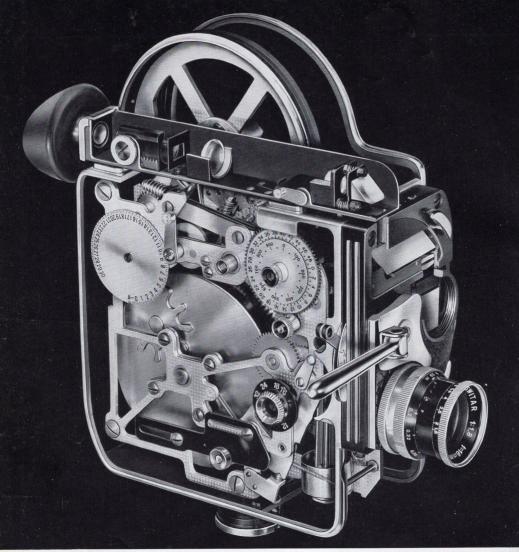
# BOLEX 16 mm









Surgical operation in Nigeria

Professor Houston 23,000 feet up in the Himalayas

Underwater hunting in the Mediterranean

# 3 different models one quality only

There are some 200,000 H 16 cameras in use throughout the world, carrying far and wide the reputation for Paillard-Bolex quality, and standing as a constant proof of their precision.

-Explorers choose this camera, for it gives unfailing service under

virtually all weather and climatic conditions.

-Most prize-winning amateur movie makers rely exclusively on the

H 16, for it is the most versatile camera available.

—Industries use it for demonstrations, teaching, training, and time and motion studies, because they know in advance that the results will be excellent.

—Scientists, doctors, surgeons, dentists, policemen find it ideal for micro and macro cinematography, time lapse studies, research and medical work.

-Advertising departments and agencies use it for the production of

TV commercials, promotion and advertising films.

—Schools and sports officials consider it the perfect instrument for covering sports events and analyzing football and other sports activities.

TV and documentary film producers have adopted the H 16 for its

performance, ease in use and permanent readiness.

The H 16 camera is considered a first choice in every field, for it is made in Switzerland, a country famed for its precision industries, and is backed by Paillard's 150 years of experience in making fine mechanical movements.



Yvan Dalain on the Amazon

Macro-cinematography

An Italian television reporter



# H16 Rex

The new H 16 Rex camera, a masterpiece of mechanical and optical precision, is the most complete and versatile 16 mm camera available anywhere. With it, all professional film effects can be produced, by means of such features as: reflex viewing, variable shutter, film rewind, frame counter and single frame device.

# Reflex viewing

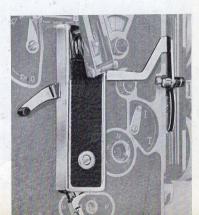
The reflex viewfinder permits the movie maker to see exactly what the lens is "seeing." The reflex viewfinder assures precise picture framing, accurate distance setting, correct evaluation of the depth of field, as well as checking the focal length of the lens and the filter in use. The prism system used in the H 16 Rex camera allows viewing both when the film is running and stationary—the picture has no flicker—the device is sturdily built, and the reflex prism is easily accessible for cleaning. The reflex finder also has an eyepiece adjustment.

### Variable shutter

Operated by a simple lever, the variable shutter allows the exposure time to be decreased without altering the filming speed. It is mainly used for fade-ins and fade-outs, lap dissolves, superimposing and trick effects, but it will also improve the quality of slow motion shots and permits extensive control over depth of field. The variable shutter is also extremely valuable in single frame work where short exposures are frequently necessary.

# Rexofader

The Rexofader, an invaluable accessory, opens and closes the variable shutter automatically and with absolute regularity. A must for producing lap dissolves.





# H16 T

The H16 T is identical to the Rex model as far as design and mechanical construction are concerned. It has a turret for three interchangeable lenses, but no Reflex viewer, variable shutter, filter slot or spool ejector. This camera is supplied with a viewfinder for lenses up to 75 mm focal length and an eyecup for ground glass focusing. Eyelevel focus available as accessory.

