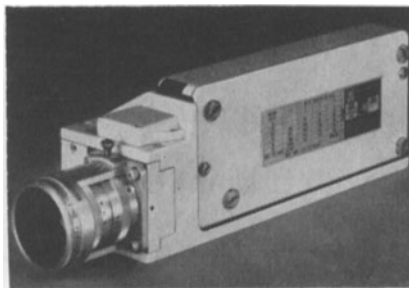
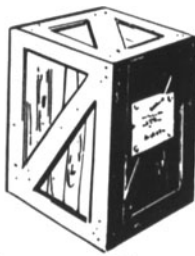


# new products

(and developments)

.....  
 Further information about these items can be obtained direct from the addresses given. As in the case of technical papers, the Society is not responsible for manufacturers' statements, and publication of these items does not constitute endorsement of the products or services.

The Photo-Sonics Model 16mm-1B, a data recording camera designed for high-speed photography under high "G" forces, ex-



treme temperatures and vibration, has been announced by Instrumentation Marketing Corp., The camera can be mounted in any position relative to acceleration forces. It is capable of shortrun, stop and start as well as full-capacity runs at speeds variable from 12 to 1,000 frames/s with film capacities up to 1,200 ft. The variable rotating disc shutter of 9, 18, 36 and 72° is located behind the rotary prism used for image compensation for film continuously in motion. Prices begin at \$1,375. Optional equipment includes power converters, boresight tools and a variety of lenses.

A portable broadcast color camera-recorder system for two-man operation which permits color video-tape recording of news, sports and other remote events for immediate playback on the air has been announced by Ampex Corp., 401 Broad-

way, Redwood City, Calif. 94063. The system consists of the BC-110 handheld color camera and the VR-3000 high-band color video-tape recorder. A lightweight 0.47-in cable links the camera with the recorder. The VR-3000, which records up to 20 min of program material on an 8-in reel of tape, previously has been used as a portable unit with only a monochrome camera. Tapes made with the system may be played back on any standard transverse scan broadcast video-tape recorder through a small rack-mounted demodulator accessory unit. The demodulator translates the signal for processing through the camera control panel and control unit for transmission of standard NTSC color pictures. The system shares the same base station camera electronics used with the BC-110 alone or with the BC-210 color studio camera. The only additional equipment needed is the chroma demodulator accessory.

The BC-110 camera head weighs 20 lb. It is mounted on an adjustable chest-and-shoulder harness. The camera head has a high-resolution 1-in viewfinder and a 6:1 zoom lens with servo iris control. A 15-lb backpack containing associated camera electronics feeds the camera signal to the recorder via cable. The recorder operator carries the 55-lb backpack-mounted video-tape recorder and control panel for the camera. The 10-lb control panel con-

