LOOK LEARN PROFIT

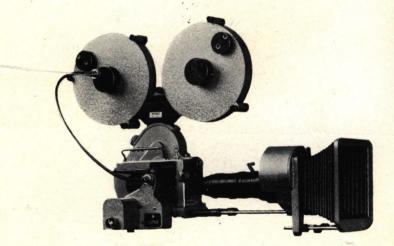
TRADEMARK OF QUALITY SINCE 1896

PROFESSIONAL

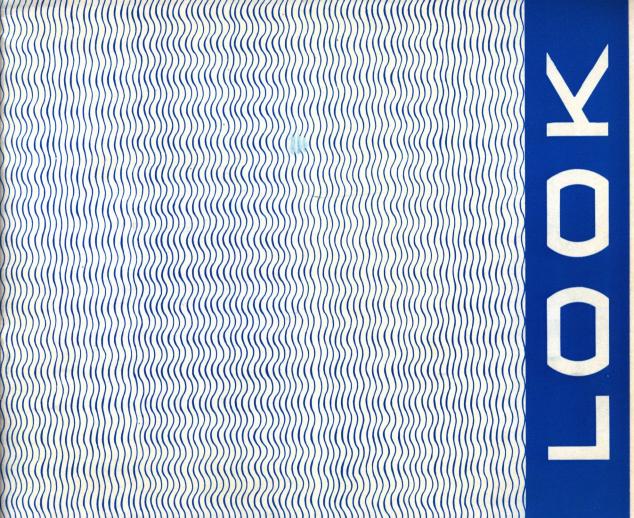
PATHÉ



THIS IS YOUR PATHE



THE BASIC CAMERA TO BUILD ON



THE PATHE NEWS STORY

Since 1896 PATHÉ has specialized in only one field — cinematography. As the world's most experienced creator of fine movie equipment, PATHÉ has developed a tradition of master craftsmanship long recognized as the international standard of excellence.

For years manufacturers have realized that the ideal 16mm camera would combine rugged dependability, precision workmanship, easy portability, the versatility of a complete system of accessories, and a reasonable price.

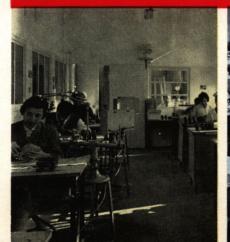
Many manufacturers attempted to achieve this ideal camera, but only succeeded in complicating their already outdated designs. PATHÉ, however, after devoting years to fundamental cine research, finally designed and produced the camera that is totally new in conception, operation, and production.

PATHÉ, as it has for so many decades, again creates the NEWS... news of the entirely new and better motion picture camera, news of the camera that was designed expressly for the space age, news of the camera that is unquestionably the world's best value... NEWS of PATHÉ.

THOSE WHO BUILD THE VERY BEST...



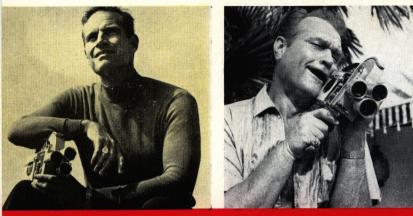
We thank these brilliant PATHÉ engineers and master craftsmen. Only their devoted genius and skill made the PATHÉ PROFESSIONAL REFLEX 16 possible.



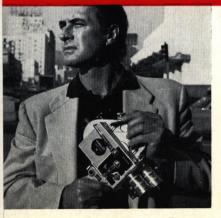




Charlton Heston is famous for his award winning roles in The Ten Commandments, Ben Hur and other great movies of our time. Red Skelton, the most beloved comedian is seen by more than 35 million people every week on his hour long CBS television show.



Discriminating leaders in every field who appreciate the very best choose and endorse PATHÉ as their personal 16mm movie camera.



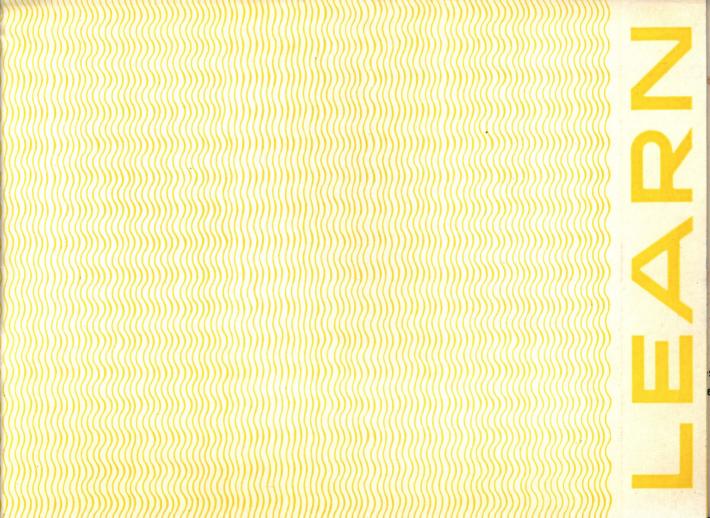
Jock Mahoney, the space age « Tarzan » brings a new acting dimension to the jungle.



Catherine Rouvel famous for her role in film « Chair de Poule ».



THOSE WHO CHOOSE THE VERY BEST...