# H16 M

The H 16 M is of the same mechanical quality, and has the same features as the H 16 T, except that it has single lens mount instead of three lens turret. It is especially suitable for use with a Pan Cinor zoom lens having its own Reflex viewfinder (see page 11), as well as for laboratory work and underwater filming (see page 15).

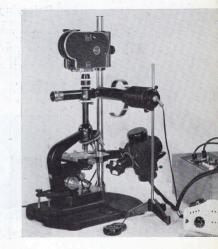


# The unlimited possibilities of the H 16 camera

Nothing is impossible with the H 16: slow and accelerated motion effects, single frame, time and instantaneous exposures, reverse run—there is no limit to the wide range of possibilities open to the movie maker. He can easily produce titles, trick effects, fades, lap dissolves, ultra-accelerated motion effects, cartoons, scientific films, and all the other effects of professional cameramen. The film rewind permits superimposing two or more pictures: superimposing titles over actual scenes; dissolves, etc. The single frame device makes the Bolex an ideal camera for time lapse studies. When fully wound, the camera will expose 161/2 feet of film, which is equal to a 40 second run at 16 f.p.s. A highly accurate governor keeps the filming speed perfectly constant from beginning to end.

# Micro-cinematography

The Bolex H cameras are ideal for micro-cine-matography in combination with the microscope adapters made by various microscope manufacturers. The camera permits studying cinematographically the life of micro-organisms. Our illustration shows the unit developed by Wild Ltd., Heerbrugg, Switzerland. Time lapse microcinematography is also possible with time lapse units specially designed for the Bolex H cameras.







### Reflex viewing

(on H16 Rex only)

The picture on the ground glass screen of the Reflex prism, enlarged 6 times, is exactly as it will appear on the screen. The prism is easily accessible for cleaning.

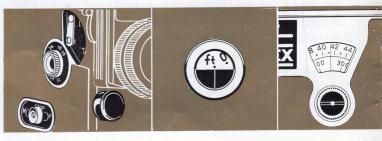
#### Releasing

The camera can be operated for continuous run and for frame-by-frame (instantaneous or time) exposure. A cable release is also available as an accessory, and is extremely valuable for single frame exposures. A hand crank permits unlimited forward and reverse run for special effects and for rewinding the film for changing from one type of film to another.

#### Counters

The footage and the frame counters show the exact length of film shot and the number of frames exposed. Both are coupled to the camera mechanism. They add in forward run and subtract in reverse. All the usual trick effects can be obtained with accuracy.

A clicking sound can be heard after every 8'/4" of film exposed (about each second at 24 f.p.s.) allowing the operator to easily estimate the length of the scene being filmed.

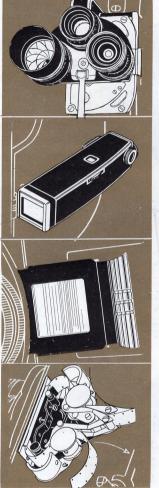




#### Variable shutter

(on H16 Rex only)

A simple lever controls the shutter opening whether the camera is in use or not. It can be locked in the open, ½ closed, ½ closed, ¾ closed and entirely closed positions.



# Turret

Holds three interchangeable lenses. Folding turret lever for rotating turret without danger of altering the diaphragm or distance settings on the lenses.

#### Octameter viewfinder

(on H16 Rex only)

Principal

of the H16

features

Has 8 focal lengths: 16, 25, 35, 50, 63, 75, 100, and 150 mm.

#### Preview viewfinder

(on H16T and M)

Has 4 focal lengths: 16, 25, 50 and 75 mm. Removable viewfinders, Parallax correction between 20" and infinity. Field adapter for a 10 mm focal length available. Both finders can also be set in between the engraved figures.

#### Filter slot

(on H16 Rex only)

Holds a gelatin filter behind the turret but in front of the taking window and the variable shutter. The filter is therefore always in position, regardless of which lens is used, and a single set of gelatin filters is sufficient for the whole range of lenses. The large selection offered in gelatin filters is another advantage of the filter slot.