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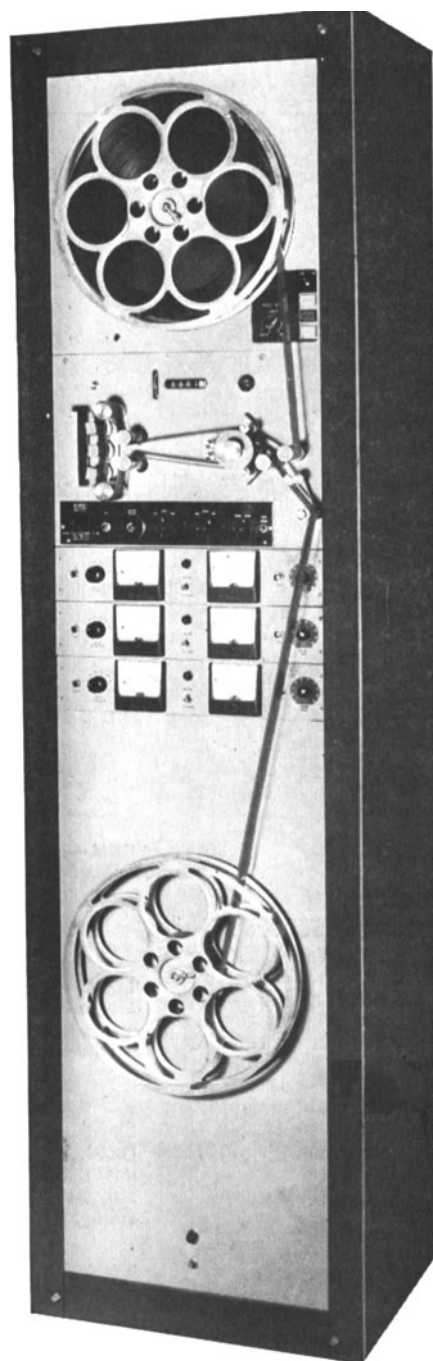
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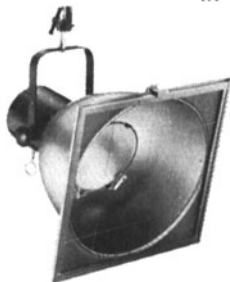
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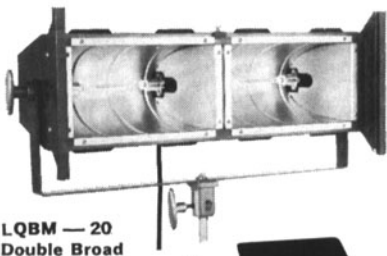
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tains a high-brightness 4-in diagonal picture monitor, 2-in waveform monitor, tape timer clock, iris control, talk-back control, cue-light control and controls for the recorder. The camera uses two Plumbicon TV tubes. Operating with 100 fc, it is said to provide good picture resolution and SNR of 40 dB. The recorder includes a silver cadmium battery which supplies power for the camera and recorder. It records in high-band color on standard 8-in reels at 15 in/s. Tapes made on the VR-3000 have a bandwidth of -3 dB at 4.2 MHz and SNR of 45 dB. The system is priced at about \$130,000.

Two new closed-circuit, studio-type television cameras, Model CC-330 for use with a Plumbicon and Model CC-328 for use with a separate mesh vidicon, have been announced by Ampex Corp., 2201 Estes Ave., Elk Grove Village, Ill. 60007. Except for the requirement of different deflection assemblies, the cameras are identical. Using the lead-oxide type Plumbicon and a 50-gauss focus field, the CC-330 has a horizontal resolution of 600 lines at the center and 400 lines at the corners. The CC-328, with a separate mesh vidicon and a 60-gauss focus field provides a horizontal resolution of 800 lines at center and 600 lines at the corners. Both cameras have a signal-to-noise ratio of more than 46 dB. Features common to both cameras include an integral 9-in electronic viewfinder, local or remote control beam, focus, target video gain and blanking level and amplified intercom. The CC-330 camera is priced at \$4,600 (without the Plumbicon) and the CC-328 is priced at \$4,300 (without the vidicon). Both cameras are equipped with a 4:1 zoom lens.

Two new black-and-white TV cameras for closed-circuit and video-tape applications have been announced by Bell & Howell, 7100 McCormick Rd., Chicago, Ill. 60645. Both cameras have full, silicon solid-state circuitry an Automatic Light Control circuit. Model 2962 has a viewfinder and a 5:1 zoom lens. It is priced at \$1,295. Model 2961 is equipped with a 25mm lens and standard "C" type lens mount. It is priced at \$450.

