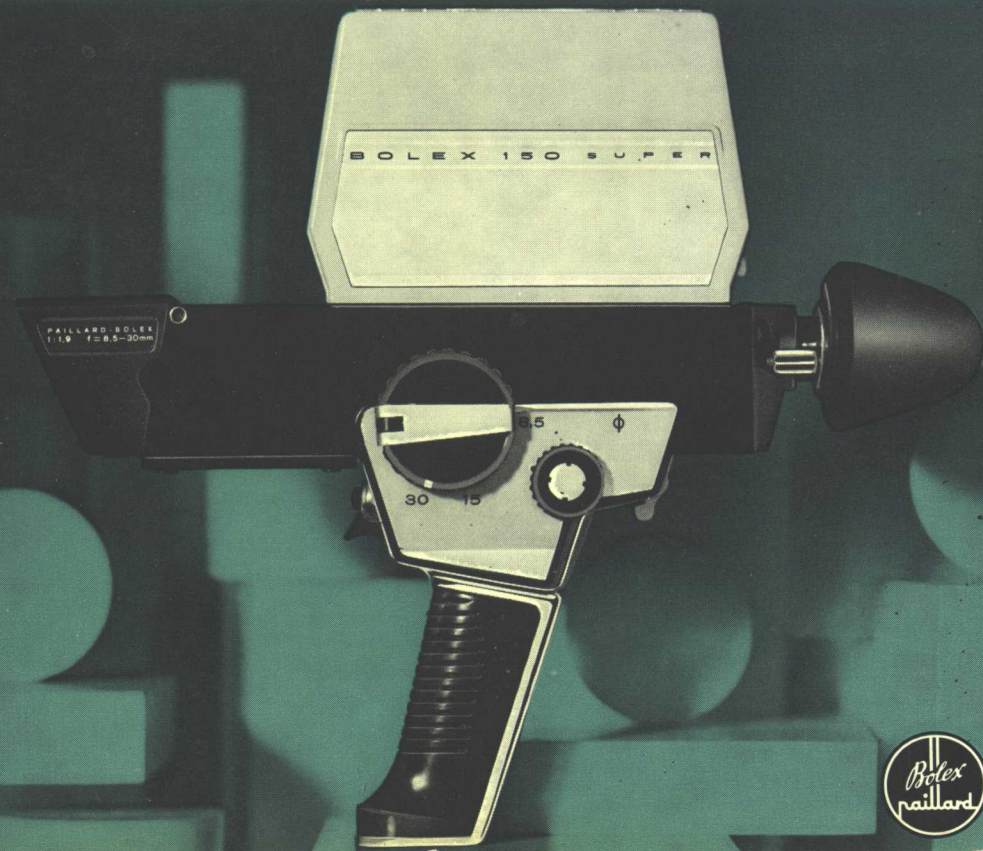


INSTRUCTIONS FOR USE

BOLEX 150 SUPER





Your camera has been supplied with:

1 sling-strap

1 filter mount

2 PX-13 batteries for the automatic exposure system.

We strongly recommend that, after reading this instruction manual, a trial cartridge of film is used in the camera, and the results checked, before you film a holiday trip or any important event. This will help you to get to know the camera and will show if you are following the instructions correctly. When in doubt, see your Bolex dealer for advice or help.



Contents

Introduction	4
Get to know your camera	6
Setting-up	8
Lens hood	8
Viewfinder eyecup	8
Eyepiece adjustment	9
Checking the batteries	10
Loading the film	12
Filming	14
Operating the mechanism	14
Focusing	14
Depth-of-field	15
Framing the subject	16
Automatic exposure system	16
Locking the exposure system	17
Filters	18
Film counter	18
A few words of advice	19
How to look after your camera	20
Replacing the batteries	21
Accessories	22
Technical data	23
The Bolex 18-5 Super projector	24

You now have a really modern camera—a camera which sets a new fashion in filming. Even before you have used it, your Bolex 150 Super camera gives you the greatest pleasure and satisfaction and we know this will continue. The completely original concept of your camera is the result of Paillard's long experience in the high-precision manufacture of movie-making equipment. The Bolex 150 Super is the latest in a long line of cameras which are traditionally unrivalled for quality.

If you are a beginner to filming, you will be thrilled how you can make successful movies easily. And if you are experienced, you will appreciate the numerous advantages of this new camera.

