





EASILY THE MOST EXCITING 8mm camera yet desig ed is the new Camex Reflex, made by Som Berthiot, which features continuous through-the-lens viewing and will accommodate the interesting new Pan Cinor zoom lens for 8mm cameras. Also shown is the handy pistol grip accessory.

ANOTHER "FIRST" for Bell & Howell is this automatic for Kodachrome filming. Diagram above shows how electric eye camera which automatically and con-tinuously sets exposure regardless of light condition. No batteries or motor are involved.

THE CANON 8 is the first Japanese-made 8mm camera to make its appearance in the U.S. Outstanding feature is a convenient and clear "Select-A-View" finder located on top of camera. It also affords through the lens focusing in making camera setups,

# 8MM COMES OF AGE

"Pro" features, new improvements put 8mm cameras on a par with the sixteens; usher in a new era of movie making for serious cine filmers.

By JOHN FORBES

N OT ALL THE new 8mm cameras in-troduced this year are illustrated above. Only those whose radically new features of function and design make them of more than ordinary interest to the 8mm movie maker whose filming technique and ambition have advanced beyond his novice days.

The cameras pictured and described here give the serious 8mm movie maker better tools for making better pictures than have ever before been available to him. Now, for the first time, 8mm offers all the excitement and the professionallike results heretofore enjoyed by the advanced 16mm amateur.

Certainly the French-made Camex tiny prism is mounted behind the lens Reflex-the first 8mm camera with continuous through-the-lens focusing and viewing-is just about the most exciting of all. The through-the-lens focusing and viewing is an important feature. until now found only in such professional 16mm cameras as the Arriflex and the Eclair Camerette, and in the semiprofessional Pathe 16. Previously, this feature was considered too costly and complicated for 8mm cameras.

With the Camex Reflex, you look into the finder and see the image as it comes through the camera lens enroute to the film. Technically, it is quite simple; a

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When the shutter is closed, during the interval the film is advanced to the next frame, the image from the lens reaches the prism only and is then re-directed to a second prism in the finder system. which transmits it to the evepiece of the finder where it is easily and clearly observed by the camera operator. When the shutter is opened, the prism moves out of the line of image transmission to permit the exposure, then returns to the same position again. This is a continuous operation-as continuous as the operation of the shutter, movement of which

on the front of the camera's shutter.

is so rapid that the image thus reflected appears virtually uninterrupted and without objectionable flicker.

The advantages of continuous viewing are many. Not only does it simplify focusing but is is a great aid to composing scenes, and of course it makes it possible to see exactly what you are getting on film as the film is being exposed in the camera-regardless of the focal length of the lens used. This system of viewing does not require changing the view finder element to match the picture format whenever lenses of different focal length are used.

The image viewed is aerial, not groundglass; is brilliant and of the exact dimensions and format recorded on the film. Depth of field is readily checked

> WHEN SHOOTING scenes like this, cameras having automatic exposure control guarantee correct exposure. Here the camera records the child in shade, but as she moves toward camera into bright sunlight, the lens will automatically close down to the proper aperture for correct exposure in the brighter area.

The lens diaphragm may be opened or solves. closed while filming. The lens stop scale is visible from rear of the camera, mak-

and adjusted by means of this finder. ing it feasible to produce fades and dis-The camera, a product of Som Ber-

(Continued on Next Page)



AMERICAN CINEMATOGRAPHER

590 AMERICAN CINEMATOGRAPHER



THE MANY salient feautres of the new Camex Reflex 8mm camera are pointed out in the illustration above.

thiot, Paris, makers of a well-known line of camera lenses and also of the Pan-Cinor zoom lens, is equipped to use a special new 8mm Pan-Cinor Zoom lens —another exclusive feature. Here again, the reflex viewfinder plays an important part, permitting as it does through-the-Zoom lens viewing as the Pan Cinor is adjusted to various focal lengths during a shot.

Other features of this attractive new camera include quick-demountable lens system (no lens turret), speeds of 8 to 32 frames per second; an 8-foot film run without winding the camera; singleframe exposures; backwinding; time exposures of any duration of time; automatic footage counter coupled to singleframe counter which operates both forward and reverse; takes 25-foot rolls of double-8mm film; and an all-metal grey leather-trimmed case. A host of interesting optional accessories are available also, ranging from the Zoom lens already



CANON 8, pictured on preceding page, is shown here with top removed to reveal mechanism of the Select-A-View viewfinder

mentioned to a highly-efficient pistolgrip—both of which are shown on the camera in the accompanying photo. Equipped with a Berthiot Cinor 12:5-mm lens, the camera is priced at \$229.00. With the same lens in f/1.9, the price is \$269.00. The Pan Cinor 8mm zoom lens lists for \$339.00.