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Eyepiece of Direct Viewfinder
Head of Motor Winding Spindle
Motor Winding Handle
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Head of Drive Spindle
Camera Speed lock
Frame Counter
Driving Handle

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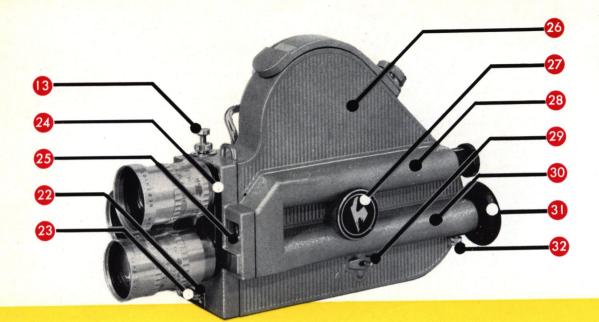
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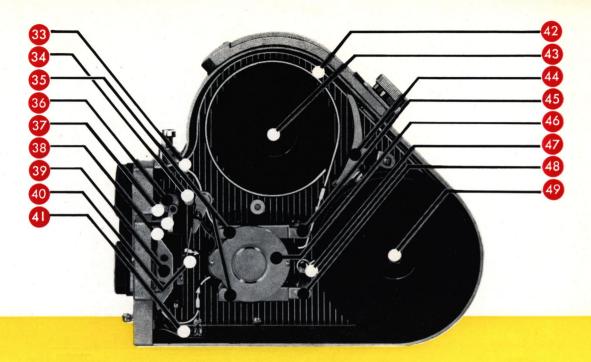
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Shutter Release
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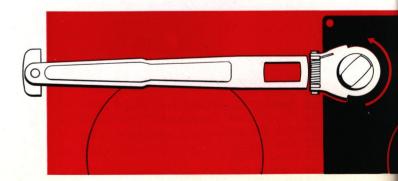


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MECHANICAL OPERATION

WINDING THE MOTOR



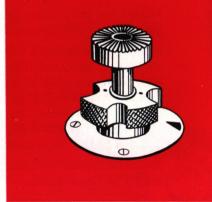
Lift the motor winding handle (6) and engage it on the head of the motor winding spindle (6). Turn the handle in the direction of the arrow (counter-clockwise) until a bell is heard. This signifies that only 4 or 5 more turns are needed for complete winding and that the handle should then be turned slowly to avoid unnecessary shock on the positive stop.

NOTE : The bell-warning signal will be heard only if approximately 9 feet of film have been unwound after the last complete winding.

After the motor spring is fully wound, let the winding handle snap back into a rest position. The camera will now expose 22 feet of film without rewinding. However, it is good practice to wind the motor after each scene, regardless of the power reserve. Should it be necessary to shoot a continuous scene longer than 22 feet (894 frames), for example in medical and technical applications, either of 2 electric drive motors is recommended. One, the PATHÉ 16-24, will drive the camera at either 16 or 24 fps, while the other, the PATHÉ 8-80 WILF with tachometer, will drive the camera at any speed from 8 to 80 fps. Either motor may be operated directly from batteries or from AC with a transformer.

ANOTHER PATHÉ FIRST. When the camera is used with our motor 8.80 motor, the shutter will always stop in ist closed position — meaning no troublesome black frames to edit.

MECHANICAL OPERATION... Cont.



SELECTOR SWITCH

The filming selector switch (15) and the shutter release (13) are key controls in operating the camera. The filming selector switch is marked with four characters : « C », « I », « B », and « OFF ». When this switch is set to these characters it controls the filming operation as follows :

- « C » Ordinary filming. Start by pressing the shutter release (13), stop by letting it up.
- « T » Instantaneous single frame exposure (similar to ordinary snapshot camera). The approximate exposure time with the shutter wide open is 1/16th sec. at 8 fps and 1/24th sec. at all other speeds.
- « B » Single frame time exposure. Each frame is exposed from the moment the shutter release is pressed until the moment it is let up. NOTE : Variable shutter must be wide open.
- « OFF » Safe position. The shutter release is positively locked, and any possibility of accidental exposure is eliminated.

To set the filming selector switch to any of the above characters, simply press it down, turn it to bring the desired character opposite the red triangle on the index plate (16), and let it up. NOTE : The selector switch may be turned from « $C \gg$ to « OFF » and back.

For continuous filming, set the filming selector switch (15) on « C », push the shutter release (13) down, and turn it slightly to the left. NOTE : Do not turn the filming selector switch when the shutter release is in the continuous filming position.

To prevent camera movement during single frame operation it is advisable to use the PATHÉ right angle swiveling cable release. This may be easily fiitted in the socket in the top of the shutter release and will eliminate camera movement.

15

MECHANICAL OPERATION... Cont.



CAMERA SPEEDS

The PATÉ PROFESSIONAL REFLEX 16 may be run at ANY filming speed from 8 to 80 fps. Note that six speeds (8, 16, 24, 32, 64, 80 fps) are marked with engraved dots. The position of these dots will vary slightly from camera to camera since they are placed on a camera only after it has been individually tested and calibrated by hand. Although these six speeds are the absolute ultimate in filming precision, any intermediate speed may also be used by simply estimating its position between two exactly calibrated marks.

To set a particular filming speed, first release the speed lock (9) by turning it counter-clockwise. Then, hold the speed control dial (21) by its two knobs and turn it in either direction so that the desired speed is opposite the index mark (19) on the camera body. Finally, to prevent moving the speed control accidentally, turn the speed lock clockwise to positively lock the speed control in position.

Since each camera's speeds were individually hand calibrated with film in the camera, it is not advisable to run the camera without film at any speed over 16 fps.

16

The normal speeds used in 16mm projection are : (1) 16 fps for silent films and some magnetic sound, and (2) 24 fps for optical sound and most magnetic sound films. When a film is projected at its normal speed the part of it shot at a speed slower than normal will produce an illusion of accelerated motion on the screen. Similarly, the part of the film shot at a speed faster than normal will produce a slow motion effect on the screen. For example, assume that you are shooting a silent film. The normal projection speed is 16 fps. Therefore, where normal motion is desired on the screen, the film should be shot at 16 fps. As the filming speed becomes slower, the motion on the screen will be more and more accelerated. This effect is the basis of time-lapse photography. If slow motion is desired, the film should be shot at speeds faster than 16 fps. As the filming speed is increased, the motion on the screen will become slower. This is the basis of motion analysis and detailed time motion studies.

As a general rule, the rate of motion on the screen as compared to the normal rate of motion is the ratio of the projection speed (fps) to the filming speed (fps). For example, if you project at 16 fps and film at 80 fps the motion on the screen will be 1/5 (16/80) the normal rate of motion.

The following charts are provided as necessary information for complete versatility and as a ready reference during production.