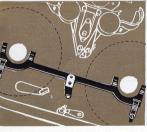
#### **Automatic loading**

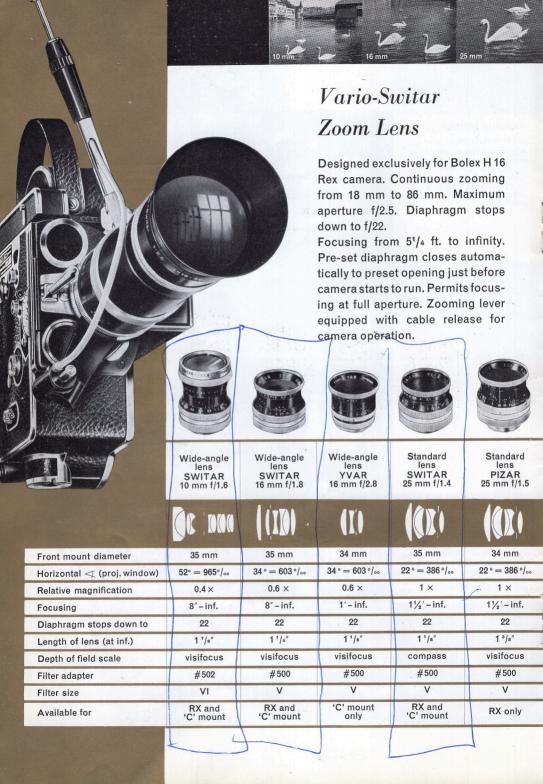
An ingenious device makes loading the film automatic, and a safety mechanism insures that the internal controls are correctly positioned before filming.

The single sprockets allow the operator to use single or double perforated film, and also film that is to be equipped later on with a magnetic or optical sound track.



makes changing spools easy. Simply press on the ejector lever, the two spools are freed and can be removed from the camera without difficulty.









# Kern-Paillard Swiss Lenses

A high-precision camera must be equipped with high-quality lenses so that the pictures on the screen are absolutely clear, brilliant and sharp. Kern-Paillard Swiss lenses attain this exacting standard, and an extremely wide range of top-quality lens types has been designed to cover every requirement. They are outstanding for their remarkable correction of aberrations, and each lens element is mounted to eliminate internal reflections. As an exclusive feature, all Kern-Paillard lenses are fitted with one of two automatic depth-of-field scales designed for quick and easy reading:

the Visifocus Scale (orange dots) or the Compass Scale (white line).















25 mm f/1.8

Telephoto lens SWITAR 50 mm f/1.4

Telephoto lens PIZAR 50 mm f/1.8

Telephoto lens SWITAR 75 mm f/1.9

Telephoto lens YVAR 75 mm f/2.8

Telephoto lens YVAR 100 mm f/3.3

Telephoto lens YVAR 150 mm f/4

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V			1	М	

37 mm	43 mm	43.5 mm	44 mm	33 mm	33.5 mm	43.5 mm
22° = 386°/。	11 ° = 193 °/	11 ° = 193 °/。	7°=129°/。	7° = 129 °/。	5½° = 96.5°/	3½° = 64.5°/
1 ×	2 ×	2 ×	3 ×	3 ×	4 ×	6 ×
1½' – inf.	3' – inf.	3' – inf.	5' – inf.	5' – inf.	8' – inf.	13'-inf.
22	22	22	22	22	22	32
1 3/8"	2 3/8"	2 <sup>5</sup> /8"	3 ³/s"	3 3/4"	5 1/8"	71/2"
visifocus	visifocus	visifocus	visifocus	visifocus	visifocus	visifocus
#500	#508	#508	#508	#500	#500	#508
V	VI	VI	VI	V	V	VI
'C' mount only	RX and 'C' mount	RX and 'C' mount	Same lens fits RX and 'C'			

# SOM Berthiot French Lenses



Paillard is the exclusive distributor for five SOM Berthiot lenses. As Kern-Paillard lenses, they are renowned for their precision and excellent results. A new wide-aperture lens for the H 16 T and H 16 M models has recently been developed: the Cinor 25 mm f/0.95.

The Lytar 25 mm f/2.8 can be used with all H models.