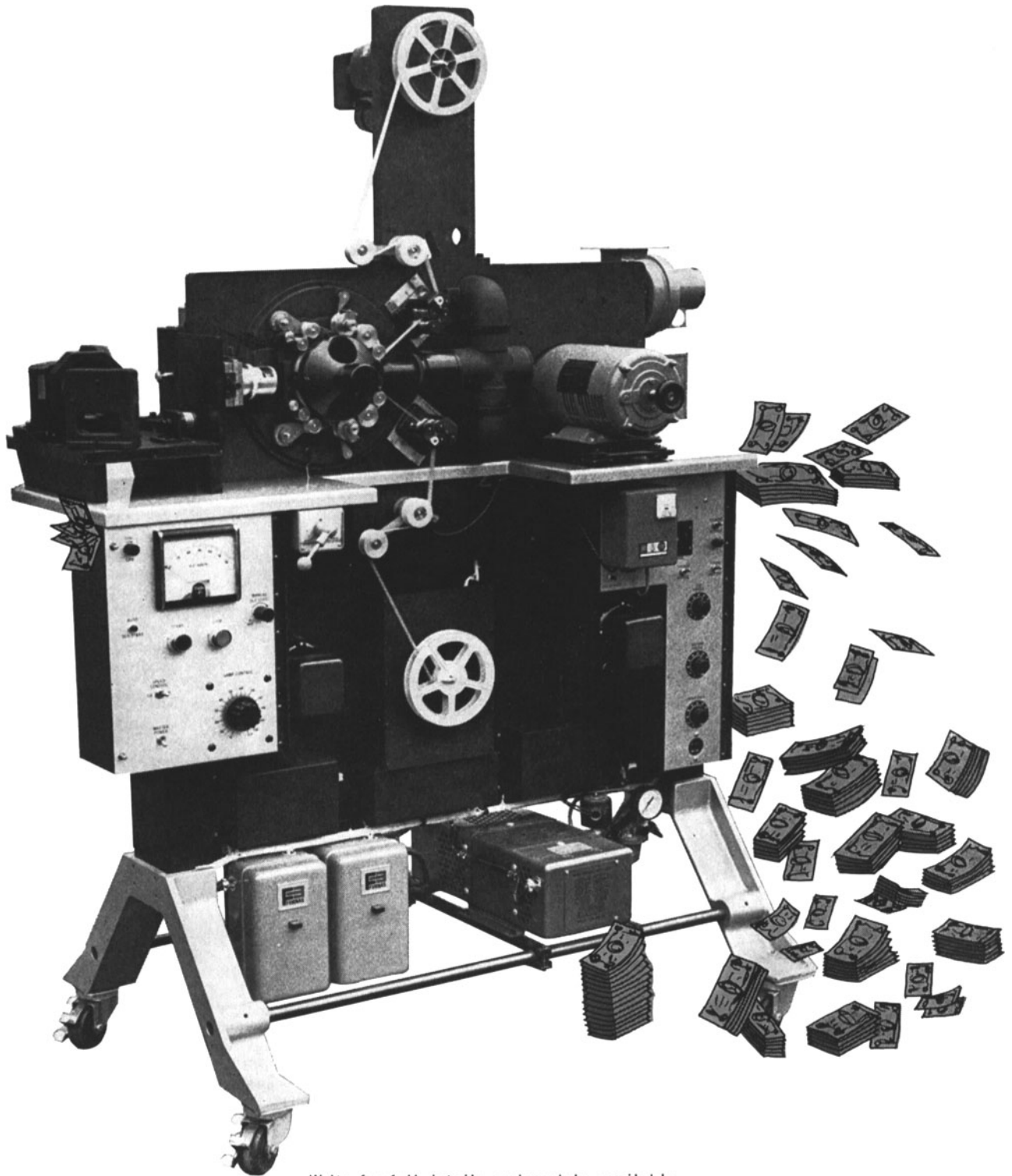


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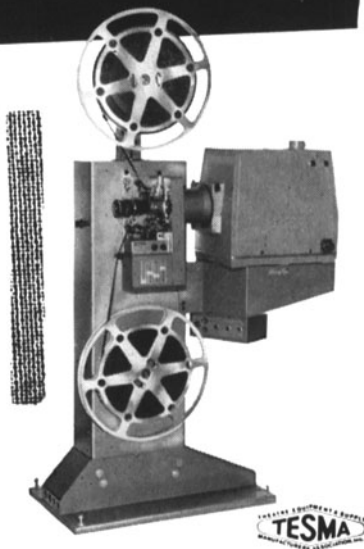
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A color TV film system priced at less than \$10,000 has been introduced by Radio Corp. of America. The system incorporates RCA's one-tube color TV film camera and is used to originate color TV programs from motion pictures and slides. The system includes a 16mm projector, optical multiplexer and slide projector. It is expected to be used primarily in education and industry and for originating films in cable TV systems.



