

# new products

(and developments)

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 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.

**Polyvision**, a closed-circuit system which places the screen on the ceiling, has been developed by Compagnie Française Thomson-Houston, 173 Blvd. Haussmann, Paris 8, France. The firm's representative in the United States is Thomson Electric Co., 50 Rockefeller Plaza, New York, N.Y. 10020. The system was designed especially for classroom use to eliminate light reflections and other distractions. In the Polyvision system the TV set is suspended from the ceiling with the picture side turned toward the floor. An individual mirror, resembling a rear-view mirror, is mounted at each student's desk or table. The image inversion from the mirror is taken care of by



inverting the image sweeping in the TV set. Each set has a slanted hood painted in a dark color which protects the screen from glare and creates a shadow area around the set. Each mirror is mounted on a removable

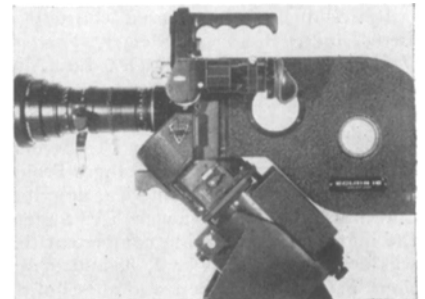
swivel bracket so that the student can place the mirror at the height, angle and direction which is most convenient for him.

The system includes the Model THV 259 A-23 receiver, especially developed for closed-circuit systems. It is equipped with a large-size picture tube and silicon diodes. A control desk located at the side of the teacher's desk includes a video amplifier, a monitoring receiver for the teacher's use and a 20-w LF amplifier feeding in parallel the two sound sources placed along the side walls.

In use, the student can place his mirror close to his notebook and does not have to look upwards since he can see the image in the mirror as he would read a book. The mirror does not interfere with the student's view of the teacher or the blackboard.



**The Videocorder**, a transistorized portable video-tape recorder designed especially for home use, has been introduced by Sony Corp. of America, 580 Fifth Ave., New York, N.Y. 10036. The machine has a 9-in. picture screen. Overall dimensions are 27½ by 16½ by 11 in. The unit weighs 66 lb. Power source is 117-v a-c, 60 cycles/sec. Power consumption is 103 w. Television programs in both black-and-white and color can be recorded. Playback is in black-and-white with sound. The machine uses ½-in. tape and records at a speed of 7½ in./sec. A 7-in. reel provides 60 min of continuous recording. The unit is priced at \$995.



**The Eclair NPR 16mm camera** now incorporates a number of new features, including a silent switch and release button, according to an announcement from Eclair Corp. of America, 7262 Melrose Ave., Los Angeles, Calif. 90046. The 18-lb camera accommodates a 400-ft magazine with a built-in loop guard, a new take-up spindle to prevent the cover from closing until the reel is properly in place, and a new safety catch. In case of a film jam the magazine drive clutch automatically disengages to protect the film and camera. A 360° rotating eyepiece and reflex viewing system permits the cameraman to operate the camera while facing backward from his subject. Other features include a built-in sync pulse

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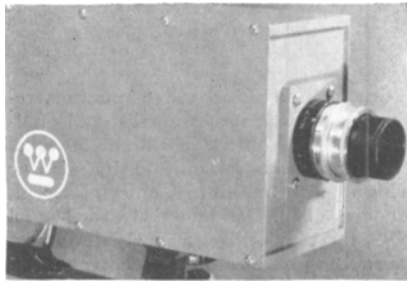


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generator, pin-registered film movement, a variable shutter with an opening from 5° to 180° and a bright-image viewing system that "sees" 20% more than the film aperture. The camera is priced at \$3,850.



**A 16mm camera system** that uses a solid-state imaging device instead of an electronic tube for light sensing and image conversion has been developed under a NASA contract by the Aerospace Division, Defense and Space Center, Westinghouse Electric Corp., Box 2278, Pittsburgh, Pa. 15230. The imaging device is a mosaic made up of 2,500 phototransistors. The mosaic is square with 50 light-sensitive semiconductor elements on a side. The device is reported to produce an image with a resolution of 100 lines/in. The sensitive area of the mosaic, which contains the 2,500 phototransistors, measures about 0.5 by 0.5 in. out of an overall size of 0.6 by 0.6 in. Molecular electronic circuitry is used throughout the camera system to perform the electronic functions necessary to obtain a video signal output. Without the lens the camera measures 6 by 4 by 2½ in.