	EXPOS	URE TIM	E 100 F	OOT SPO	DOL	
FRAMES PER SECOND	8	16	24	32	64	80
EXPOSURE TIME	8 MIN ¹ . 20 SEC.	4 MIN. 10 SEC.	2 MIN. 48 SEC.	2 MIN. 5 SEC.	1 MIN.	50 SEC.
	PROJEC	TION TI	ME 100	FOOT SP	001	
16 FPS	4 /	MIN. 10 SEC. O	R APPROXIMAT	TELY 15 MIN. F	OR 100 FT. RE	GL.
24 FPS		MIN. 48 SEC. O				

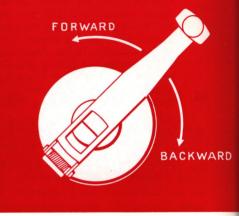
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MECHANICAL OPERATION ... Cont.

HAND CRANKING

The driving handle (11) may be used to drive the film either forward or backward by hand. To hand crank the film forward for special effects, first be sure that the spring motor is completely unwound and set the shutter release (13) in the continuous filming position. Set the film speed control at the desired filming speed. Lift the driving handle (11), engage it on the drive spindle (8) and wind it as fast as possible or until you feel the definite resistance of the motor governor. If you do not feel the resistance of the governor you may not be winding the crank fast enough to obtain an accurate speed. At high filming speeds, it is very difficult to wind the crank fast enough for accurate results.

PATHÉ



To rewind the film by hand first be sure that the variable shutter (23) is completely closed (placing a lenscap on the taking lens is also a good ideal). Then engage the driving handle (11) on the head of the drive spindle (8).

Without releasing the handle, press the shutter release (13) and wind the handle clockwise. The frame counter (10) will record the frames rewound; in addition, each complete turn of the small handle is 8 frames.

IMPORTANT

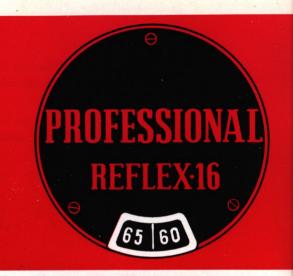
As the film is being rewound, the motor spring is being wound up. Therefore, in order to rewind film, the motor spring cannot be fully wound. The length of film rewound cannot exceed the extent to which the motor spring is unwound. However, when the motor spring is completely unwound, over 22 feet of film can be rewound.

MECHANICAL OPERATION ... Cont.

The PATHÉ PROFESSIONAL REFLEX 16 is equipped with two different counters — a frame counter (10) and a film counter (2).

FRAME COUNTER

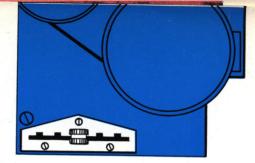
The accurate geared frame counter adds in forward operation (when used with the spring motor) and subtracts in reverse, putting the precision fades and dissolves of Hollywood tricks at your fingertips.



FILM COUNTER

The automatic film counter shows the length of film unexposed. It is graduated up to 100 feet, the maximum capacity of the camera alone. When 400 foot magazines are used, the separate counters of each magazine take over. If the film is completely exposed the counter will read $\ll 0$, and when there is no film the camera the counter will read \ll EMPTY ».





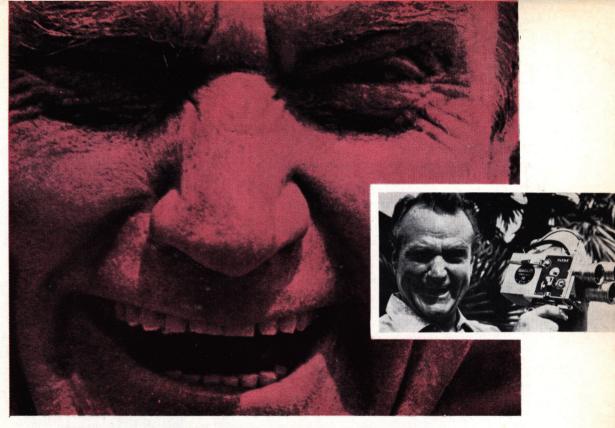
VARIABLE SHUTTER

One of the most versatile features of your PATHE PROFESSIONAL REFLEX 16 is its 180° variable shutter. This unique shutter gives you a means of controlling the exposure time that is independent of the filming speed. When used in conjunction with the filming speed control, however, it permits choosing from a wide range of diaphragm openings under almost any lighting conditions The variable shutter is also an essential control in reducing depth of field, filming fast moving objects, filming in very bright light, and making fades and lap dissolves (see p. 33).

MECHANICAL OPERATION ... Cont.



The variable shutter index plate (22) and control lever (23) are on the front of the camera, directly under the lens turret. The index plate is notched in five places. The first, the third, and the fifth notch are marked respectively, « OPEN », « 1/2 OPEN », and « CLOSED ». When the control lever (is in the notch marked « OPEN », the shutter is completely open; when the control lever is in the second notch, the shutter is 3/4 open; when the control lever is in the notch marked « 1/2 OPEN », the shutter is in the fourth notch, the shutter is 1/4 open; and when the control lever is in the fourth notch, the shutter is 1/4 open; and when the control lever is in the shutter is completely closed. To prevent accidental wasting of film a warning buzzer sounds when the shutter is completely closed. The control lever may be moved while filming, may be locked in any one of the five positions marked on the index plate, or may be left in any intermediate position.



WHAT'S RED AND ALWAYS SMILING?

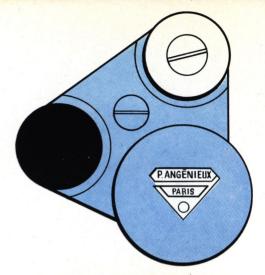
World Famous comic Red Skelton, of course. He's smiling at the performance of his Pathe Professional Reflex 16. Red recognizes the best. That's why he chooses Pathe when choosing his personal movie equipment. Comic Skelton says "Like any serious amateur home film maker I like the best results and I find that Pathe's Professional 16 gives me the finest results every time".