A color dropout compensator and an RF monitor have been announced by Ampex Corp., 2201 Estes Ave., Elk Grove Village, Ill. 60007, as options for the VR-7800 video-tape recorder. The VR-7800 is a closed-circuit, studio-production video-tape recorder with monochrome electronic editing and other features for color or monochrome recording. The dropout compensator stores one horizontal line of video information until the next horizontal line of video has been played. If the dropout compensator senses a dropout in an upcoming line of video it substitutes information from the stored line for the dropout. Due to the similarity in successive video lines the viewer is unaware of the dropout. The color dropout compensator is priced at \$4,000.

The RF monitor is designed to aid in assuring a continuous RF signal. A warning light alerts the operator to take appropriate action. The device is available in kit form or a factory-wired option. It is priced at \$500.

A three-vidicon color TV film camera designed specifically for reproducing motion pictures and slides in a color TV system has been announced by Radio Corp. of America. The camera, priced at \$14,750, can be used with low-cost projectors and multiplexing equipment, the announcement stated. The camera is called the PK-610. It is fully solid state and is self-contained except for the power supply, remote-control panel and color encoder. The complete color system, for broadcast or closed-circuit, is priced at \$22,750.

New 3-in image orthicons designed for high-sensitivity and low-noise characteristics have been announced by Visual Electronics Corp., 356 W. 40 St., New York. The tubes were developed by English Electric Valve Co. The new tubes, because of a new electron gun structure, have a reduced noise component so that

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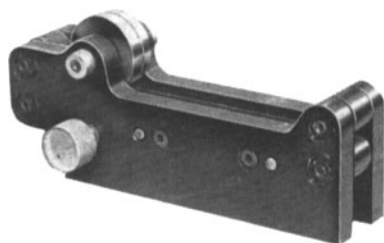


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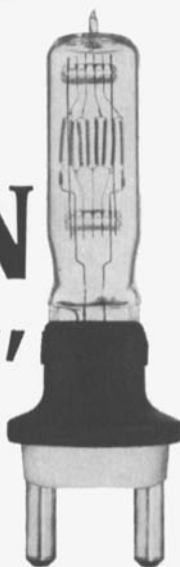
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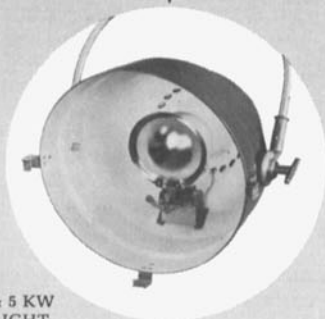
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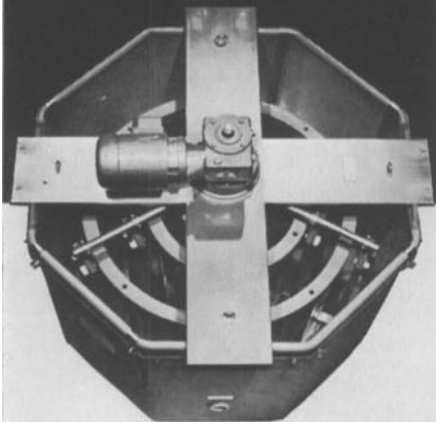
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A portable tape recorder with Pilotone, made especially for professional cameramen and audio engineering use, has been announced by Tandberg of America, Inc., P.O. Box 171, 8 Third Ave., Pelham, N.Y. It is compatible with 16mm and 35mm cameras to record sound in synchronization with film speed. Called Model 11-1-P, the recorder is solid state, full-track and battery operated. It has four tape heads and takes 7-in reels. It weighs 11.5 lb and will accept 10 "D" cell batteries. The Pilotone system is produced in the camera by a 1-V 60-Hz generator and fed to the tape recorder via a cable. The two-track, stereo pilot head records the 60-cycle signal in the opposite phase so the signal will not be heard on playback. When the machine is used in playback, the Pilotone output is connected to a synchronizer that compares Pilotone frequency with reference frequency. If the Pilotone frequency diverges from the reference frequency, a correcting signal is received from the synchronizer. The synchronizer output is connected to the projector. Lip synchronization is achieved by a manual speed control of  $\pm 3\%$ . Model 11-1-P is priced at \$699.50.