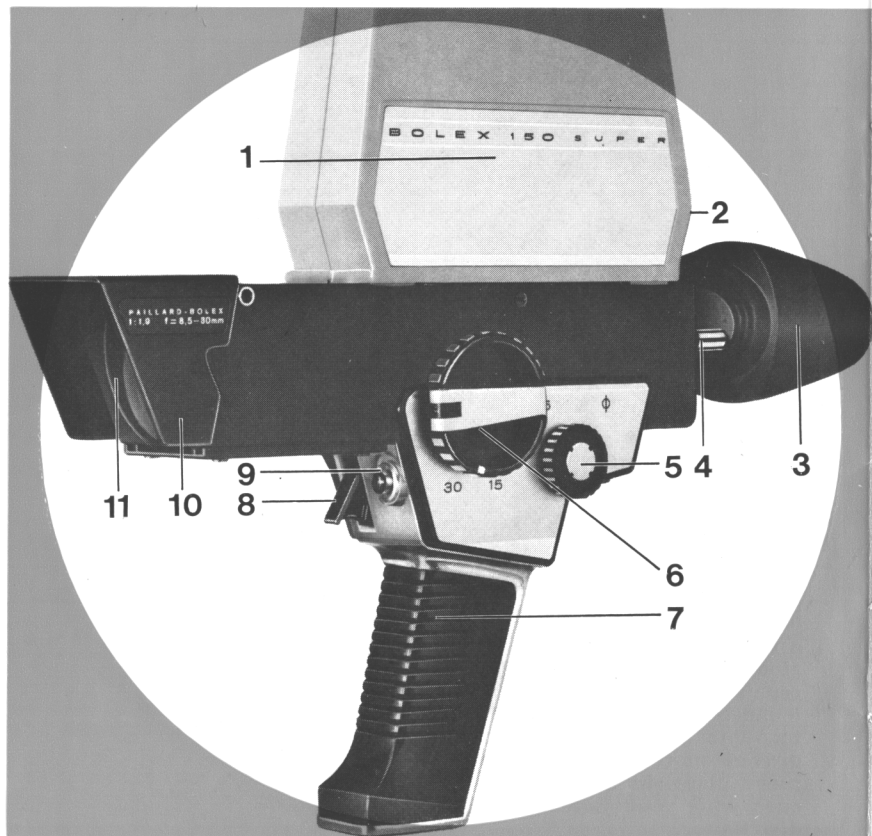
Here's wishing you many happy hours with your Bolex 150 Super camera.

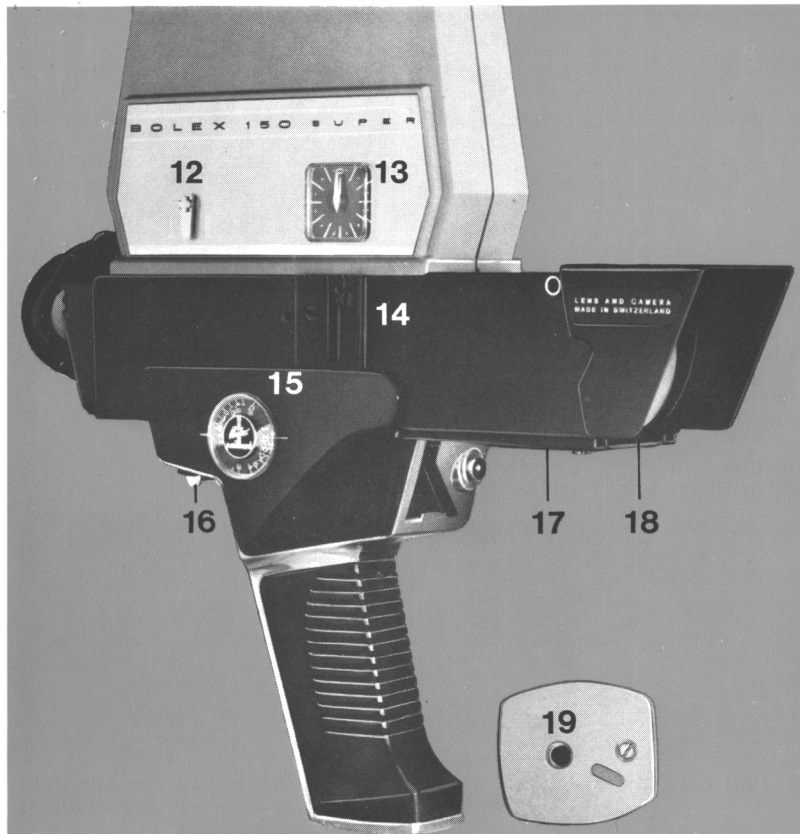
Through our world-wide organisation, we can offer impeccable after-sales service in practically every part of the world. If service is required, return your camera to a Paillard-Bolex distributor. He alone is authorised to carry out repairs, adjustments and maintenance work. Please remember to quote the serial number—engraved on the accessory attachment plate—in any correspondence with your Bolex dealer or distributor.

Paillard S. A.

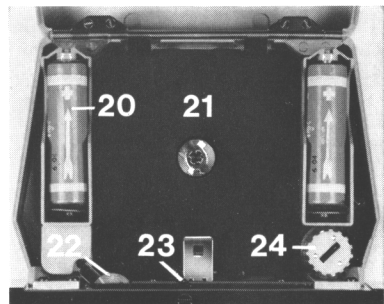
Get to know your camera

1. Magazine (pp. 12 and 21).
2. Magazine opening catch (p. 12).
3. Viewfinder eyepiece with rubber eyecup (p. 8).
4. Fluted knob for eyesight adjustment (p. 8).
5. Focusing knob (p. 14).
6. Focal length (zoom) knob with folding lever (p. 16).
7. Pistol grip (p. 14).
8. Trigger (p. 14).
9. Automatic exposure locking button (p. 17).
10. Lens hood (p. 8).
11. Lens (p. 14).