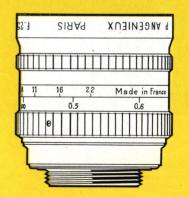
OPTICAL OPERATION

LENSES and THE LENS TURRET

The lens turret (24) of the PATHÉ PROFES-SIONAL REFLEX 16 makes any one of three lenses immediately available with a simple flick of the wrist. Three positive stops position the turret exactly, every time. A turret lock (17) is also available as an accessory for use with heavy lenses such as Pan Cinors, Zooms, and long telephotos.

Any « C » mount lens with a thread length of 3.8 mm or less can be screwed on the turret of the PATHÉ PROFESSIO-NAL REFLEX 16. For the most efficient results try screwing a wide angle lens in the position for filming, a telephoto above that, and a normal lens on the left. If the index line of a PATHÉ lens is in an awkward position after it has been screwed on the camera, adjust it by moving it from the camera, pressing the rear threads in, and turning them so the index is in the desired position.

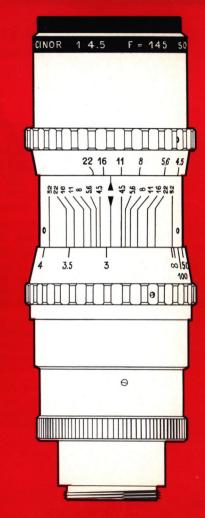




DISTANCE SETTING and DEPTH OF FIELD

Because the reflex viewfinder of the PATHÉ PROFESSIONAL REFLEX 16 shows every scene exactly as it will be projected on the screen, the problems of focusing and depth of field are reduced to a minimum. After the lens has been focused by setting the correct distance on the distance scale, the focus and depth of field should be checked in the ground glass circle of the reflex viewfinder. Depth of field is the zone in which the picture is sharp. This zone starts at a distance less than the distance at which the lens is set and extends to a greater distance. The extent of this zone, or the depth of field, varies with the diaphragm opening of the lens, the focal length of the lens, and the camera-tosubject distance. As a general rule, the depth of field is *great* when using a small diaphragm opening, a short focal length lens, or a long camera-to-subject distance. Conversely, the depth of field is usually small when using a large diaphragm opening, a long focal length lens, or a short camera-to-subject distance.

Practically all PATHÉ lenses have a depth-of-field scale engraved on their mount. This scale consists of a central index mark with diaphragm openings engraved on each side of the index. Real from the depth-offield scale, at the diaphragm opening (f stop) being used, to the distance scale to determine the limits of the depth of field. If the diaphragm opening does not exactly correspond to a figure on the distance scale, the actual limit of the depth of field must be estimated. When making such an estimate, remember that as the camera-to-subject distance increases, the figures on the distance scale will become closer together.



OPTICAL OPERATION... Cont.

VIEWFINDERS

The PATHÉ PROFESSIONAL REFLEX 16 is fully equipped with two entirely independent viewfinder systems.

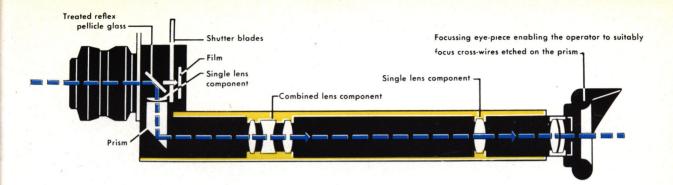
The direct viewfinder (28) permits the photographer to quickly evaluate the field of view (for normal and telephoto lenses) and rapidly frame fast moving action. The slight parallax error can be disregarded for subjects beyond 10 feet.

You can easily adjust the direct viewfinder to your individual eyesight. Just move the eyepiece forward or backward until the object you are looking at is in critically sharp focus.

The brilliant flicker-free reflex viewfinder is one of the most important features of the PATHÉ PROFES-SIONAL REFLEX 16. This advanced optical system enables you to constantly view through the taking lens, even during actual filming. You can accurately frame and focus, estimate and plan depth of field, check the focal length of the lens, check the color of the filter used, estimate lighting conditions and create special lighting effects.

One of the key features of the reflex viewfinder is a thin glass plate with parallel faces, that is placed at an angle of 45° on the optical axis between the lens and the film. This pellicle glass constantly reflects about 8 % of the image light into the viewing tube, thus providing continuous reflex viewing. The amount of light reflected is so slight that it will not affect the exposure, yet it provides a constantly brilliant image.

Before the reflex viewfinder can be used correctly and efficiently it must be adjusted to the eyesight of the individual using it. For best results do not use the reflex finder without its rubber eyepiece (7). It has been carefully designed to eliminate all extraneous light and to provide comfortable and correct viewing.



To adjust the reflex finder to your eyesight, first, swivel the rubber eyepiece so that its long side is away from your nose, against the side of your head. (Note : For those who wear glasses a special rubber eyepiece is readily available at all PATHÉ dealers). Then, loosen the adjusting screw (32) slightly, allowing the rubber eyepiece and tube (7) to slide freely in the finder tube (30). Now, push the light block control lever (29) toward the eyepiece (rear of camera) to open the light block, and remove the taking lens. While viewing a well-lighted source, slide the rubber eyepiece and tube until the black cross and the grain of the ground glass are perfectly sharp. Then rescrew the adjusting screw to hold the eyepiece in position. The reflex viewfinder is now ready for use.

NOTE : Focusing should be done only on the center circle of ground glass. The outer area gives accurate framing, but does not permit critical focusing. In addition, exact focusing is more efficient with the lens wide open for two reasons. First, with the lens wide open the depth of field is shorter. This greatly reduces the possibility of error in critical focusing. Second, a wide aperture provides a bright image since more light is passing through the lens. Don't forget to readjust the diaphragm before beginning to film.

Because of the continuous reflex viewing system, what is seen on the lens is exactly what will appear on the screen, regardless of the focal length of the lens or the camera-to-subject distance.