A new series of film viewer/readers has been announced by Traid Corp., 777 Flower St., Glendale, Calif. 91201. Designated the V/R 100 series, the viewer/readers are designed for analysis of 16mm, 35mm and 70mm film in single-frame, multiple-frame, cine-motion or cine-flow action with mode change available instantly from the front control panel. The basic V/R 100 has an 18- by 24-in screen for viewing or scanning, complete front panel controls, frame counter and optional image rotation. The manual version has X and Y cross wires for visual coordinates. The automatic version has an optical shaft encoder to convert coordinates into automatic digital readouts for recording on magnetic tape, punched tapes, cards, typewriter, etc. Any model in the series is available with variable magnification, image rotation, downward projection unit, automatic frame advance of 1 to 100, shutter assembly, bidirectional frame counter and automatic lens shift. Forced air cooling and a special optics system design ensure film safety. Prices range from \$6,100 to \$11,000. Film trans-

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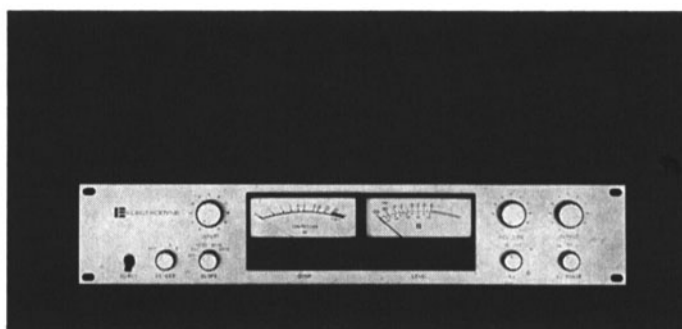
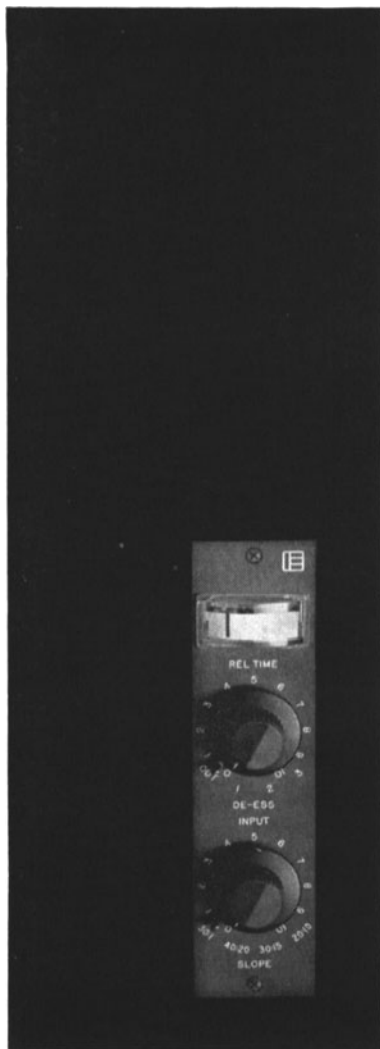
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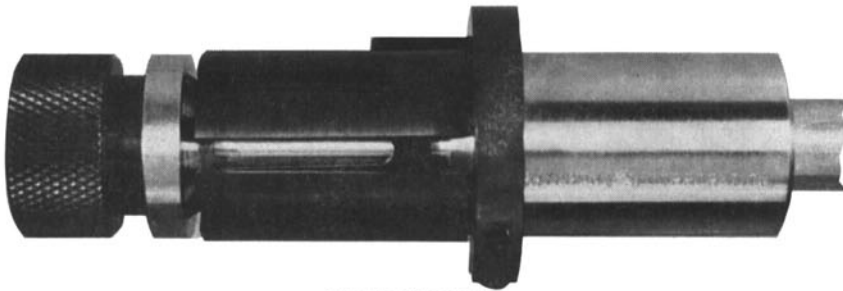
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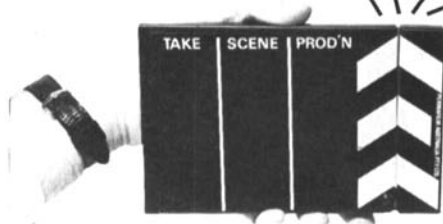
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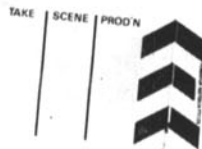