VI

RX only



5.5

'C' mount only





5.5

Same lens fits

RX and 'C



5.5

RX only

	Wide-angle lens CINOR 10 mm f/1.9	Standard lens CINOR 25 mm f/0.95	Standard lens CINOR 25 mm f/1.4	Standard lens LYTAR 25 mm f/1.8	Telephoto lens TELECINOR 75 mm f/2.5
	( <b>()</b> )( )0)	(CDII	(CD)	(11)	
	44.5 mm	39.5 mm	39.5 mm	39.5 mm	39.5 mm
	52° = 965°/00	22°=386°/00	22°=386°/••	22° = 386°/00	7°=129°/00
	0.4 ×	1 ×	1 ×	1 ×	3 ×
	10" – inf.	1 3/4' - inf.	1 3/4′ – inf.	1 1/2' - inf.	3.3′ – inf.
	22	22	22	22	22
-	21/2"	21/4"	21/4"	1 3/4"	31/8"
	engraved	engraved	engraved	engraved	engraved

5.5

RX only



# Bolex Anamorphot

System Moeller

When fitted in front of the camera lens, the anamorphic lens makes it possible to shoot wide screen films (width of picture = twice its height). For projection, the Anamorphot is fitted in front of the projector lens.

Front diameter

Length of lens

Depth-of-field scale

Drop-in filter size

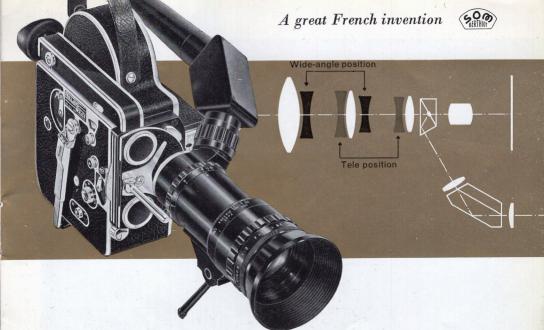
Available for

Focusina

Horizontal < (proj. window)

Relative magnification

Diaphragm stops down to



# The Pan Cinor

### Zoom lens

is available in three models:



Pan Cinor "70" f/2.4 = 17.5 to 70 mm; range 7 ft. to infinity.

Pan Cinor "85" f/2 = 17 to 85 mm; Rangefinder built in the viewfinder; range 6 ft. to infinity.

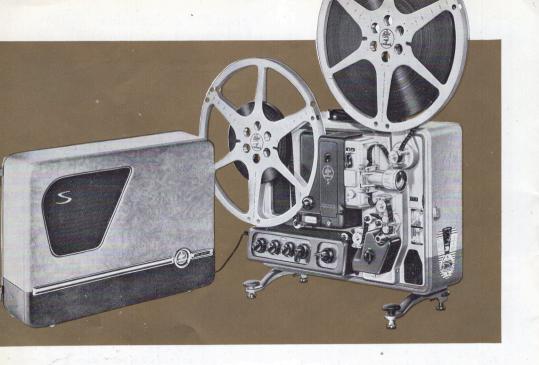
Pan Cinor "100" f/3.4 = 25 to 100 mm; range 7 ft. to infinity.

Using a Pan Cinor, the operator can alter the size of field as he pleases with a single movement. Framing his subject to suit his purpose, he can switch in an instant from a general view of the subject to a medium shot or close-up without changing position. By switching gradually, while filming, he can obtain the classic "travelling" effect. Optical travelling (A) gives the impression of moving towards or away from the scene being filmed. Follow-on travelling (B) creates the illusion of keeping pace with a moving subject. The Reflex viewfinder of the Pan Cinor allows completely accurate framing of the picture taken by the lens, whatever the focal length and shooting distance. Even with the H 16 Rex, this viewfinder is a useful asset because of its clarity.

Accessories for Pan Cinor "85", "70" and "100"

Close-up attachment #3 (f = 6 ft.) for distances from 6' 6'' to 3' 3''

Close-up attachment #4 (f = 3 ft.) for distances from 3' 9" to 2' 6" The Pan Cinor lenses take standard series VIII filters.