**A new underwater stereo camera system** has been designed and constructed for the Woods Hole Oceanographic Institution by Edgerton, Germeshausen & Grier, Inc., 170 Brookline Ave., Boston 15, Mass. The system is said to be capable of taking as many as 2,300 multiple exposures in one lowering, an increase of 1,800 over the 500 multiple exposures previously possible. This increased exposure capability will enable scientists to leave the camera lowered, at greater depths, for more extended periods and thus to photograph a much larger area of the ocean's bottom as the cameras are towed beneath the research ship at depths of many thousands of feet. The system will be used initially by the Institution's Geophysics Department to carry out extensive underwater photography projects on the continental shelf south of New England, in the Carribean, the mid-Atlantic, the Mediterranean and other ocean areas.

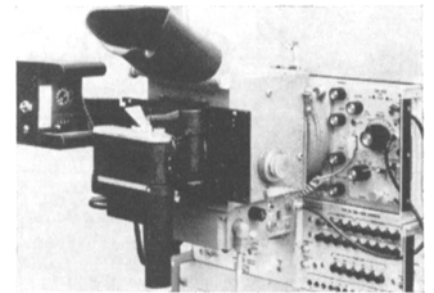
**A low-noise subminiature cable** reported to have a significantly low noise level is a product of Environmental Equipments Ltd., Station Yard, Wokingham, Berkshire, England. The cable is intended for use in temperatures ranging from -75 C to +260 C. It can be connected to transducers and electronic equipment fitted with sockets employing UNF 10-32 threads. It is sheathed in wrapped PTFE tape and has an outside diameter of 0.075 in. The center conductor of the cable is silverplated copper-weld 0.0124 in. in diameter, and the dielectric material is extruded PTFE. Weight of the cable is 6 lb per 1,000 ft.



**Bell & Howell Filmosound Projectors No. 535** and self-threading Model No. 540 have been engineered and modified by Northridge Research Inc., 18222 Parthenia St., Northridge, Calif., to permit remote control of projection speed. Sound and silent pictures may be viewed at 12 frames/sec or reduced to one-picture viewing for extended periods. Pulse control is sensitive to incremental changes of one frame. One of the features of the modification permits the operator to switch to cine in either forward or reverse motion without disrupting stop motion speed as previously programmed. Complete projector prices begin at \$1,435.

**A low-cost reflex autocollimator system** designed for observation of image quality under high magnification directly from the film in the camera is a product of Richter

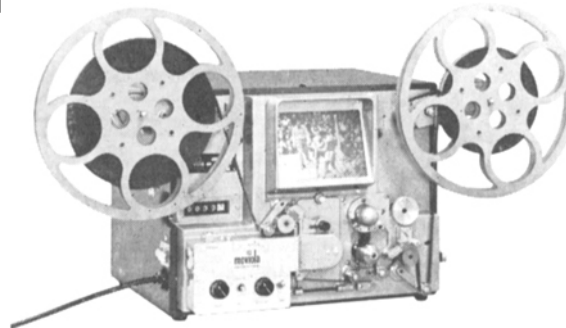
Cine Equipment and is distributed in the United States, Europe and the United Kingdom exclusively by D. B. Milliken Co., 131 N. Fifth Ave., Arcadia, Calif. Since the film can be stationary or in motion, the quality of the image formed in motion-picture cameras can be observed while the camera is running. The instrument checks for 14 points: focal plane accuracy, overall lens quality, visual resolution, photographic resolution, astigmatism, chromatic correction, spherical correction, flatness of field, coma, contrast, best working apertures, correct adjustment of lens to camera, squareness of lens with optical axis, and flatness, finish and parallelism of filters. The basic unit, Model R-2, is priced at \$393.35. It operates on 110-v a-c and is also available for 220-v a-c and d-c operation. A battery-powered field model is priced at \$326.65.



**A complete recycling system** for applications requiring an oscilloscope camera to be interlocked with a single-shot oscilloscope has been developed by the Du Mont

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Laboratories Divisions of Fairchild Camera and Instrument Corp., 750 Bloomfield Ave., Clifton, N.J. The system is designed to permit 24-hr, round-the-clock records of random and transient traces. The complete camera system includes 35mm automatic advance camera with reflex data, automatic recycler and power supply, booster motor for continuous advance, shutter solenoid, and sweep rearming cable. The camera system is mounted on rack-mounted Fairchild type 767H solid-state high-frequency oscilloscope using Fairchild's 74-03A wide range time base plug-in. The complete camera system is priced at \$1,275, and the 767H oscilloscope using a 50-mc single trace amplifier plug-in is priced at \$1,615.