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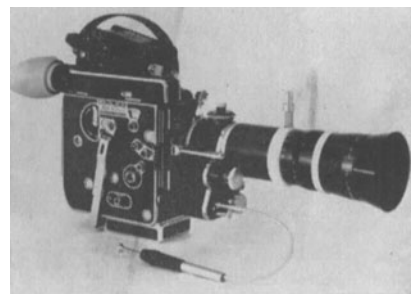
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The PVR, a new 16-35-70mm portable viewer/reader for cine and cine pulse projection has been announced by Traid Corp., 777 Flower St., Glendale, Calif. 91201. The machine has a modular design and features quick interchange pin-registered film transports. The machine can be used on a table top or its removable legs can be used to permit it to stand alone. It can be used with its 12- by 14-in Polacoat screen or as a wall projector. The PVR's cine motion is variable up to 24 frames/s and the film capacity is 400 ft. Single frame advance in the pulse mode is less than ½ s and all functions are bidirectional. The 5-digit frame counter is resettable to zero. It is priced at \$6,100.

The Adtrol Model BCD-6 Photocorder, an instrument used to record time and/or event on every frame of motion-picture film up to 1,500 frames/s, has been announced by Instrumentation Marketing Corp., 820 South Mariposa St., Burbank, Calif. 91506. The unit presents data in BCD format at the same instant an event is photographed. Information is presented in parallel form, allowing a complete word to be written at once, thus making it possible to read time or other data to that point with no reference to any other point on the film. The instrument records 6 digits of time to 9 min, 59.999 s, positioned between sprocket holes on 16mm film. It is 12 in wide, 12 5/16 in high and 10 in deep. It weighs 28 lb. The price is \$3,100.



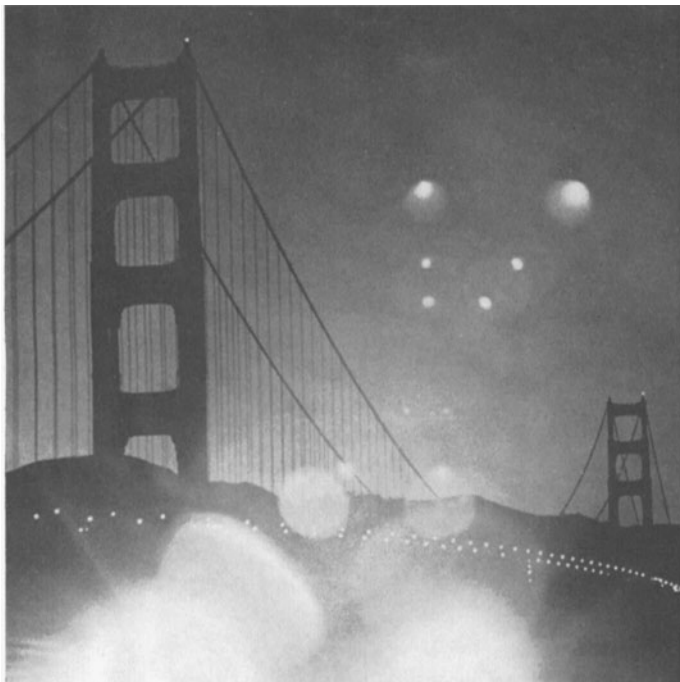
The Varlo Switar 86-OE, a new zoom lens for Bolex 16mm Rex cameras featuring through-the-lens light metering with fully automatic diaphragm adjustment, has been announced by Paillard Inc., 1900 Lower Road, Linden, N.J. 07036. The built-in exposure meter is adjustable for light sensitivities from 10 to 200 ASA. The lens has a maximum focal length of 86mm and a minimum wide-angle focal length of 18mm. In filming at long focal lengths, the lens measures only the area seen through the viewfinder. For special lighting situations, the lens has a manual diaphragm setting. For limited automation, the automatic adjustment of the diaphragm can be restricted to any range at either end of the scale. The lens is priced at \$625.