# S-211 and S-221 sound projectors

Highly versatile and complete, the S-211 and S-221 project both 16 mm sound and silent films, with single and double perforations. Perfection in construction, together with the latest technical advances, make these projectors superb instruments for obtaining unmatched picture quality and reproduction of sound. These 16 mm projectors stand out due to their wide range of frequencies, the remarkably constant film movement and their high light output, due mainly to the Hi-Fi (high fidelity) projection lenses with which they are equipped. The sturdy, precision made parts ensure flickerless pictures, and the film is fully protected. The appearance of both the S-211 and the S-221, in two-tone varnish finish and smart cover, is both harmonious and pleasing.

#### S-211

For projection of silent or optical sound films.

#### S-221

For projection of silent, magnetic, and optical sound films. Permits recording of sound effects, music and narration on films equipped with magnetic stripe.

#### Size

— Cover closed: 20½" ×11" ×17"

Cover removed, with spools: 25½" × 17" × 31"

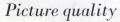
Weight: 55 lbs.

# Sound quality

High fidelity sound quality is obtained thanks to the advanced sound head and to the amplifier with independent controls for bass and treble. Separate volume controls for mixing and many other sound variations. Focusing control for optical light beam for maximum fidelity.

**S-211:** Frequency range: 50 to 7,000 cycles  $\pm$  3 decibels for optical sound.

**S-221:** Frequency range: 50 to 7,000 cycles  $\pm$  3 decibels for optical sound – 50 to 10,000 cycles  $\pm$  3 decibels for magnetic sound. Films with 100 mil, 50 mil, and 25 mil magnetic tracks can be used without special adjustments. The speaker is built into the projector cover. A large auditorium speaker is also available, see page 16.



A unique optical system is built into the S-211 and S-221 to provide maximum brightness and equal light distribution. The claw mechanism and film guides are made to exacting tolerances and ensure absolute steadiness of the projected image. Lamp is 110 volt, 750 or 1,000 watt. Condenser has three coated lenses. Picture flicker eliminated by shutter adjustable for two or three light interruptions per frame, whether projector is running or not. Three projection lenses available: 35 mm f/1.3, 50 mm f/1.3 and 70 mm f/1.6.

# Construction quality

Every one of the parts of the S-211 and S-221 is precision machined. Universal type motor with high starting torque. Speed is variable from 16 to 25 f.p.s. and is accurately stabilized by a governor activated by electronic impulses. Built-in illuminated stroboscope for precise setting of 18 and 24 f.p.s. Recording sound with the S-221 is made easy by the use of the reverse run and the frame counter.

### Convenient to use

Streamlined and compact, the S-211 and S-221 are easy to carry and to set up. The speaker in the cover can be removed, the spool arm positioned and the projector height adjusted in a matter of seconds. Loading is carried out rapidly and the projector controls are simple. These controls are illuminated. An auxilary socket for a table lamp is built in.

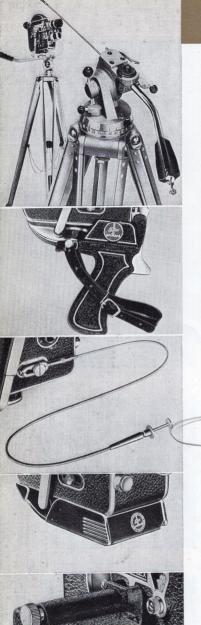
Accessories: see page 16.











# Filming accessories

### Tripod

Sturdy, light and convenient, this is the indispensable accessory for precision filming, especially when using a telephoto or Pan Cinor lens. Universal pan head with spirit level, pan handle with cable release, adjustable three position leg lock, separate locking for panning and tilting, supplied with 20" cable release.

### Trigger handle

Enables the camera to be held steadily and conveniently. With leather carrying strap.

### Cable releases

For operating the camera without actually handling it, to eliminate vibration. Absolutely necessary for single frame filming.

### Camera base

Light and practical. Provides a steady camera support on table, wall, etc., even when the camera is equipped with a Pan Cinor lens. Can also be screwed onto a tripod.

### Unimotor

Can run off batteries or ordinary house current with BE 22 Bolex transformer. Extremely useful for filming long sequences. Motor mounts on camera without special installation. Runs camera at speeds from 12 to 32 f.p.s. Speed controlled by camera governor. Transformer for 50 or 60 cycle A.C. 90 to 300 volt current. Leather case holds unimotor and 5 batteries. Supplied with carrying strap.