B&H Automatic 8mm Electric-Eye Camera

Movie cameras that automatically adjust exposure for the prevailing light are finding increasing interest. Bell & Howell company pioneered this type of camera in the 16mm field and last month unveiled its 8mm version to a responsive public. With this camera movie makers may now shoot a roll of Kodachrome film confident that every shot will be properly exposed. The need for manually setting the exposure is eliminated.

The new automatic 8 is the first cine camera in which light energy alone supplies the power to generate electric cur-



THE AUTO-EX is combination lens and semi-automatic exposure control designed for use on most D-mount 8mm cameras, has built-in exposure meter.

rent which automatically and continuously adjusts the lens diaphragm to the prevailing light. (In the B&H 16mm camera having automatic lens setting, the operation, while automatic and lightgenerated, is motor-operated.) With the 8, the operator winds the camera motor spring, sights and shoots. The electric eye, mounted on front of the camera, adjusts to changing light faster than the human eye and sets the lens for proper exposure before the starting button is touched. It can operate the lens through the full range of stops from f/1.9 to f/16 in less than one second.

This means that without knowing what an f/stop is, the movie novice can now be sure of properly-exposed film every time, a result not consistently achieved by experts. He can also follow a subject from light to shadow, confident that the electric eye is accurately computing the light changes and automatically adjusting the lens. With a conventional camera he would have to interrupt shooting to



EUMIG ELECTRIC, a pioneer in its field, is only electric-powered cine camera now being made. New model features modern design, easy lens setting, and more durable power plant: up to ten rolls of film on a single set of penlight batteries.

change the exposure setting. An amber exposure beacon in the camera's viewfinder glows as long as the available illumination is adequate. It turns black to signal that there is insufficient light for movie making.

Like the human eye, which continually adapts to the brightness of its surroundings, the electic eye works continuously as long as light reaches the photocell. It "rests" only in darkness or when there is insufficient light for movie making. It never wears out or weakens under normal conditions.

To make feasible the design approach of the electric eye, Bell & Howell engineers developed a new type of lens iris so sensitive that it moves at the touch of a human hair. Yet is is sturdy and shockproof and has withstood the most vigorous environmental and field tests. Through the use of thermistors the

electric eye mechanism adjusts to temperature changes. The camera can be used at any temperature extremes the film itself will withstand.

Light reflected from the subject enters a reticular honeycomb lens which controls the angular coverage to match that of the camera lens. Upon reaching the photocell, the light generates an electric current which is fed to the meter mechanism. The meter computes the correct exposure and opens or closes the lens as required.

from light to shadow, confident that the electric eye is accurately computing the light changes and automatically adjusting the lens. With a conventional camera he would have to interrupt shooting to of the type of film used (ASA 10 or ASA 16) by means of a slide conveniently located below the photocell.

The lens diaphragm can also be operated manually. Turning a dial from "auto" to "manual" disconnects the automatic exposure control so that the lens may be set for under- or overexposure for special effects or shooting with film other than Kodachrome. When the camera is operated manually, the needle pointer indicates the opening at which the lens is manually set without regard to the correct exposure.

Other features of the new camera include a 10-foot spring run with continuous-run lock and single-frame exposure, a picture-window viewfinder which shows the subject in actual size, and a Bell & Howell Super Comat 10mm f/1.9 lens.

For versatility, both wide-angle and telephoto attachments are available, neither of which require any adjustment or changes in the camera and function efficiently with the electric-eye exposure control. The camera lists at \$169.95 in the U.S.

#### THE CANON 8

The Canon 8 is the first Japanesemade 8mm movie camera to make its appearance on the American market. Possessing features generally found only in the finest 16mm cameras, dominant is the unique Select-A-View finder on top of the camera which shows clearly what is being photographed. The finder picture area matches all lenses, from 6.5mm wide-angle to the 75mm telephoto. Finger-tip controls on top of the camera adjust the finder for the various lenses with a rotary scale indicating visually the lens for which the finder is set. Other features include built-in automatic parallax compensation, through-the-lens focusing (before starting to shoot), twolens rotary turret, easy spool-film loading, and a rapid ratchet wind.

Built-in automatic parallax correction compensates for shooting closeups and ultra-closeups, so that the image seen in the viewfinder is exactly as it will appear on film—from infinity down to 18 inches.

The camera's through-the-lens focusing feature is invaluable when shooting critical closeups, making titles, and shooting table-top subjects. It is also invaluable for pre-viewing the depth of field of a lens.