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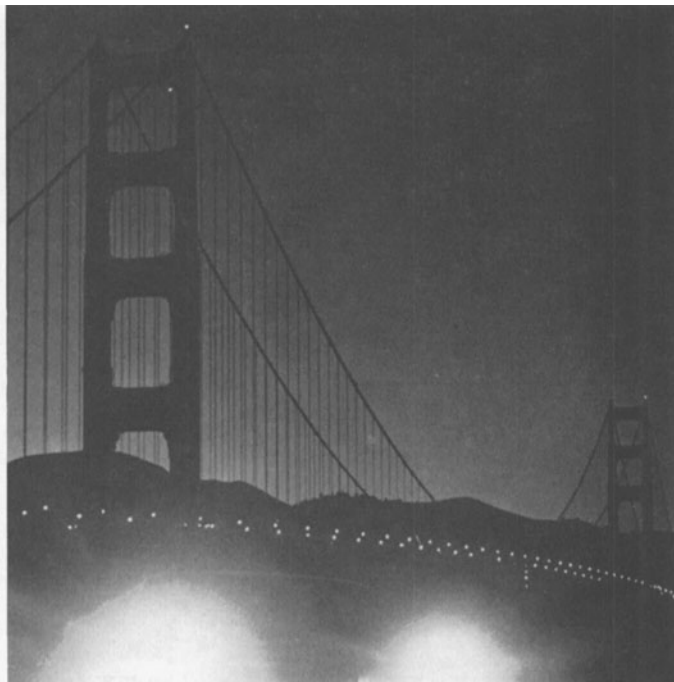
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OCLI's High Efficiency Antireflection (HEA<sup>®</sup>) coatings can greatly increase image brightness over MgF<sub>2</sub> coating, depending on the number of elements in the optical system.

But very often the most striking difference is the marked improvement in contrast.

These scenes of the Golden Gate Bridge were photographed under identical conditions with a Honeywell Pentax camera using a 15 element zoom lens. For the photograph on the left, the zoom lens was coated with a single layer MgF<sub>2</sub> antireflection coating. For the photograph on the right the zoom lens was HEA-coated. These photographs were taken at night, and all exposures were made at f/4.5 on Kodak Tri-X film. Car headlights produced the glare source near the bottom of the field of view, contributing to the intensity and number of stray images.

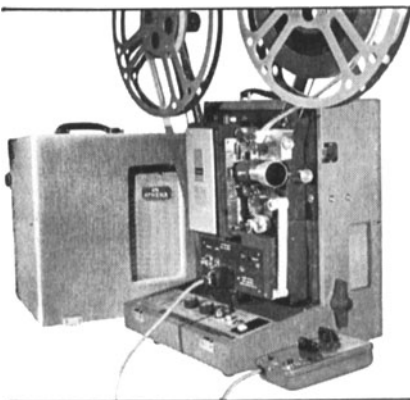
The reduction of stray light and improved contrast shown in the HEA photograph is obvious. Contrast can be improved even further than shown here depending on the lighting conditions and the particular type and number of elements coated.

HEA coatings can be applied to a variety of optical materials, and are ideally suited for optical systems designed for field, flight or space applications.

For an analysis of the improved performance to be expected by using HEA coatings on your optical system, call or write:

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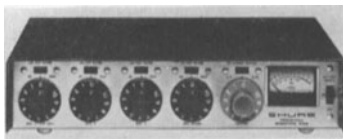
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A new microphone mixer-remote amplifier has been announced by Shure Brothers, Inc., Professional Products, 222 Hartrey Ave., Evanston, Ill. 60204. Called the Model M67, the mixer can be used as a single console or as an "add-on" mixer for expanding existing facilities. It provides four low-impedance balanced microphone inputs and one line input. It also provides additional microphone inputs in tape recording and video-tape recording applications. Features include an illuminate vu meter calibrated for +4- and +10-dBm out. It may be used with ac power or an accessory battery pack. The M67 measures 11 3/8 x 7 1/2 x 2 1/2 in. It weighs 4 lb 3 oz and is priced at \$147. Battery power supply is available at a price of \$12.60.