Weight: Motor – 1 lb. 6 oz. Case with batteries: 8 lbs. Size: Motor –  $3\frac{1}{2}^{n} \times 3^{n} \times 2\frac{1}{2}^{n}$ 

Case:  $10\frac{1}{2}$ "  $\times 6$ "  $\times 5$ "

# Filming accessories

# Rexofader

Automatically opens and closes the variable shutter of the H 16 Rex camera, thus giving smooth fade-ins, fade-outs and lap dissolves. Closing or opening cycle is 40 frames.

### Extension tubes

Necessary for filming small subjects (macro-cinematography). Particularly suitable for use with the H 16 Rex camera.

Reflex finder shows exact area covered and permits accurate focusing. Set of four tubes, 5 mm, 10 mm, 20 mm and 40 mm.

### Viewfinder field adapters

Are placed in front of the octameter viewfinder to give the field of view of other focal length lenses. Available for 10 mm and 200 mm.

# Prismatic focusser for H16 T and M

For accurate framing and focusing of the subject through the taking lens before loading the camera.

### Underwater housing

Extremely resistant, remains watertight down to a depth of 300 feet. Camera is removed and fitted into housing without tools. Easy to use. Has three outside controls: for diaphragm, motor winding and camera release. Supplied with its own parallax corrected viewfinder.





# Projector accessories

### Auditorium speaker

12" diameter, 15 watt with 50' electric cord on reel with permanent contacts. In handsome lined case with side folding down to form base. Space for many accessories. Weight: 28½ lbs.

### Microphone

High fidelity, dynamic microphone... directional. 13' cable with jack. Supplied with S-221 projector.

### Power distributor

If two speakers are used simultaneously, the accessory permits distributing the power in any proportion to the two speakers. Supplied with auditorium speaker.

### Earphone

For monitoring recording, Impedance: 50 ohms at 1,000 cycles. Double channel, 5' cable with jack. Supplied with S-221 projector.

### Superimposition unit

Volume of an existing magnetic sound recording can be lowered to superimpose narration, music or sound effects. Gives real professional results.

### Travel case

In leather-like material, with stiff bottom. Gives perfect protection to lined case. Can also hold 2,000' spool supplied with projector.

# Editing accessories

## "Super" Universal Titler

Titles make a film more attractive. Using the Bolex titler, the most varied combinations are obtainable. Very complete set of accessories for special effects and cartoons. Can be used with 16 and 8 mm cameras of all makes and many still cameras. Functions equally well vertically or horizontally. Perfect framing. Reflectors mounted on articulated arms that can be adjusted to any lighting angle, front or rear. Makes a good stand for micro-cinematography, animation and close-up filming. Built-in tape measure.

Basic titler consists of stand, titling frame, and lights. Accessory kit includes drum turntable, animation plate, flipping plates, scroll device and main frame. Felt titling letters – four colors – are available separately.

# Splicer

For 16, 9.5 and 8 mm film. Makes perfect, long-lasting cement splices.

# Carrying cases

### H-2 A Carrying case

Of high-quality leather, velvet lined. Very practical – the camera being always at hand. For cameras equipped with lenses up to 75 mm focal lengths. Size is  $12'' \times 10'' \times 6\frac{1}{2}''$ .

## H-1 A Carrying case

In brown leather, velvet lined, with compartments for films and accessories. For cameras equipped with lenses up to 75 mm focal lengths. Size is  $12'' \times 10'' \times 6\frac{1}{2}''$ .

### Omnibolex case

In brown leather for camera equipped with a Pan Cinor, Vario-Switar or Yvar 150 mm. Compartments for film, unimotor and many other accessories. Size is  $16'' \times 14'' \times 8\frac{1}{2}''$ .





The Sainte-Croix factories

## International after-sales service

Through nearly 130 agencies staffed with factory-trained mechanics, Paillard can give impeccable after-sales service nearly everywhere in the world. These specialists can adjust, overhaul and repair cameras and are also available for help and suggestions for better films and better projection.

PAILLARD Inc., 100 Sixth Ave. New York 13, N. Y.



PAILLARD S.A. SAINTE-CROIX (SWITZERLAND)



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