- 12. Battery checking lever (p. 10).
- 13. Film counter (p. 18).
- 14. Lamp fixing shoe (pp. 13 and 22).
- 15. Focusing distance dial (p. 15).
- 16. Detachable sling-strap.
- 17. Accessory attachment plate (p. 22).
- 18. Filter mount (p. 18).
- 19. $\frac{1}{4}$ " threaded hole for tripod or monopod (p. 19).



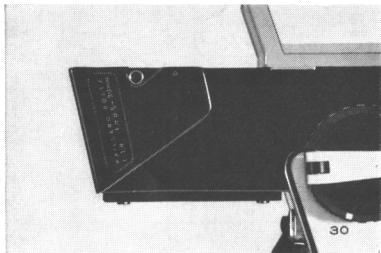
- 20. Motor batteries (pp. 11 and 21).
- 21. Cartridge driving device.
- 22. Lever for moving conversion filter (p. 12).
- 23. Gate (p. 20).
- 24. Exposure system battery compartment (pp. 11 and 21).

Setting-up

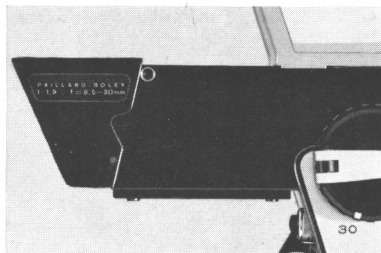
Your Bolex 150 Super camera is extremely simple to operate. Before you start filming, however, some setting-up and a few checks are necessary. First of all, lift the lens cap.

Lens hood

The lens of the Bolex 150 Super camera is supplied with a hood which is also a lens cap. It can occupy two positions:



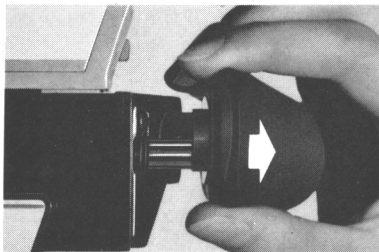
- Closed position, protecting the front of the lens between takes.



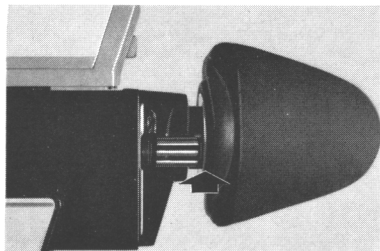
- Filming position.

Viewfinder eyecup

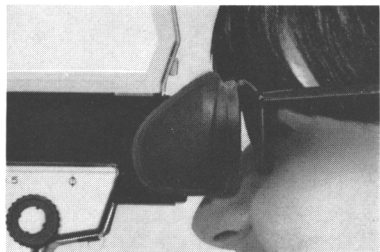
The viewfinder eyepiece is fitted with a rubber eyecup which can be set to the most convenient position, whether you prefer viewing with the left or right eye.



- Pull back the eyecup.



- Rotate it through 180° to the desired position and release it, making sure that the small pin in the end of the fluted knob is engaged in the hole.

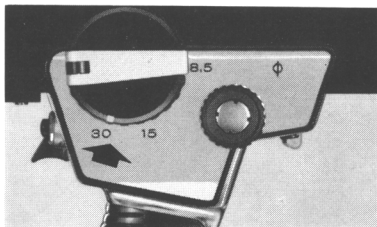


- If you wish, you can also fold the eyecup forward, especially if you wear spectacles.

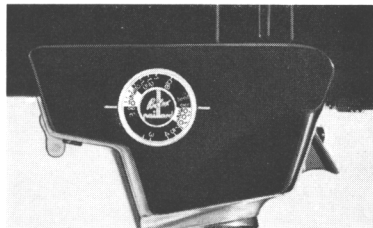
Eyepiece adjustment

For comfortable viewing, the viewfinder eyepiece should be adjusted to your particular eyesight.

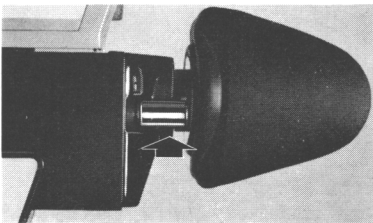
- Set the focal length to 30 mm.



- Turn the focusing knob and set the infinity mark (∞) on the dial opposite the white line.

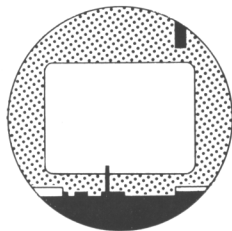


- Sight a distant subject through the viewfinder and turn the fluted knob until the picture is as sharp as possible.



Warning!

Should you ever film without your eye to the viewfinder, shield the eyepiece from direct light. Otherwise, there is a danger of stray light fogging the film.