A control strip kit for checking the quality of processing of 16mm Eastman Tri-X Reversal Film, Type 7278, has been announced by Motion Picture and Education Markets Div., Eastman Kodak Co., Rochester, N.Y. 14650. The kit includes a continuous 100-ft roll of black-and-white Eastman Tri-X Reversal Film containing at least 120 latent-image gray-scale exposures, each 9½ in. long. Also provided is one properly-processed control strip of the same image for comparison purposes. To use the system, the operator runs a length of film cut from the continuous roll through his machine at a time when all solutions are fresh. The results can then be compared, visually and/or with instruments, to the control strip of properly-processed footage. Instructions and control data are provided.

The Type 7278 film is a new fast film which incorporates antihalation protection. It is especially designed to meet requirements, such as those of TV news cameramen, for obtaining high-quality images under adverse lighting conditions on a fast-access, single-copy film.

A 9-in. transistorized video monitor, reported to provide professional signal quality although requiring less than 50 w of power, has been announced by Conrac Division of Giannini Controls Corp., Glendora, Calif. Designated Conrac Model RNB9, the unit utilizes a newly developed tube said to provide 800-line center resolution and 700-line corner resolution. Both

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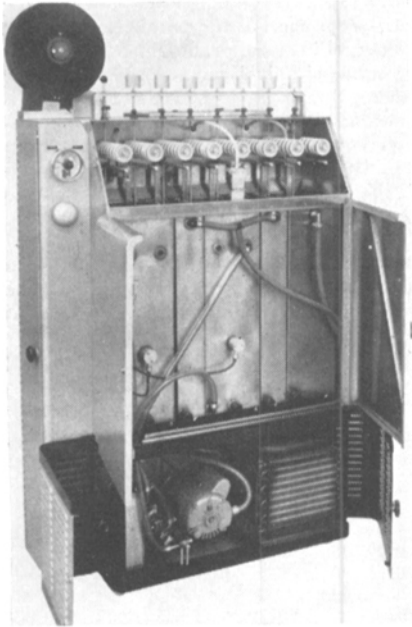
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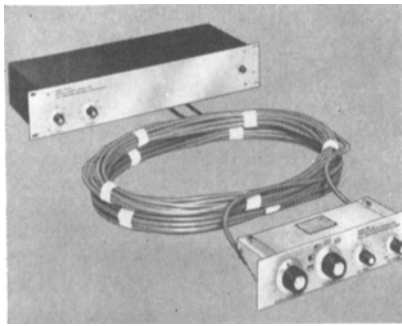
high and low voltages are regulated so monitor performance is independent of line voltage variations. The unit is priced at \$445. Also available is a 14-in. model, the RLB14, identical to the 9-in. model in operational specifications and wattage requirements. It is priced at \$445.



**The Lawley Junior Film Processor**, manufactured in England by Newman & Guardia Ltd., and distributed in the United States by Lipsner-Smith Corp., 3475 W. Touhy Ave., Chicago, Ill. 60645, has been adapted to reversal and color and to handling unperforated film and paper. The machine was originally built for dual-gage negative/positive processing. Built for daylight operation, the processor features compactness and close temperature control. Because of its small film capacity it permits rapid access to the processed film. At normal processing temperatures it will operate at speeds up to 80 ft/min but if higher speeds are required it can be operated at elevated temperatures. The Lawley Junior was originally designed to meet the needs of the British Broadcasting Corp., and Leslie Wheeler, then in charge of film processing for the BBC, played a large part in its design.

**A 10-in. cathode-ray tube** designed for industrial and military applications requiring high resolution, has been announced by Westinghouse Electronic Tube Division, Elmira, N.Y. Designated the WX30176, the tube has the capability of tracing a 0.002-in. line width over the entire screen. Auxiliary deflection plates permit small-amplitude deflection of the electron beam independently of the normal magnetic scanning. The round, flat-faced tube is aluminized and can be supplied with most of the JEDEC registered phosphors. Among other applications, the tube can be used for photographic recordings and alphanumeric displays.