If the reflex viewfinder is not used during filming it should be closed by pushing the light block control lever (29) toward the lenses. This will prevent any light from reaching the film through the viewfinder eyepiece, and will completely eliminate any danger of fogging the film with the viewfinder.

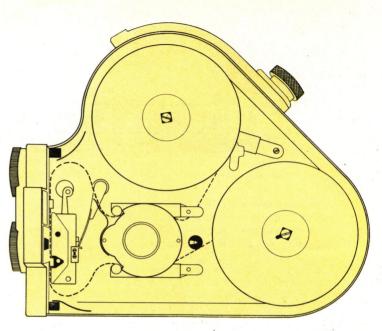
ACTION

LOADING

The PATHÉ PROFESSIONAL REFLEX 16 is loaded in 4 simple steps.

Open the Camera

Lay the camera in front of you with the winding handle down. Release the cover lock (27) by pulling it up and rotating it clockwise until the feet of the PATHÉ Cock are pointing toward the lens. Grasp the viewfinder tubes with your left hand. Put your right thumb on the magazine screw (1) and your right fingers under the eyepiece of the direct viewfinder (4). Break the



cover seal with a twisting motion of your right hand and lift the cover off with your left hand.

Prepare for Loading

Always be sure that the spring motor has been wound at least one turn of the winding handle before loading the camera. Move the pressure pad (39) from closed to open by first pushing the pressure pad lock (40) and then the pressure pad toward the center drive gear until they automatically lock in the opened position. (Always be sure to release the pressure pad lock before making any attempt to move the pressure pad itself). Push the footage counter arm (44) toward the back of the camera until it catches on its spring lock. Open the sprocket guides (45, 48) by pulling the positioning pins up (35) and swinging the guides open.

Load the Camera

Unwind about 1-1/2 feet of film. (Each spool has spare film at the beginning and at the end to protect the usable film). Put the full spool on the feeding spindle (43). The film should unwind in the direction of the arrow on the camera body. Close the footage counter arm (44) by pressing its spring lock. Thread the film under the upper sprocket guide (45) around the pressure pad (39) and over the lower sprocket guide (48). Pull the pressure pad lock toward the center drive gear and carefully close the pressure pad, easing the lock forward. Be sure that the claw is engaged in the film perforations by carefully sliding the film back and forth until you feel a definite resistance.

Form the loops by following the diagram in the camera body, and close the sprocket guides (45, 48). IMPORTANT: D0 NOT LET THE FILM COME IN CONTACT WITH EITHER LOOP PROTECTION PLATE (33, 41)

Pull the film to check that the teeth of the center drive gear are engaged in the film parforations and run the camera for a few seconds as a general check on the loading procedure.

Close the Camera

To close the camera check that the upper and lower sprocket guides (45, 48) are correctly closed and that the PATHÉ Cock on the cover lock (27) is horizontal.

Fit the front of the cover on the camera, then the abck. Press on the viewtinder tubes and rotate the cover lock counter-clockwise until it drops into its closed position.

ACTION... Cont.

The most important part of making prize winning movies is a good understanding of basic filming principles.

Remember that the correct exposure for a particular film depends on the diaphragm opening, the shutter speed, and the filming speed. A change in any one means a compensating change must be made in the others to maintain the same exposure.

And never forget that good movies come to life because of the motion of the subject, not because of camera motion. Since every movement of the camera is greatly magnified when projecting, you should try to hold the camera as steady as possible. The specially designed pistol grip is an excellent aid for this, although a tripod should be used with the longer focal lengths.

Whenever possible, lean against a firm support, rest the camera against your face, tuck your elbows in against your body, and push the button (or squeeze the trigger of the trigger handle) smoothly, remembering to HOLD YOUR CAMERA STEADY.

CHOOSING YOUR FILM

Both black and white and color films are available to the 16mm movie maker. Black and white film has a remarkably wide range of exposure; almost all the detail in a scene is reproduced. The many different film sensitivities available make it possible to produce some unusual effects that would be quite difficult to get with color. Remember, with black and white film contrast between light and dark is the main way of distinguishing objects; plan your shots accordingly.

Filming in color with a PATHÉ is as easy as filming in black and white. Color film has practically no grain and is very good for projection on large screens. Wherever objects are defined by their colors rather than by contrast between light and dark, color will give very pleasing and spectacular results.

BASIC

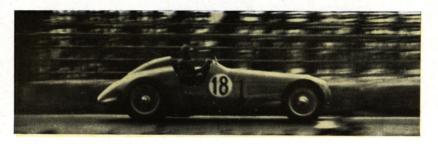


The length of a particular scene depends entirely on the action and interest of the subject being filmed, and only you can judge that. The normal sequence, however, lasts approximately 8 seconds on the screen. As a general rule, try to break up scenes which require very long filming (sports events, etc.) by changing the angle of view from time to time.

The actual composition of each scene also ultimately depends on the individual preferences of the photographer. There are, nevertheless, some basic rules which serve as a general guide. First, do not shoot everything from eyelevel, but look for new, interesting, and emphatic angles. Second, try to film some extreme closeups the results will be unusual and intriguing. Third, always film rapidly moving subjects from a three-quarter angle or head on; never from a right angle. Fourth, approach a subject with a series of shots taken in a zig-zag line, rather than one straight zoom. And, most important of all, do not hesitate to drastically edit your processed film. Change the sequence and length until they fulfill their potential. Make the most of what you have.

SCENE LENGTH AND COMPOSITION

ACTION... Cont.



PANNING

Panning is the method of shooting a scene by swiveling the camera around a fixed point. Like any other movie-making technique, panning is only effective when it is used for a reason; it must never be abused.

There are two main types of pan shots — the stationary pan and the swish pan. In making a stationary pan be sure that you : (1) have a solid support, (2) use a camera speed somewhat faster than normal (32 fps), and (3) accurately determine the beginning and ending points of the pan. To give a feeling of smooth continuity, start filming without moving the camera, then swivel the camera very slowly and smoothly (allow 10-12 sec for panning through 90°), stop the camera, and continue filming for a short time. Always pan in one direction only, and never pan backwards.