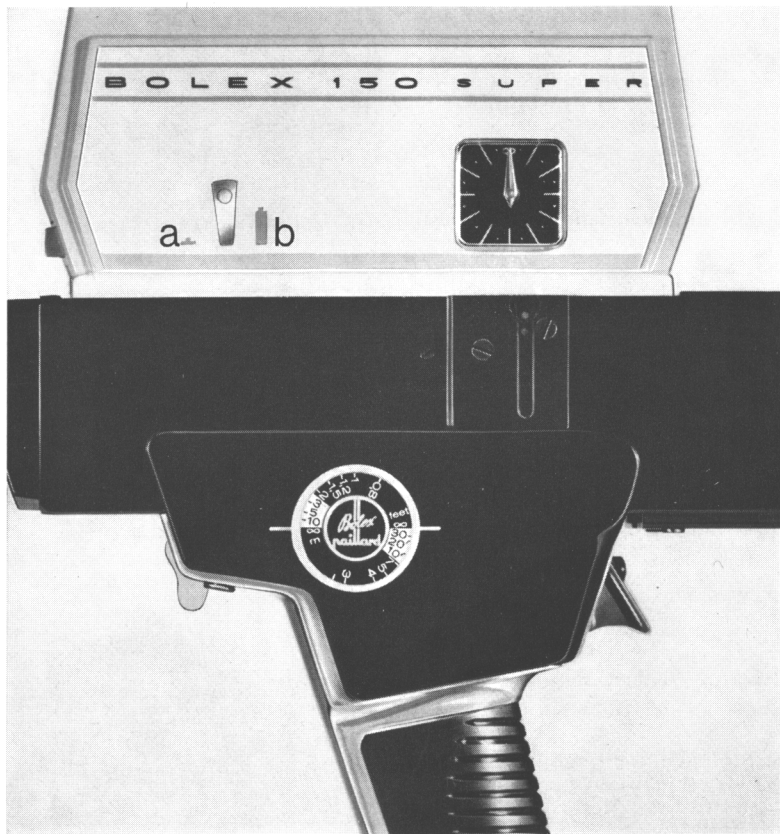
Important

The sharpness of the picture seen in the viewfinder must not be used as a guide for focusing.

The light grey circular area outside the actual filming area helps you to observe the surroundings to your scene.

Checking the batteries

Before using the camera, remember to check the condition of the batteries. It is advisable to repeat this check from time to time. The Bolex 150 Super camera requires four batteries for the motor and two other batteries for the exposure system.

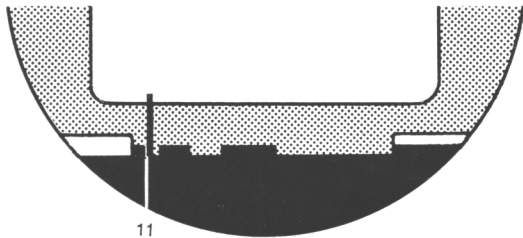


Automatic exposure system batteries

A device called a photo-resistance reacts to changing light conditions and adjusts the lens diaphragm accordingly.

With your eye to the viewfinder, pull back (a) the small lever on the right hand side of the magazine. As long as the needle does not move to the right of the position illustrated below, the batteries are still good. If the needle is not in this position, both batteries must be replaced (see page 21).

On an average, the batteries last from one to two years.



11

Motor batteries

If not already fitted, the four motor batteries (1,5 V „penlight” type) should be inserted in the magazine (see page 21). These batteries are checked in a similar fashion. With your eye to the viewfinder, push forward (b) the small lever on the right hand side of magazine. As long as the needle does not move to the right of the position illustrated below, the batteries are still good. If the needle is not in this position, all four batteries must be replaced (see page 21).

After intensive use, the batteries

may run down prematurely. However, if they are taken out of use for a few hours, they will recharge themselves and can be used to drive several more cartridges of film. New batteries will last for between 15 and 25 cartridges of film, depending on the temperature. Battery capacity decreases sharply at low temperatures. At -10°C only three or four cartridges can be used.

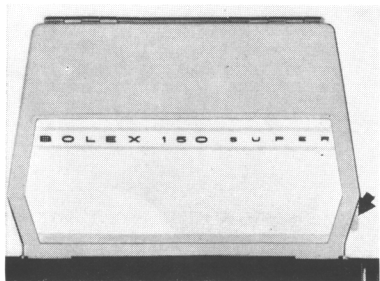
As a general rule, batteries should be changed once a year, even if the above mentioned number of cartridges have not been used.

We strongly advise you to remove the motor batteries when the camera is out of use for any length of time.

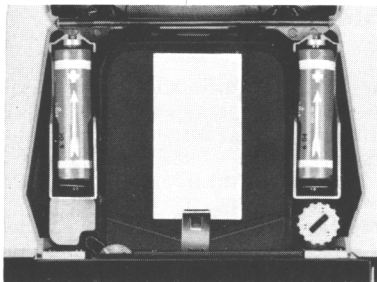
Loading the film

All that remains is to load your camera—and you are ready to film.

The Bolex 150 Super camera is designed to take Super 8 film in Kodak-type cartridges. Mostly, you will probably use colour film which is specially designed for use in artificial light conditions. A conversion filter, built-in the camera, enables you to use this one type of film in daylight as well as in artificial light. Camera loading is extremely simple.



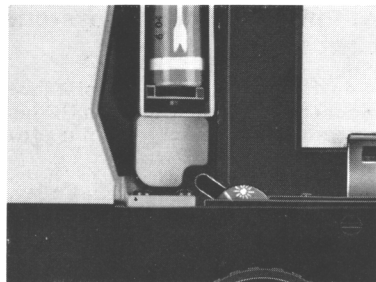
- Open the magazine lid by pressing catch in.