Additional features include an audible "click" signal which indicates every six inches of film used; a revolving dial footage counter which tells at a glance the total amount of film exposed; a positive stop that halts the camera mechanism before the spring motor unwinds completely, thus eliminating "flash" frames at the end of each scene; and "drop-in" spool film loading, a feature



Negative thought for today:

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September, 1957



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that precludes errors of careless film threading.

With a single 13mm f/1.8 lens, the camera is priced at \$159.50; with two lenses mounted in its turret-a 25mm f/1.8 plus the 13mm f/1.8, the price is \$232.50.

## EUMIG 8 ELECTRIC CAMERA

For the movie maker who dislikes winding a camera, the new Eumig 8mm Electric is his dish. This is another innovation from the foreign market, but not a new one. Eumig pioneered the 8mm electric-drive camera and boasts the only battery-operated cine camera on the market at this time. The maker has insured its continuing popularity through simplicity of design, ease of operation, and most important-precision workmanship in its construction.

The Eumig Electric operates on four inexpensive penlight batteries, which will drive the camera efficiently for up to ten rolls of film. Constant speed is insured by governor control on the motor, which maintains camera speed at a constant level from first to last scene during the shooting of a roll of film.

The starting button may be set for three types of operation: 1) continuous or intermittent run, 2) single frame, and 3) lock. The lens is a color-corrected and coated fixed-focus f/2.8, set in a special mounting designed for simplicity in selecting diaphragm settings. The stops range up to f/22.

Despite its electric-drive feature, the motor is extremely light in weight and the camera's total weight is about the same as other cine cameras of similar size having spring motor drives. List price is \$69.50.

## ELGEET AUTO-EX

A measure of automation in 8mm movie making is available through an interesting new accessory now being marketed by Elgeet Optical Company, well-known manufacturers of lenses for motion picture cameras. It is the Auto-Ex. a photo-cell-coupled 12.5mm f/1.9 lens which brings semi-automatic exposure control to owners of D-mount 8mm cameras.

The Auto-Ex consists of a built-in photo-electric exposure meter coupled to a fast f/1.9 lens. In operation, the cell of the meter accepts the light of the scene being filmed, measures it, and translates its finding to a floating red indicator needle, which is visible to the camera operator at all times. Also visible through a window at the rear of the Auto-Ex is an arrow, which is regulated by a lever that controls the iris opening of the lens (see photo). After sighting the camera on the scene or subject to be filmed, the operator moves the arrow until it is superimposed over the

lens for proper exposure.

Unlike the strictly automatic exposure control of the new B&H 8mm camera described earlier, the Auto-Ex does not automatically change the diaphragm opening whenever a sudden change in light value is encountered-as in the case of the sun being unexpectedly obscurred by a cloud. In all instances, the lens diaphragm is set manually by the filmer according to the exposure dictated by the red indicator of the instrument's photo cell.

Last but not least-the Auto-Ex is aimed primarily for Kodachrome filming. It is calibrated for ASA-10 (daylight Kodachrome) and ASA-16 (Kodachrome's tungsten rating).

Generally available at camera stores, the list price is \$49.95.

#### MOVIE OF MOVIE-MAKING

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Normally, he used 25mm, 35mm and 50mm lenses on the turret, including when shooting downwards from the spot rails where he got some of his most effective shots. He used Kodak Tri-X always, except for a few exteriors made on Plus-X-B. On the sets he was rarely able to shoot a scene from the same angle for which Perinal had lighted it, and elsewhere (the cutting-room for instance) he often had to rely on wintry daylight from windows for illumination. One unusual shot which required some planning was the editor's view of the film passing through an Acmiola picture head-shot at f/4.

The real music sessions would have been too busy and too late to shoot, so I asked Woxholt to cover an early token recording of a trumpet fanfare needed for scenes of St. Joan at the Coronation of the Dauphin. He lit this simply with two 5 K's.

His most enterprising shot was in the looping theatre; a pan from the sound mixer at his console, lit very low key, to the back of an actor under the microphone with the picture projected on the screen in the background. The screen brightness was only eight foot-candles, so he lighted the artist at sixteen. Since Woxholt's camera motor was not interlocked with the projector, its reflex shutter was very useful here to check phasing.

From the editorial viewpoint it was naturally impossible to remember every shot in the average daily output of 400 feet, containing perhaps 30 to 50 angles; so. I had them coded and wrote a brief description of each shot. Around the canned shots we then wrote very brief trailer introductions and commentaries for principal actors Richard Widmark, red indicator needle, thus setting the Sir John Gielgud, Richard Todd, Anton "To deliver a lot of light where it is needed most luse 'NATIONAL' carbons."



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