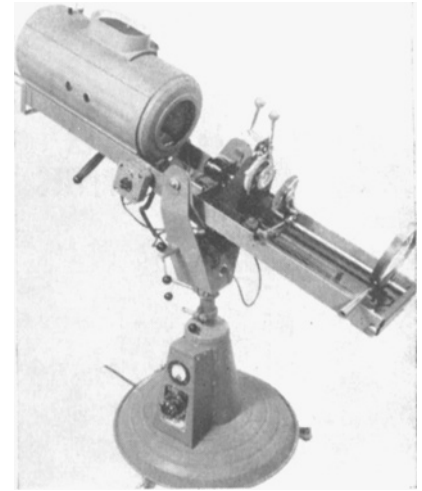
**The Mark VI-AR Special Effects Generator** with remote control has been announced by Ball Brothers Research Corp., Boulder Industrial Park, Boulder, Colo. The



generator produces horizontal, vertical and corner wipes and has an external key for keyed inserts. Matting or lettering is accomplished by means of a special circuit which allows the operator to select any lettering shade between black and white independent of the amplitude of the matting video signal. The unit has its own internal power supply (117-v a-c) to operate the Special Effects Generator and associated remote-control circuits.

**A line of portable borderlights**, designed specifically for theatrical applications, has been introduced by the Theatre Division of Lighting & Electronics, Inc., 81 Prospect St., Brooklyn, N.Y. 11201. Designated Series 65-10, 65-20 and 65-70 are designed for mounting in any position to provide shadowless illumination. They may be re-lamped and the colors changed without repositioning. Color filters snap into spring-loaded aluminum extruded rails and the

cast aluminum end plates act as scenery guards. Construction features include carbon-steel springs, Alzak reflectors, pipe mounting strap and tilt adjustable knob. Color filters are supplied plain, stippled or spread rounded in red, blue, green, white amber, pink and blue green. The units accommodate R, PAR and IF lamps.



**The lobsterscope**, an adaptation of a spotlight accessory used many years ago in vaudeville, has been announced by Strong Electric Corp., 79 City Park Ave., Toledo, Ohio 43601, for use on their Trouper and Super Trouper Carbon Arc follow spotlights. The lobsterscope is a device which is

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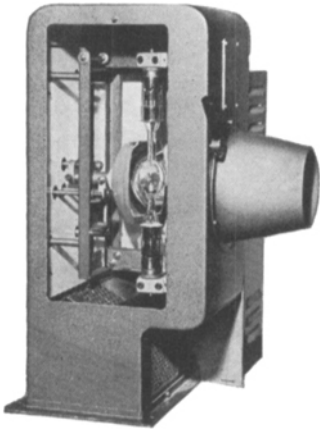
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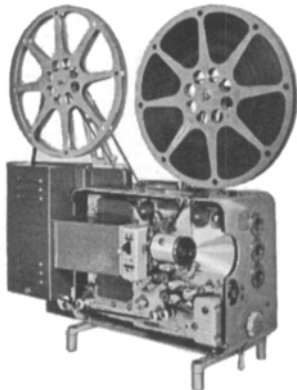
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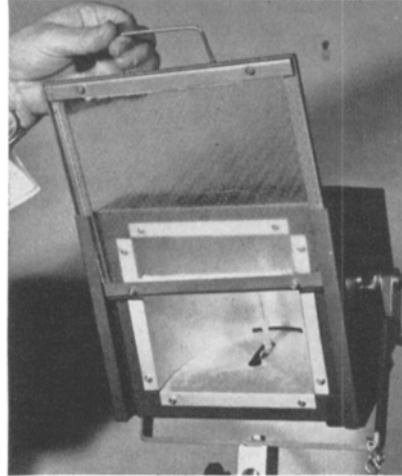
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placed in a spotlight beam to produce a stroboscopic effect giving the movement of performers a "jerky" appearance, somewhat similar to that of early motion pictures. It is also used with appropriate music and sound equipments to produce thunder, lightning and storm effects. The new lobsterscope is a comparatively small unit which is motor driven and affords variable speed. The lobsterscope is priced at \$135 for use on the Trouper and \$160 for use on the Super Trouper.