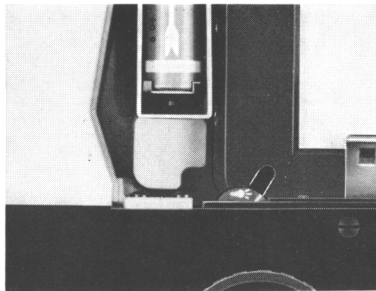
- Slip the cartridge of Super 8 film into the magazine, so that the identification label is on the outside with the flattest end downwards.

— Press the cartridge firmly into place.

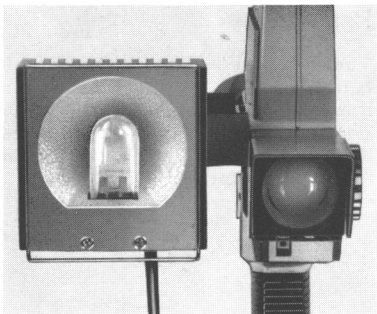
Before closing the magazine, make sure that the conversion filter lever is in the correct position.



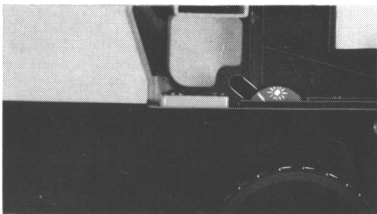
- Lever position for daylight filming (filter in place).



- Lever position for artificial light filming (filter moved aside).



- For even greater simplicity when filming in artificial light, use the Bolex 650 W lamp especially designed for the Bolex 150 Super camera.



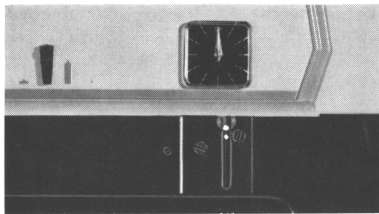
- You can then leave the filter lever in „daylight” position permanently, as the conversion filter automatically moves aside when

the lamp is switched on—and automatically moves back into place when the lamp is switched off.

To take advantage of this automatic system, you must fix the Bolex lamp into the special shoe on the right hand side of the camera.

Notes

The „daylight” position of the filter is marked on the lamp fixing



shoe on the right hand side of the camera. When the filter is in this position, the white dot on the spindle is opposite the blue dot.

The position of the conversion filter is unimportant if you use black-and-white or daylight type colour film. The conversion filter is automatically moved aside by a special notch in the cartridge.

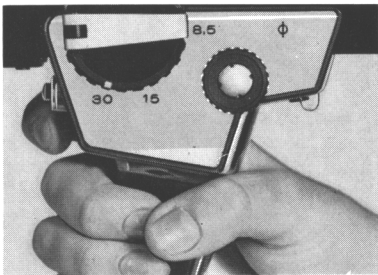
In subdued light, the magazine can be opened at any time to alter the position of the conversion filter, without any risk of fogging the film.

Filming

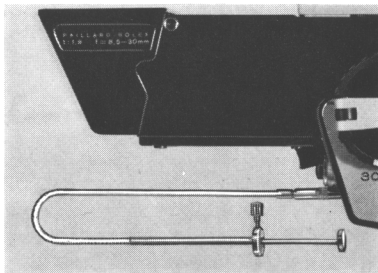
Operating the mechanism

Your camera is now ready for use. Its mechanism is driven by an electric motor, fed by four batteries.

You can operate the mechanism :



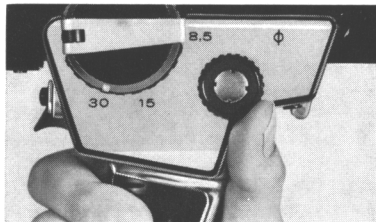
- either by pressing the trigger ;



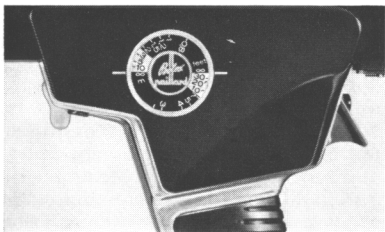
- or by using a cable release. To fit the cable, lift the trigger up to the safety position (where it also should be left when the camera is not in use) and screw the cable into the threaded hole. If you use a cable release fitted with a locking screw, the camera mechanism can be operated continuously—useful when you want to include yourself in the picture (see page 22).

Focusing

The Bolex 150 Super camera is equipped with a superb lens : the Paillard - Bolex 8.5-30 mm f/1.9 Zoom. Its high quality ensures first class results. The minimum focusing distance is 2'8".



- Focus is quickly and easily set by means of the knob on the left hand side of the camera.



● On the right hand side, focusing distances can be read at a glance on the dial marked in feet and metres.

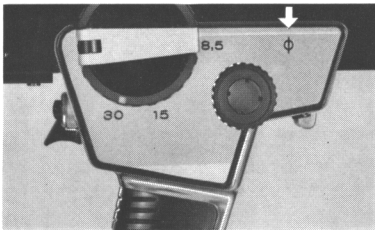
The white sector of the dial for distance focusing facilitates your task. For the most part you can apply one of the following focusing tips, without preoccupying yourself with the graduation:



Subject
between
6 and 10 ft

Subject
between
10 and 23 ft

Subject
between
23 ft and ∞



● For accurate measurement of the distance between the subject and the film, use the symbol ϕ which is on the left hand side of the camera, behind the focusing knob, as a guide for the film plane.