A swish pan is used primarily for filming very fast moving objects (racing cars, galloping horses, etc.) The only difference between a stationary pan and a swish pan is the fact that in a swish pan the camera is swung very quickly to follow the motion of the subject. The back ground is blurred in such shots, but this is actually an advantage since it leads to a very real impression of speed.

FADES AND DISSOLVES

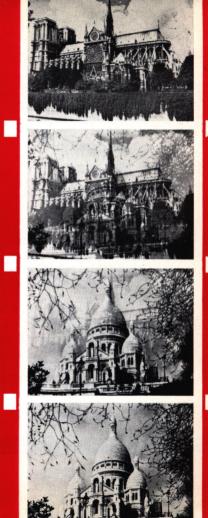
A fade-in is the smoothly gradual change from complete darkness to the correctly exposed scene. This slow transition prevents your audience from being suddenly blinded by an annoyingly brilliant picture on the screen.

To make a perfect fade-in, place the variable shutter on « closed ». Press the shutter release and gradually swing the variable shutter to « open ». This should be done in a predetermined time, usually two or three seconds.

A fade-out is the gradual change from a correctly exposed scene to total darkness. It is made by simply reversing the operation of a fade-in. Move the variable shutter from its fully open position to the fully closed position instead of the reverse.

If you are filming two consecutive scenes of different brightness, try ending the first scene with a fade-out and starting the second scene with a fade-in. This transitional fade will greatly increase the natural appearance of the change of place or action.

A lap dissolve is one of the most pleasing methods of creating a transitional effect between two scenes. In a lap dissolve the picture of the first scene gradually disappears as the picture in the second scene gradually appears. This remarkably soft transition is made by superimposing a fade-in on a fade-out.



ACTION... Cont.

SINGLE FRAME FILMING

Filming one frame at a time has a number of important uses, such as cartoons, titling, animation, and motion analysis. For the best results eliminate camera motion by using a tripod and a cable release.

Using the filming switch, you can choose betwen instantaneous single frame exposure and time single frame exposure, depending on the filming situation and your particular needs.

Superinposed exposures are often used to increase an effect or emphasize a certain idea. A superimposed exposure is two or more separately filmed scenes on the same length of film.

To make a double exposure with each scene having the same intensity, simply give each scene 1/2 the correct exposure. The easiest way to do this is to set the camera for the correct exposure with the variable shutter wide open, then film each scene with the variable shutter 1/2 open. Similarly, to make a triple exposure with all scenes having the same intensity, give each scene 1/3 the correct exposure, etc.

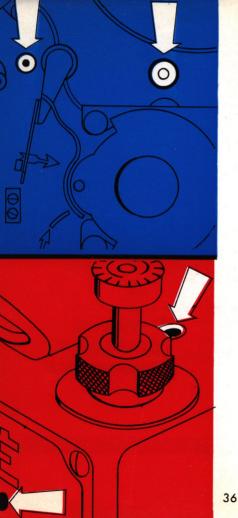
To make a double exposure with two scenes of different intensity, give the main scene more exposure — for example, 3/4 of the correct exposure for the main scene, and 1/4 for the secondary scene.

Be careful! Any superimposed exposure *must* be carefully framed to produce definitive pictures rather than complete confusion. But the results are well worth the effort.

SUPER IMPOSED EXPOSURES

UNLOADING

When the film counter shows « 0 » there is no film left on the spool. However, it is still necessary to run the camera for a few seconds to wind all of the protective leader around the exposed film. After this has been done, open the camera, remove the spool of exposed film, and immediately put it in its metal can. Never do this in direct sunlight. If you cannot conveniently use a shaded place, shade the camera and film with your body by turning your back to the sun.



MAINTENANCE

MECHANICAL

The guideway (37) and the pressure pad (39) must be kept perfectly clean to avoid any damage to the film. Do not let any dust or bits of emulsion deposit on the gate opening. A clean cloth dampened with a good non-scratching cleaning agent and the special brush supplied with the camera are all that is necessary to keep it perfectly clean.

After about 40 to 50 rolls of film, or after long inactivity, the camera should be oiled at the places *shown*.

OPTICAL

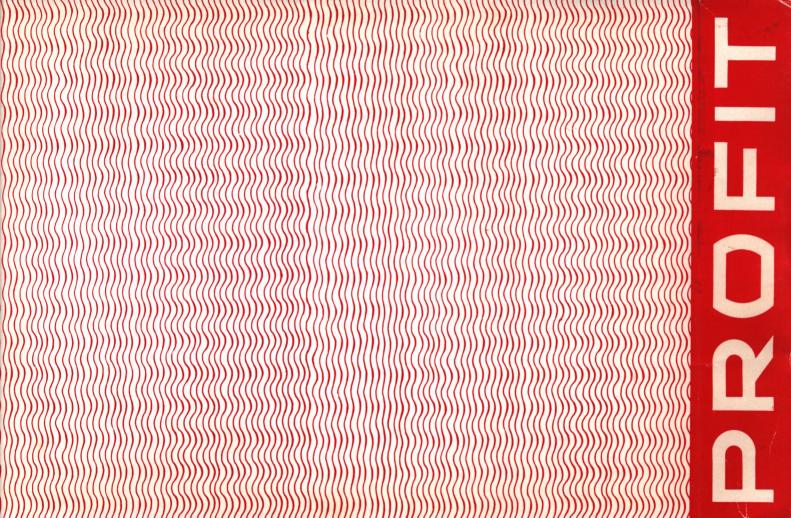
Keep the exterior surfaces of your lenses absolutely clean. Use lens tissue and a good commercial lens cleaner. Do not clean the lenses too often, and be careful not to get finger marks on them. When not in use protect them with lens caps.

VERY IMPORTANT — One of the necessary parts of the continuous reflex viewfinder, a very thin glass plate, is directly behind the gate aperture. To keep dust out and to avoid the possibility of damaging this plate, it is advisable to keep either a lens or a lens cap over this aperture.