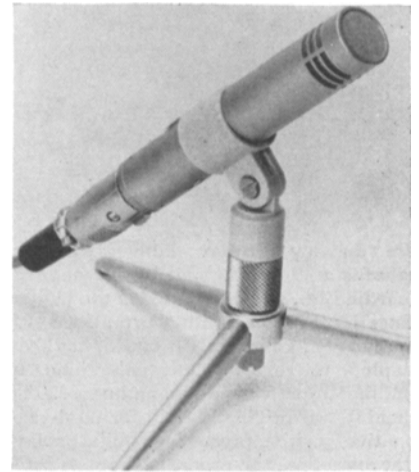


The Variable Broad quartz-iodine light, designed to provide wide, smooth coverage from a single light source, has been announced by ColorTran Industries, 1015 Chestnut St., Burbank, Calif. At 10 ft. field coverage (to 10% of maximum intensity) can be continuously varied from 24 ft to 45 ft wide. Beam coverage, to 50% of maximum intensity, is variable from 16 ft to 30 ft. Both the coverage and intensity of light can be varied infinitely by use of a control knob at the rear of the housing. The Variable Broad weighs only 7 lb and measures 9 by 9 by 8 in. It is priced at \$79.95. Available for use in the light are clear or frosted 3,200 K, 500-, 750- and 1,000-w quartz-iodine lamps operating directly from 120-v a-c or d-c. An 800-w lamp is also available for 230-v operation.

A new line of sealed-beam-type movie-flood lamps designated PAR36 has been announced by Westinghouse Electric Corp., Box 2278, Pittsburgh, Pa. 15230. Nine 650-w lamps, designed to meet almost every requirement of indoor and outdoor portable lighting, are included in the new line. The lamps feature an 8-hr life and one of the lamps, the FAJ PAR36, designed for studio use, provides 100-hr life. A collector grid over the coiler-coil filament, which gathers the tungsten vaporized from the filament during burning, is employed to minimize lamp blackening throughout the life of the bulb to keep both the reflector and the lens bright and clear. Some of the lamps are designed to burn in a 45° to horizontal position, but most of them are designed to operate satisfactorily in any position. Two of the lamps employ a dichroic coating on the lens to the lamp to change the color temperature of the light produced and thus make it usable indoors with daylight film. Most of the lamps are priced at \$5.45.

The Projected Scale Micrometer, a measuring instrument used for making measure-

ments on aerial photographs, has been announced by Bausch & Lomb, Rochester, N.Y. 14602. When attached to the B&L Zoom 70 Stereoscope or StereoZoom Microscope it permits measurement of distances on aerial photographs directly to 0.0001 ft. The instrument uses a beam splitter to superimpose a scale on the photograph. The scale is magnified in the same proportion as the photograph so that direct readings are possible. Measurements are made simply by positioning the scale and moving it along its axis. The scale is rotatable about its axis and can be displaced up to 0.01 ft in either direction from its mid-position for convenience in positioning the object to be measured. Illumination for the scale is provided by a 6-v, 0.7-amp lamp with a rated life of 500 hr. Required voltage is supplied by a transformer with rheostat to control scale brightness. The unit, including transformer, is priced at \$555.



The Neumann U-64 linear admittance cardioid microphone has been announced by Gotham Audio Corp., 2 W. 46 St., New York, N.Y. 10036. A miniature type, it incorporates a newly designed Mylar base vacuum gold steamed element with acoustical delay network. This element is said to provide linear frequency response from angles of sound-pickup as great as  $\pm 135^\circ$  from on-axis incidence. A built-in switchable 10-db overload protection is incorporated and a foam rubber anti-pop screen is supplied. The microphone measures  $\frac{3}{8}$  in. diameter by  $4\frac{1}{2}$  in. Multiple microphone systems are available. Power requirements are from 117-v to 230-v, 50/60 cycles. The single U-64 system is priced at \$360. Prices range to \$1,680 for a six-microphone system.

The Graphic Level Recorder, Model 2305, produced by B&K Instruments, Inc., 3044 W. 106 St., Cleveland, Ohio 44111, is adapted to the recording and measuring of a-c signals throughout the frequency range of from 2 to 200,000 cps. It detects and records the true rms, average or peak values of a-c signals vs. time or frequency. With chopper input it detects and records d-c signals. Instrument accuracy is said to be  $\pm 1$  db for sine, complex or random signals. Recording can be presented in either linear or logarithmic terms.