Depth-of-field

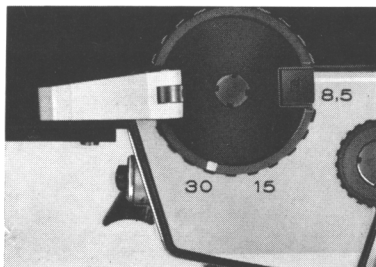
The depth-of-field is the zone in front of, and behind the subject, which will be in sharp focus. It varies according to the focal length used, the lens diaphragm aperture and the focusing distance.

The longer the focal length (that is, the nearer to 30 mm), the larger the lens diaphragm aperture (to f/1.9) or the shorter the focusing distance, the shallower the depth-of-field will be. Conversely, the shorter the focal length (that is the nearer to 8.5 mm), the smaller the lens diaphragm aperture (to f/16), or the longer the focusing distance, the greater the depth-of-field will be.

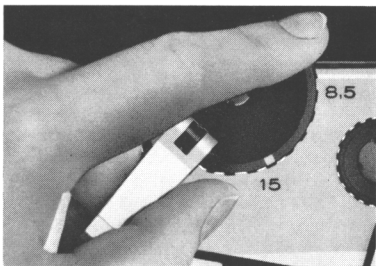
Consult the depth-of-field chart supplied with the camera.

Framing the subject

The focal length knob enables you to frame the subject as you wish. The most natural relief and movement will be reproduced at projection if the shots have been taken around the standard focal length, ($f = 15 \text{ mm}$). If circumstances should prevent you from a correct framing of the subject by applying this focal length, you then frame the subject as you wish by either using a wide-angle focal length ($f = 8,5 \text{ mm}$) if it is impossible to withdraw further or telephoto ($f = 30 \text{ mm}$) if you cannot approach. Focal lengths can also be changed during filming. This effect, known as „zooming”, creates the impression of moving away or approaching the subject. As a general rule, a complete zoom from 30 mm to 8.5 mm, or vice-versa, should take at least 5-6 seconds, otherwise the projected picture may appear jerky. Successful zoom effects depend on the steadiness of the camera.



- Swing out the zoom lever to its fullest extent.

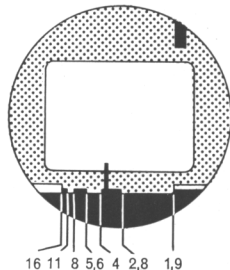


- Hold the tip of the lever between the second finger and thumb of the left hand and place the forefinger on the outside of the knob itself—near the cut-out—and turn smoothly. It is advisable, however, to use zoom effects in moderation otherwise your films could become dull and monotonous.

Automatic exposure system

The setting of the lens diaphragm aperture is fully automatic. It is controlled by a photo-resistance fed by two batteries (for checking and replacing batteries see pages 10 and 21). The light is continuously measured as it passes through the lens.

The automatic exposure system takes into account the sensitivity (ASA speed) of the film in use, by means of a special notch in the film cartridge. The position of this notch varies according to the type and sensitivity of the film.

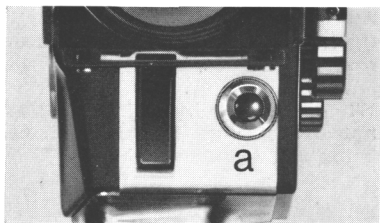


- The cut-out scale in the lower part of the viewfinder indicates the lens diaphragm aperture selected by the automatic exposure system.

At each end of this scale is a coloured zone. If the needle enters the red zone, on the right, the light is insufficient for filming. On the other hand, if the needle enters the yellow zone on the left, this indicates that the light is too strong for filming.

Exceptions :

When using film of 40 ASA (17 DIN) sensitivity or lower, and filming snow or beach scenes, or back-lighted subjects, you can continue even if the needle is in the yellow zone. When shooting night sequences outdoors (illuminations, fireworks, neon signs, etc.) you can achieve excellent results even if the needle is in the red zone.

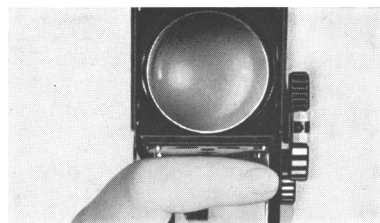


Locking the exposure system

● If you wish, the automatic exposure system can be locked, either before or during filming. This is achieved by pressing the button (a) and is used mainly under the following conditions :

- To avoid an undesirable reaction of the diaphragm while filming alternately light and dark subjects or following a moving subject which is passing in front of a contrasted background.
- To lock the lens diaphragm at any desired aperture, before filming, in order to achieve deliberate over or under-exposure.

To obtain any desired lens diaphragm aperture between $f/1.9$ and $f/16$, aim the camera at a bright or dark subject—according to whether you require a small or



● The automatic exposure system is locked by simply pressing button (a).