It is strongly recommended that you do not attempt to clean this glass since it is very fragile. If it is absolutely necessary, use a very soft camel hair brush and be extremely careful.

STORAGE

Before storing the camera let the spring run down completely and then wind it one or two turns.



The «golden moments » fly. Dont't let them slip away and be lost forever. Record them for PLEASURE and PROFIT with your dependable PATHÉ camera.

A lazy afternoon spent with your family and friends will be magically transformed by your PATHÉ camera into an important treasure; a permanent reminder of happy moments, familiar faces, remembered scenes that can be brought back to vivid, vibrantly colorful life again and again. Make PATHÉ a part of your everyday life. It will contribute importantly to your future happiness.

Your PATHÉ camera can also be an important profit-making tool for you. Some PATHÉ owners have found that one simple « shot » paid for their entire investment in PATHÉ equipment.

In today's fast-moving world. rapid, accurate communication is most important — often extremely valuable. Because PATHÉ cameras are so dependable they can be used for spot TV News coverage. In fact, television stations often pay hard cash for good « news » film. PATHÉ cameras are also used in time-study work; in industry; in laboratories; in education — in fact, in any file where precise, dependable cinematography is used and valued. Look around — where you live; where you work; where you play. With a little thought you'll find countless opportunities for using your PATHÉ PROFESSIONAL REFLEX 16 for PLEASURE and PROFIT.



picture is a true one and has not been ined from "Dr. KILDARE " story ...

The French Radio Television uses the PATHE 16 camera.

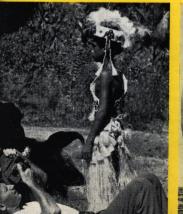


To investigate on the Civilization of Incas, he is using the PATHE 16 camera...



Look at those lovely Lapon children filmed with the PATHE 16 camera.

PATHE ... wherever precise, dependable cinematography is used and valued



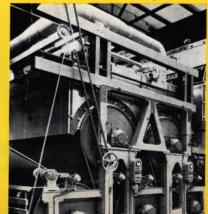
he heart of Tropical Africa, they are proud to You will remember the wonderful impressions of some In the factories, the PATHE 16 filmed with the famous PATHE 16 camera, hours on a sailing boat thanks to your PATHE 16 camera camera does a lot of good job.

505

F 1397

1397

To film with such a sunny hot temperature in Africa, the PATHE 16 is a must.







It's here - the ideal, tru'y professional, lightweight 16 mm reflex camera, the worldfamous PATHE | Just a 6 lb. handfull... but every ounce a " pro". No other camera of its size offers you all these features !

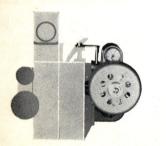


Complete choice of the best PATHE SOM Berthiot and PATHE Angenieux lenses are available with standard "C" mount. When your assignment calls for a Kompendium (matte box - filter holder - bellows) complete with base you can add it by simply tightning one screw!



Or, if a zoom lens is what you need - just make your choice from a variety of the famous SOM Berthiot zoom or Angenieux zoom lenses: You will save by not buying the viewfindler for these lenses because PATHE is the smallest professional camera ever to offer : continuous reflex viewing (directly through shooting lens, without parallax), and further...

ACCESSORIES... make Pathé the basic came

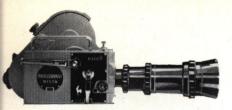


Or, providing you want to utilise with your electric motor any speed from 8 to 80 frames per second, just add the 8-80 PATHE unit (motor with tachometer, battery and AC converter - charger). But that's not all.



Without conversion of any kind, PATHE is designed to accept a 400' magazine - adaptable in seconds!

The PATHE magazines are of a distinguished - practical design. Their two separate housings allow for handy cutting and checking of desired portions of film. PATHE'S unique, versatile magazine system cuts down on the weight and expense for when more magazines are needed. For any need, professional or amateur, we build a better camera.



...Fully variable shutter (from 0° to 180°) ...8 to 80 frames per second ...and other essential professional features. If your job calls for a motor drive, add either the 16-24 PATHE unit (motor, battery, and AC converter-charger)...

a to build on !

CODE

PATHE ACCESSORIES

600 Set of 400' Magazines	
650 One Magazine, 400'	
700 Kompendium With Base	
701 Base only	
702 Kompenrium W/Out Base	
710 16-24 24 Volt Motor	
720 16-24 Rechargeable Battery	
730 16-24 AC Converter & Charger	
715 8-80 Wil Motor With Tachomete	ar
725 8-80 Rechargeable Battery	
735 8-80 AC Converter and Charge	r
740 Hypergonar-Cinemascope Lens	•
7.50 Base for use of above W/Kompd	
760 Projector Adapter (Hypergonar)	
770 Base (Hyper) for elec. Motor	
780 Extension Tubes (Set of 4)	
790 Camera Table Release	
795 Camera Pistol Grip	
800 Camera Compartment Case	
802 Camera Eveready Compartment	Case
805 Turret Lock Screw	ouse

PATHE LENSES

There is something very special about PATHE SOM Berthiot and PATHE Angenieux lenses. These lenses were designed and produced especially for PATHE by SOM Berthiot and Angenieux - two of the world's leading manufacturers of fine photographic and optical equipment. Because these lenses were especially designed for PATHE, they become an integral part of PATHE cameras; camera and lens become one superb unit.