Two new Switar fixed focal length lenses for Bolex 16mm cameras have been announced by Paillard Inc., 1900 Lower Road, Linden, N.J. 07036. The two lenses, the Switar 10mm f/1.6 and the Macro Switar 26mm f/1.1, are equipped with a preset diaphragm arrangement for more convenient filming. Dual levers on the diaphragm ring are pressed together and rotated for setting the diaphragm opening. The Switar 10mm focuses down to about 1 in measured from the lens covering an area as small as 1 1/2 x 2 in, the same area covered by the Macro Switar 26mm which focuses down to about 4 in from the lens. The 10mm lens is priced at \$225; the 26mm lens, at \$270.

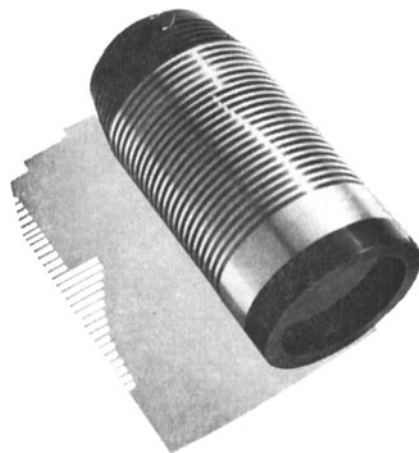
Two new zoom lenses especially designed for vidicon cameras have been announced by Television Utilities Corp., 46-45 Vernon Blvd., Long Island City, N.Y. 11101. Model Z-1500 is a lens with focal-length range from 15 to 150mm and f/2.5 aperture. It is priced at \$825. The Z-1000 has a range of 25mm to 100mm and f/1.8 aperture. It is priced at \$425. Rear-controlled versions of both lenses are available for use on viewfinder cameras.



The Eumig 308 super 8 movie camera with 8:1 zoom and macro lens has been announced by Eumig (U.S.A.) inc., 101 W. 31 St., New York, N.Y. 1001. Features include an instant-loading 50-ft cartridge and a Eumig Austrozoom lens (f/1.8, 8:1

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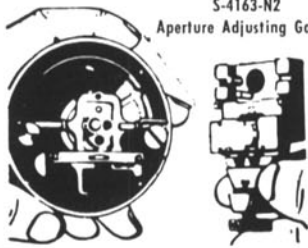
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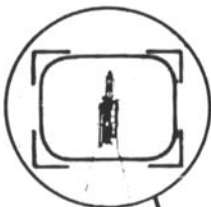
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zoom from 7.5 to 60mm) and Macro lens for close-ups to 18 × 24 mm. The camera operates on six penlight batteries and has a built-in battery tester. It operates at 18, 24 and 50 frames/s. Film speed is from 10 to 160 ASA. The price is \$349.95.



The **Samson Cam-Link Panhead**, a springless head with operation similar to Cradle Head performance, has been announced by Quick-Set Inc., 8121 Central Park Ave., Skokie, Ill. 60078. The Cam-Link has convenient conventional controls. The tilt has separate drag and brake and the handle has adjustable position and angle, and is reversible left to right. It is priced at \$195.

The **KFS-60B 5kW Follow Spot Dimmer** and the **CXFS-60 Boost Transformer**, an accessory, have been announced by Berkeley-ColorTran, Inc., 1015 Chestnut St., Burbank, Calif. 91502. The dimmer is a lightweight portable 120/150-V solid-state dimmer plus a dimmer controller. It is convection-cooled and incorporates a built-in filter to reduce lamp filament "sing" and RF interference. The controller is rear-illuminated and does not require a separate source of power. The **KFS-60B** is priced at \$365. The boost transformer is equipped with a power tap selector switch for voltage control to permit operation of a follow spot at more than 120 V. It is priced at \$225.

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