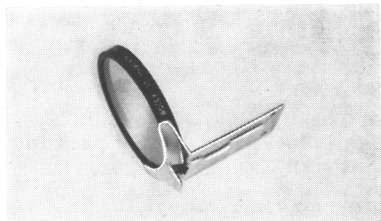
large aperture. Move the camera slowly away from this subject until the needle reaches the aperture required. Now press the button (a). As soon as the button is released the automatic exposure system will function normally.

Remark :

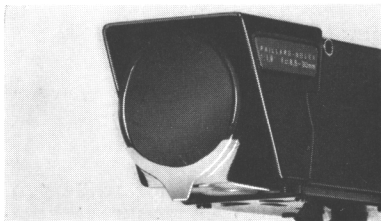
The needle may shift while you are pressing the exposure locking button. This is however of no importance as the diaphragm aperture stays unchanged.

Filters

A filter mount is supplied with the camera and it accepts standard ASA Series VI rim mounted filters.



- Place the filter in the filter mount.



- Slip the filter mount into its slot.

As the light is measured through the lens, the exposure system automatically takes into account the effect of the filter.

When a filter is in position it does not prevent the lens hood from being closed during takes.

Film counter

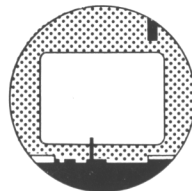
After filming several sequences, you may want to know how much film is left in the magazine.



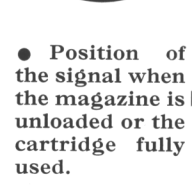
- The counter needle rotates clockwise. One complete revolution of the needle equals the total length of film in the cartridge (50ft = 3 min.

20 sec. of filming time at 18 frames per second). The counter is divided into 24 segments, each corresponding to approximately 8 seconds of filming time (or 2ft of film). The needle automatically returns to zero when the cartridge is removed.

Another useful feature is the signal in the viewfinder which indicates whether the magazine is loaded or unloaded, and whether any film remains in the cartridge.



- Position of the signal when the magazine is loaded.



- Position of the signal when the magazine is unloaded or the cartridge fully used.

When the film is finished, open the magazine lid. Take out the cartridge and send it for processing, following the instructions given by the film manufacturer.

You can, if required, unload the camera even if the cartridge has not been fully used. Only a small length of film visible at the end of the cartridge will be fogged. Remember to note the length of film which has been exposed before removing the cartridge, for when you reload this cartridge the counter will not take this into account.

A few words of advice

Make films full of life and movement

Keep the camera as steady as possible while filming. The slightest jerk is magnified on the screen and results in unsteady pictures.

The shape of your camera ensures an excellent hold. However, if circumstances permit, it is always advisable to use a monopod or tripod. As a rule, a tripod is essential when taking single-frame exposures.

— Avoid long scenes or your film will drag. On the other hand very short scenes will make your films jerky and difficult to follow. Five to ten seconds is a good average length.

— Vary the angle of your shots. And vary their distance, with long shots, medium shots and close-ups. Remember that close-ups often provide the most interesting results.

— Keep camera movements to a minimum and reserve zoom effects for really deserving cases. In excess, they can become monotonous.

— Lastly, aim for varied and interesting effects. Your Bolex 150 Super camera gives you great scope.



How to look after your camera

Do not, under any circumstances, dismantle the camera. If you do, you may be involved in costly repairs and the guarantee will be void. The interior of the magazine must be kept spotlessly clean.

Lens and filters

The surface of the front lens and the filter surfaces should be kept absolutely clean. Use the special soft tissues sold in photographic shops. But avoid rubbing the surfaces more than necessary as this could damage the anti-reflection coating.

Close the lens hood between takes. Special care should be taken to avoid dust and fingerprints—perspiration attacks 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 two to three years. At the end of this time, it is advisable to return the camera to a Paillard-Bolex distributor for fresh lubrication.

Care of the camera in tropical regions

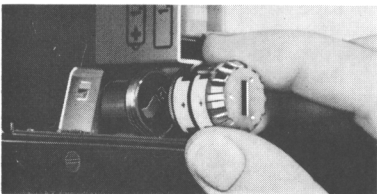
Certain precautions should be taken to protect both camera and films against heat and humidity. Airtight boxes and protective chemicals are available from photographic shops and we strongly recommend you to make use of them if you will be spending any time in the tropics.

Replacing the batteries

All the batteries used in your camera are housed inside the magazine.

Exposure system batteries

The two batteries for the automatic exposure system are in a special compartment. To insert new batteries :

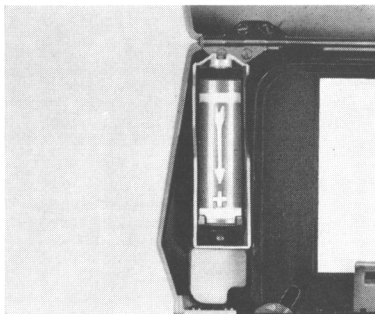


- Unscrew the compartment.
- Insert the two batteries, one on top of the other, well into the compartment, as shown in the diagram. The base, marked +, should be at the bottom and the coloured plastic seal uppermost. Screw the compartment back into place.