CODE	PATHE ANGENIEUX	CODE	PATHE SOM-BERTHIOT
165	10 mm F. 1,8	120	10 mm F. 1,9
167	15 mm F. 1,3	125	25 mm F. 1,4
170	25 mm F. 1,4	130	75 mm F. 2,5
175	25 mm F. 0,95	135	100 MM F. 3,5
177	50 mm F. 1,5	140	145 mm F. 4,5
180	75 mm F. 2,5		
182	100 mm F. 2,5		
183	150 mm F. 2,7		

CODE	PATHE ANGENIEUX ZOOM			
185	ANG-ZOOM 17- 68 mm F. 2,2 W/O V. F.			
190	ANG-ZOOM 17- 68 mm F. 2,2 WITH V. F.			
191	ANG-ZOOM 12-120 mm F. 2 W/O V. F.			
192	ANG-ZOOM 12-120 mm F. 2 WITH V. F.			
	•			
CODE	PATHE SOM-BERTHIOT ZOOM			
150	PAN CINOR 17-85 mm F. 2 W/O V.F.			
160	PAN CINOR 17-85 mm F.2 WITH V.F.			
145	PAN CINOR 25-100 mm F. 3,4 W/O V.F.			
155	PAN CINOR 25-100 mm F. 3,4 WITH V.F.			

41

PATHE CINEMASCOPE

If a photographic lens could be called a miracle - that lens is the Hypergonar PATHE Cinemascope lens used on the PATHE Professional Reflex-16. The Hypergonar is a formule developped by Professor Henri Chretien, the famous French astronomer and optical scientist whose inventions revolutionized Hollywood movie-making by adding new life, dimension and excitement to the movie screen.





This is the compressed picture your camera snaps when the PATHE Cinema-Scope lens has been attached.

This is the magnified picture, with panoramic sweep, you flash on the screen with PATHE CinemaScope lens projecting.



We reserve the right to alter designs and specifications - Printed in France - Bourson - Compiègne

GUARANTEE

Your new PATHÉ equipment has been carefully assembled by highly skilled European craftsmen; the thorough checking and testing it has been spbjected to before leaving the factory guarantees its perfect optical and mechanical operation.

Correctly handled, your new equipment will give you a lifetime of superb service. And you can be sure that PATHÉ, the world's most trusted manufacturer of fine movie equipment, will absolutely stand behind the materials and workmanship of its products.

However, to protect yourself against the possibility of some human error, even during transportation and handlling, to aid you in case of loss or theft, and to obtain your guarantee, we strongly urge you to mail the enclosed registration card. If it is not mailed within ten days after the date of purchase, the guarantee is void.



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Attention

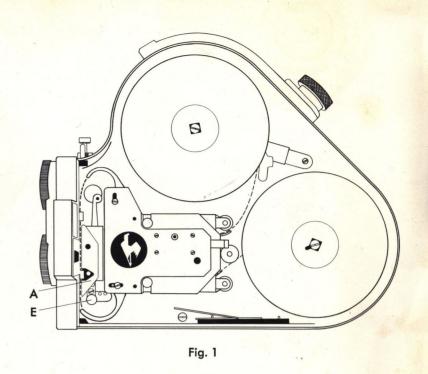
NEWEST MODEL

The PATHE Professional Reflex 16-AT, which you have just acquired, is the latest model. Therefore, its newest features are not described in the enclosed booklet but are explained herein.

PATHE PROFESSIONAL REFLEX 16-AT

The PATHE Professional Reflex 16-AT will work anywhere you will. That's because it's tough made from the same durable alloy used in jetcraft landing gear.

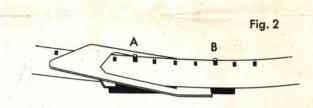
It's impervious to sweltering jungle heat, frigid Alaskan temperatures or salt water air. Above all it's automatic. Trim the film, introduce the film to the automatic threading device, run the camera, attach film to take-up spool — all in thirteen seconds.



PATHE PR 16-AT starts the system — simply and economically. Add to it anytime: 400 ft. magazine, motors, compendium or other accessories when you need them without extra expensive back-to-factory cost. Versatility at its best!

AUTOMATIC FILM THREADING

TRIMMING THE FILM. Before any attempt is made to thread the film it must be trimmed. The cutter is located below and to the right of the film sprocket. Place the spool of film on the top spindle so that the film will unwind clockwise. Hold the film between the thumb and index finger of the right hand and pass it through the knife; engage the sprocket holes in the two guides "A" and "B" (see figure 2). Hold the

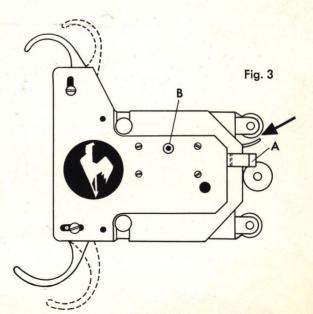


film in place with the index finger of the right hand and with the index finger of the left hand depress the cutter bar. Be sure to throw away the cut end of the film to prevent its passing through to the mechanism.

INTRODUCING THE FILM

- Set the loop formers by pulling back the slide "A" (see figure 3).
- Film gate must be closed and locked (see "A", figure 1).
- 3. Introduce the film into the opening indicated by the arrow (see figure 3).
- Depress the camera release button and run the mechanism until approximately 10 inches of film have passed through the lower film guide and stop.
- 5. Release the loop formers by depressing the small button "B" (see figure 3).
- 6. Attach the film to the take-up spool and run the camera for a few seconds to see that the loop formers are open, the film gate is secure, the spools are properly seated and the film is taking up.

AUTOMATIC SAFETY



Should you forget to release the loop formers they will be released automatically when the cover is put in place.

MAINTENANCE INSTRUCTIONS

To clean the sprocket and aperture plate proceed as follows:

- Release the loop formers by depressing the small button "B" (figure 3).
- Lift lower and upper film guide locks "C" and "D" and open both film guides (see figure 4).
- With the thumb and index finger of the right hand grasp the automatic threading mechanism above and below the film guides and lift up gently.
- 4. Lift pressure plate knob "E" (figure 1) and open film gate.
- 5. With a suitable brush carefully clean the aperture plate and film gate.
- 6. To reinstall the automatic threading device simply reverse the above procedure making certain that the guides "F" and "G" (figure 5) on the threading mechanism fit into the recesses "F" and "G" (figure 4) in the camera mechanism plate.

CAUTION

Never hold the automatic threading mechanism by the loop formers "H" and "I" (figure 5), doing this, could throw the automatic device out of adjustment.