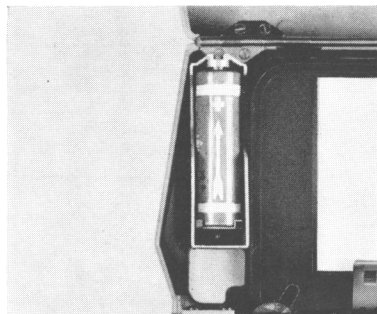
Check the batteries (see page 11). Use long-life batteries-Mallory Type PX-13.

Motor batteries

The four motor batteries are grouped in two pairs. To insert new batteries, consult the diagrams on each side of the housings.



- Put in one battery, + end downwards.



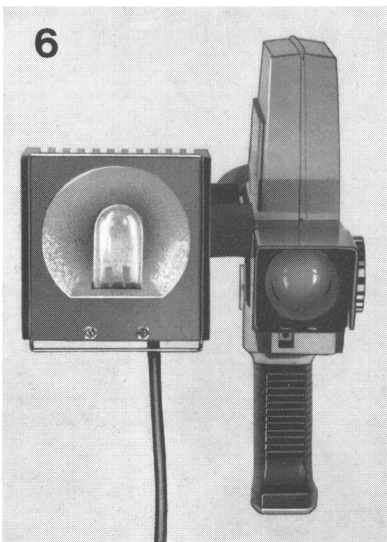
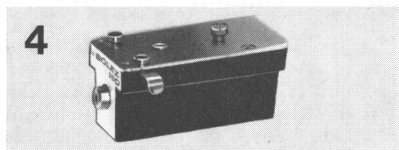
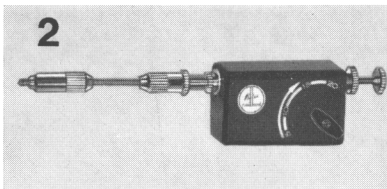
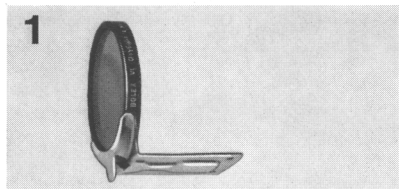
- To insert the second battery, first fit the — end into the lower spring, press downwards and then insert the + end into the terminal socket.

Check the batteries (see page 11). Use „penlight” 1.5 V batteries (International Code „A. A.” size). It is advisable to use only the best quality batteries to avoid the risk of electrolyte leakage.

Nevertheless, we strongly recommend that the motor batteries are removed when your camera is out of use for any length of time.

Accessories

Various practical accessories have been designed for use with the Bolex 150 Super camera.



1. A filter mount, whose use is described on page 18.

2. An automatic release, the ideal accessory for self-filming. It starts the camera running six seconds after the timing mechanism has been set and allows for a predetermined shooting time of between 5 and 20 seconds.

3. A cable release, fitted with a locking-screw, allows for the camera to be operated in continuous run (see page 14).

4. A single-frame release unit, very useful for producing trick effects and essential for animating still subjects.

5. A black carrying case provides smart protection for the camera and contains enough room for several spare cartridges and various accessories.

6. A high output iodine-quartz lighting unit (650 W), especially designed for this camera. When the lamp is switched on, the built-in conversion filter in the camera automatically moves aside (see page 13).

Technical data

Bolex 150 Super camera

- Super 8 film in Kodak-type 50ft. cartridges.
- Cartridge duration : 3 min. 20 sec. at the speed of 18 f. p. s.
- Interval between two consecutive divisions of film counter : 8.3 sec. or 25" of film.
- Filming speed : 18 frames per second.
- Exposure time : 1/47 second.
- Electric motor fed by four „penlight” 1.5 volt batteries (International „AA’ size).
- Photo-resistance fed by two long-life batteries, ref. Mallory PX-13.
- Range of sensitivities :
25-100 ASA (15-21 DIN) for black-and-white films and daylight type colour films.
40-160 ASA (17-23 DIN) for artificial light colour films.
- Focal lengths : 8.5-30 mm.
- Diaphragm apertures : f/1.9-f/16.
- Filing distances (measured from the film plane ϕ) : from 2'8" to infinity (∞).

Your films are precious and fragile

Your films are precious because they are virtually irreplaceable ; think how difficult it would be to recapture the same scene a second time ! Surely you do not want to jeopardize all that opportunity, your own talent and your camera have produced? Of course not. You want a projector which will protect your films and ensure they last as long as possible—a projector which is as accurate, reliable and well designed as your camera.

The Bolex 18-5 L Super is such a projector. Its 100% automatic threading system makes for quick and easy loading and provides maximum protection for your films. The Bolex 18-5 L Super projector cossets your films with kid-glove care and offers many other advantages besides : brilliant, colour-true and uniformly sharp pictures, flicker-free slow motion at 5 f. p. s., reverse projection, lead for an automatic intermission light, plus the possibility of making exciting sound movies with the Bolex 18-5 Synchronizer. Furthermore, the zoom lens enables you to instantly adapt the picture to the size of the screen without moving the projector.

The Bolex 18-5 L Super projector makes the ideal partner for the 150 Super camera. Ask your dealer for a demonstration and you will agree. We wish you every success and many pleasurable hours with your Bolex equipment.



Paillard S. A., Sainte-Croix (Switzerland)



ME 136/76 Anglais

Printed in Switzerland